CITY OF INDUSTRY

CITY COUNCIL
REGULAR MEETING AGENDA

OCTOBER 8, 2015
9:00 AM

Mayor Mark Radecki
Mayor Pro Tem Cory Moss
Council Member Abraham Cruz
Council Member Roy Haber, III
Council Member Newell Ruggles

Location: City Council Chamber, 15651 East Stafford Street, City of Industry, California 91744

Addressing the City Council:

- ***Agenda Items:*** *Members of the public may address the City Council on any matter listed on the Agenda. In order to conduct a timely meeting, there will be a three-minute time limit per person for any matter listed on the Agenda. Anyone wishing to speak to the City Council is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed card should be submitted to the City Clerk prior to the Agenda item being called and prior to the individual being heard by the City Council.*

- ***Public Comments (Non-Agenda Items):*** *Anyone wishing to address the City Council on an item not on the Agenda may do so during the "Public Comments" period. In order to conduct a timely meeting, there will be a three-minute time limit per person for the Public Comments portion of the Agenda. State law prohibits the City Council from taking action on a specific item unless it appears on the posted Agenda. Anyone wishing to speak to the City Council is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed card should be submitted to the City Clerk prior to the Agenda item being called by the City Clerk and prior to the individual being heard by the City Council.*

Americans with Disabilities Act:

- *In compliance with the ADA, if you need special assistance to participate in any City meeting (including assisted listening devices), please contact the City Clerk's Office (626) 333-2211. Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting.*

Agendas and other writings:

- *In compliance with SB 343, staff reports and other public records permissible for disclosure related to open session agenda items are available at City Hall, 15625 East Stafford Street, Suite 100, City of Industry, California, at the office of the City Clerk during regular business hours, Monday through Friday 9:00 a.m. to 5:00 p.m. Any person with a question concerning any agenda item may call the City Clerk's Office at (626) 333-2211.*

1. Call to Order

2. Flag Salute

3. Roll Call

4. Public Comments

5. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered to be routine and will be enacted by one vote. There will be no separate discussion of these items unless members of the City Council, the public, or staff request specific items be removed from the Consent Calendar for separate action.

5.1 Consideration of Register of Demands.

RECOMMENDED ACTION: Approve the Register of Demands and authorize the appropriate City Officials to pay the bills.

5.2 Consideration of a Conflict Waiver for Casso & Sparks, LLP for various City projects.

RECOMMENDED ACTION: Approve the Conflict Waiver.

5.3 Consideration of a Professional Services Agreement between the City of Industry and Cordoba Corporation for real estate advisory services.

RECOMMENDED ACTION: Approve the Agreement, and authorize the City Manager to execute the Agreement.

5.4 Consideration of the minutes of the June 25, 2015 regular meeting.

RECOMMENDED ACTION: Approve as submitted.

5.5 Consideration of the minutes of the June 25, 2015 special meeting.

RECOMMENDED ACTION: Approve as submitted.

6. PUBLIC HEARING

6.1 Public Hearing regarding Zone Exception 15-2 to allow a ten foot tall wall within the front setback, Development Plan 15-10 to develop two industrial buildings (84,660 square feet and 45,510 square feet), and the accompanying Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program at 489 and 499 Parriott Place.

a. Consideration of Resolution No. CC 2015-31 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA MAKING FINDINGS AND ADOPTING THE INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR A DEVELOPMENT PLAN AND ZONE EXCEPTION FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS AT THE PROPERTY LOCATED AT 489 AND 499 PARRIOTT PLACE IN

THE CITY OF INDUSTRY.

RECOMMENDED ACTION: Adopt Resolution No. CC 2015-31.

b. Consideration of Resolution No. CC 2015-32 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA APPROVING ZONE EXCEPTION 15-2 TO ALLOW A TEN FOOT TALL SCREEN WALL IN THE FRONT SETBACK; AND DEVELOPMENT PLAN NO. 15-10 FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS FOR THE PROPERTY LOCATED AT 489 AND 499 PARRIOTT PLACE IN THE CITY OF INDUSTRY.

RECOMMENDED ACTION: Adopt Resolution No. CC 2015-32.

7. **ACTION ITEMS**

7.1 Consideration of Development Plan 15-7 submitted by Donlon Builders to develop a new 125,344 square foot industrial building at 15000 Nelson Avenue.

a. Consideration of Resolution No. CC 2015-33 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA MAKING FINDINGS AND ADOPTING THE NEGATIVE DECLARATION FOR THE CONSTRUCTION OF A 125,344 SQUARE FOOT INDUSTRIAL BUILDING AT 15000 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA, WITHIN THE MANUFACTURING ZONE, AND MAKING FINDINGS IN SUPPORT THEREOF.

RECOMMENDED ACTION: Adopt Resolution No. CC 2015-33.

b. Consideration of Resolution No. CC 2015-34 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, APPROVING DEVELOPMENT PLAN 15-7 FOR THE CONSTRUCTION OF A 125,344 SQUARE FOOT INDUSTRIAL BUILDING AT 15000 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA, WITHIN THE MANUFACTURING ZONE.

RECOMMENDED ACTION: Adopt Resolution No. CC 2015-34.

7.2 Presentation and discussion regarding the Climate Action Plan, a comprehensive roadmap outlining the activities the City will undertake to reduce greenhouse gas emissions.

RECOMMENDED ACTION: Discuss and provide direction to staff.

7.3 Consideration of a Construction, Operation and Maintenance Agreement between the City of Industry, the Alameda Corridor East Construction Authority and Union Pacific Railroad for the Fullerton Grade Separation Project at the Los Angeles Subdivision of the Union Pacific Railroad.

RECOMMENDED ACTION: Approve the Agreement.

7.4 Consideration of Amendment No. 1 to the Memorandum of Understanding between the City of Industry and the Los Angeles County Metropolitan Transportation Authority for the Grand Avenue Westbound On-Ramp Project.

RECOMMENDED ACTION: Approve Amendment No. 1.

7.5 Information regarding the issuance of an encroachment permit to Southern California Edison for the closure of two lanes on Gale Avenue immediately east of Azusa Avenue for a maximum of four weeks to replace a vault.

RECOMMENDED ACTION: Receive and file.

7.6 Presentation and discussion regarding three conceptual housing developments generally located at the Industry Hills Expo Center, Parriott Place West, and Walnut Drive South.

RECOMMENDED ACTION: Review, discuss and provide direction to staff.

7.7 Consideration of an Agreement between the City of Industry and Lang, Hansen, O'Malley & Miller to provide governmental relations services.

RECOMMENDED ACTION: Approve the Agreement, and authorize the City Manager to execute the Agreement.

8. **CITY COUNCIL COMMITTEE REPORTS**

9. **AB 1234 REPORTS**

10. **CITY COUNCIL COMMUNICATIONS**

11. Adjournment. Next regular meeting: Thursday, October 22, 2015 at 9:00 a.m.

CITY COUNCIL

ITEM NO. 5.1

CITY OF INDUSTRY
AUTHORIZATION FOR PAYMENT OF BILLS
CITY COUNCIL MEETING OF OCTOBER 8, 2015

FUND RECAP:

FUND	DESCRIPTION	DISBURSEMENTS
100	GENERAL FUND	1,872,074.63
103	PROP A FUND	7,296.87
105	AQMD GRANT FUND	705.96
120	CAPITAL IMPROVEMENT FUND	251,549.16
161	IPUC - ELECTRIC	216,037.80
TOTAL ALL FUNDS		2,347,664.42

BANK RECAP:

BANK	NAME	DISBURSEMENTS
BOFA	BANK OF AMERICA - CKING ACCOUNTS	43,579.71
PROP/A	PROP A - CKING ACCOUNT	7,296.87
WFBK	WELLS FARGO- CKING ACCOUNT	2,296,787.84
TOTAL ALL BANKS		2,347,664.42

CITY OF INDUSTRY
BANK OF AMERICA
October 8, 2015

Check	Date			Payee Name	Check Amount
CITYELEC.CHK - City Electric					
1363	09/22/2015			**CITY OF INDUSTRY**	$40,115.44
	Invoice	Date	Description	Amount	
	9/22/15	09/22/2015	TRANSFER FUNDS-ELECTRIC	$40,115.44	
PARKCIT.CHK - Parking Citation Checking					
539	09/01/2015			**YUEN, FONG MEI**	$300.00
	Invoice	Date	Description	Amount	
	09/01/15	09/01/2015	REFUND-CITATION #127565	$300.00	
540	09/18/2015			**SUPERIOR COURT OF CALIFORNIA,**	$2,423.50
	Invoice	Date	Description	Amount	
	AUGUST 2015	09/18/2015	PARKING CITATION REPORT-AUG 2015	$2,423.50	
541	09/18/2015			**TURBO DATA SYSTEMS, INC**	$395.77
	Invoice	Date	Description	Amount	
	23293	09/18/2015	CITATION PROCESSING-JUL/AUG 2015	$395.77	
542	09/18/2015			**GUTIERREZ, CONCEPCION**	$300.00
	Invoice	Date	Description	Amount	
	09/18/15	09/18/2015	REFUND-CITATION #128297	$300.00	
543	09/18/2015			**PUJARAMA, DESY P.**	$45.00
	Invoice	Date	Description	Amount	
	9/18/15	09/18/2015	REFUND-CITATION #125809	$45.00	

Checks	Status	Count	Transaction Amount
	Total	**7**	**$43,579.71**

CITY OF INDUSTRY

PROP A

October 8, 2015

Check	Date			Payee Name	Check Amount
PROPA.CHK - Prop A Checking					
11593	09/23/2015			**CITY OF INDUSTRY-REFUSE**	$78.80
	Invoice	Date	Description	Amount	
	2250903	09/01/2015	DISP SVC-METROLINK	$78.80	
11594	09/23/2015			**INDUSTRY SECURITY SERVICES**	$6,582.44
	Invoice	Date	Description	Amount	
	14-15105	08/21/2015	SECURITY SVC-METROLINK	$1,729.73	
	14-15165	08/28/2015	SECURITY SVC-METROLINK	$1,729.73	
	14-15230	09/04/2015	SECURITY SVC-METROLINK	$1,729.73	
	14-15299	09/11/2015	SECURITY SVC-METROLINK	$1,393.25	
11595	09/23/2015			**SO CAL INDUSTRIES**	$93.87
	Invoice	Date	Description	Amount	
	193405	08/18/2015	RR RENTAL-METROLINK	$93.87	
11596	09/23/2015			**SO CALIFORNIA EDISON COMPANY**	$296.40
	Invoice	Date	Description	Amount	
	2016-00000338	09/18/2015	7/23-8/21/15 SVC-600 S BREA CYN B	$296.40	
11597	09/23/2015			**WALNUT VALLEY WATER DISTRICT**	$245.36
	Invoice	Date	Description	Amount	
	2076148	09/08/2015	8/1-8/31/15 SVC-METROLINK SYN-SPANISH LN	$227.07	
	2077028	09/09/2015	8/4-9/2/15 SVC-PLATFORM METROLINK BREA CY N	$18.29	

Checks	Status	Count	Transaction Amount
	Total	**5**	**$7,296.87**

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
62686	09/17/2015			**BURKE, WILLIAMS & SORENSEN,**	$531,653.96
	Invoice	Date	Description	Amount	
	09/17/15	09/17/2015	FINAL PAYMENT	$531,653.96	
62687	09/17/2015			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	CUP 15-6	09/17/2015	FEE-NOTICE OF EXEMPTION	$75.00	
62688	09/17/2015			**PUENTE BASIN WATERMASTER**	$13,931.48
	Invoice	Date	Description	Amount	
	15-2	05/06/2015	2015-2016 OPERATING BUEGET	$6,965.74	
	15-1	05/06/2015	2015-2016 OPERATING BUEGET	$6,965.74	
62689	09/22/2015			**BANK OF AMERICA - VISA**	$1,509.85
	Invoice	Date	Description	Amount	
	2016-00000315	09/06/2015	08/07-09/06/15 AUTHORIZED REP	$1,509.85	
62690	09/22/2015			**CASSO & SPARKS, LLP**	$49,927.50
	Invoice	Date	Description	Amount	
	20123	09/20/2015	RETAINER FOR JUNE 2015 - FRAZER AJE #62	$31,500.00	
	20124	09/20/2015	LEGAL SVC FOR JUNE 2015 - FRAZER AJE #62	$18,427.50	
62691	09/22/2015			**CASSO & SPARKS, LLP**	$4,924.50
	Invoice	Date	Description	Amount	
	20125	09/20/2015	IUDA-LEGAL SVC FOR JUNE 2015 - FRAZER AJE #62	$4,924.50	
62692	09/22/2015			**NOBLE AMERICAS ENERGY**	$157,229.56
	Invoice	Date	Description	Amount	
	152590004830737	09/16/2015	WHOLESALE GAS-AUG 2015	$18.41	
	152570004827896	09/14/2015	WHOLESALE USE-AUG 2015	$157,211.15	

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
62693	09/22/2015			**PAETEC COMMUNICATIONS**	$735.33
	Invoice	Date	Description	Amount	
	58753974	09/10/2015	PHONE SVC-SEP 2015	$735.33	
62694	09/22/2015			**PITNEY BOWES, INC.**	$103.75
	Invoice	Date	Description	Amount	
	8554990-SP15	09/13/2015	POSTAGE MACHINE-SEP 2015	$103.75	
62695	09/22/2015			**RADECKI, KEVIN**	$31,384.35
	Invoice	Date	Description	Amount	
	09/22/15-S	09/22/2015	PAYMENT OF UNUSED SICK TIME	$31,384.35	
62696	09/22/2015			**RADECKI, KEVIN**	$32,321.10
	Invoice	Date	Description	Amount	
	09/22/15-V	09/22/2015	PAYMENT OF UNUSED VACATION TIME	$32,321.10	
62697	09/22/2015			**RICOH USA, INC.**	$275.57
	Invoice	Date	Description	Amount	
	47195249	09/12/2015	COPIER LEASE-PROPERTY TAX	$275.57	
62698	09/22/2015			**RICOH USA, INC.**	$1,345.19
	Invoice	Date	Description	Amount	
	47195243	09/12/2015	COPIER LEASE-PROPERTY TAX	$930.34	
	47195244	09/12/2015	COPIER LEASE-PROPERTY TAX	$251.02	
	47195245	09/12/2015	COPIER LEASE-PROPERTY TAX	$163.83	
62699	09/22/2015			**SAN GABRIEL VALLEY COUNCIL OF**	$15,464.00
	Invoice	Date	Description	Amount	
	1058-A	07/01/2015	ANNUAL DUES FY 2015-2016	$15,464.00	
62700	09/23/2015			**GAS COMPANY, THE**	$42.67

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	Invoice	Date	Description	Amount	
	2016-00000316	09/18/2015	08/17-09/16/15 SVC - 610 S BREA CYN RD	$42.67	
62701	09/23/2015			**INDUSTRY PUBLIC UTILITY**	$3,746.88
	Invoice	Date	Description	Amount	
	2016-00000317	10/10/2015	08/10-09/10/15 SVC - 600 BREA CYN RD	$3,746.88	
62702	09/23/2015			**SAN GABRIEL VALLEY WATER CO.**	$790.06
	Invoice	Date	Description	Amount	
	2016-00000318	09/17/2015	08/17-09/16/15 SVC - 14329 VALLEY	$722.91	
	2016-00000319	09/18/2015	08/18-09/17/15 SVC - 336 EL ENCANTO	$67.15	
62703	09/23/2015			**SO CALIFORNIA EDISON COMPANY**	$79,552.69
	Invoice	Date	Description	Amount	
	2016-00000322	09/17/2015	08/17-09/16/15 SVC - 1341 FULLERTON RD	$39.00	
	2016-00000323	09/17/2015	08/17-09/16/15 SVC - 17635 GALE	$2,213.21	
	2016-00000324	09/18/2015	07/17-09/16/15 SVC - VARIOUS SITES	$136.99	
	2016-00000325	09/18/2015	07/17-09/16/15 SVC - PECK RD S/O PELLISSIER	$76.71	
	841 7TH-SEP15	09/18/2015	07/17-08/17/15 SVC - 841 7TH AVE	$1,226.82	
	2016-00000326	09/18/2015	07/17-09/16/15 SVC - VARIOUS SITES	$2,732.60	
	2016-00000327	09/18/2015	05/01-09/01/15 SVC - VARIOUS SITES	$39,367.00	
	2016-00000328	09/18/2015	07/17-09/16/15 SVC - VARIOUS SITES	$11,264.40	
	2016-00000329	09/18/2015	07/17-09/16/15 SVC - 15415 DON JULIAN RD	$6,349.91	
	2016-00000330	09/18/2015	07/17-09/16/15 SVC - VARIOUS SITES	$5,285.14	
	2016-00000331	09/18/2015	07/17-09/16/15 SVC - 15415 DON JULIAN RD	$541.25	
	2016-00000332	09/18/2015	08/01-09/01/15 SVC - VARIOUS SITES	$4,166.75	
	2016-00000333	09/18/2015	07/17-09/16/15 SVC - VARIOUS SITES	$6,152.91	
62704	09/23/2015			**SO CALIFORNIA EDISON COMPANY**	$12,366.00
	Invoice	Date	Description	Amount	
	7500593072	09/15/2015	08/01-08/31/15 SVC - OLD RANCH RD/MAYO AVE	$5,623.22	

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date		Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo					
	7500593073	09/15/2015	08/01-08/31/15 SVC - 208 S. WADDINGHAM WAY	$3,813.71	
	7500593074	09/15/2015	08/01-08/31/15 SVC - 745 ANAHEIM-PUENTE RD	$1,027.46	
	7500593084	09/15/2015	08/01-08/31/15 SVC - 133 N. AZUSA	$1,901.61	
62705	09/23/2015		**VERIZON**		$553.20
	Invoice	Date	Description	Amount	
	2016-00000320	09/07/2015	09/07-10/06/15 SVC - GENERATOR SITE-TELEMETRY	$25.00	
	841 7TH-SEP15	09/10/2015	09/10-10/09/15 SVC - 841 S. 7TH	$97.25	
	2016-00000321	09/10/2015	09/10-10/09/15 SVC - GENERATOR SITE-TELEMETRY	$146.23	
	2016-00000334	09/10/2015	09/10-10/09/15 SVC - 600 BREA CYN RD	$222.29	
	2016-00000335	09/10/2015	09/10-10/09/15 SVC - ELECTRIC MODEM	$62.43	
62706	09/23/2015		**VERIZON**		$110.36
	Invoice	Date	Description	Amount	
	2016-00000336	09/10/2015	09/10-10/09/15 SVC - ELECTRIC MODEM	$55.18	
	2016-00000337	09/10/2015	09/10-10/09/15 SVC - GENERATOR SITE-TELEMETRY	$55.18	
62707	09/23/2015		**WALNUT VALLEY WATER DISTRICT**		$2,294.32
	Invoice	Date	Description	Amount	
	2076297	09/08/2015	08/01-08/31/15 SVC - BAKER PKWY METER #1	$616.93	
	2076298	09/08/2015	08/01-08/31/15 SVC - BAKER PKWY METER #2	$371.87	
	2076304	09/08/2015	08/01-08/31/15 SVC - GRAND AVE CROSSING	$796.98	
	2076305	09/08/2015	08/01-08/31/15 SVC - GRAND AVE CROSSING	$71.07	
	2076307	09/08/2015	08/01-08/31/15 SVC - 22002 VALLEY BLVD	$360.00	
	2077010	09/09/2015	08/04-09/02/15 SVC - PUMP STN N/W CHERYL	$23.04	
	2077252	09/09/2015	08/04-09/02/15 SVC - NOGALES PUMP STN	$54.43	
62708	09/29/2015		**AT & T**		$221.63
	Invoice	Date	Description	Amount	
	2016-00000343	09/17/2015	09/17-10/16/15 SVC - TONNER-GUARD SHACK	$99.93	
	2016-00000344	09/17/2015	09/17-10/16/15 SVC - TONNER-RADIO	$121.70	

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
62709	09/29/2015			**CITY OF CHINO HILL UTILITY**	$318.14
	Invoice	Date	Description	Amount	
	2016-00000345	09/18/2015	08/17-09/16/15 SVC - 1550 RANCHO HILLS DR	$318.14	
62710	09/29/2015			**MCI COMM SERVICE**	$32.68
	Invoice	Date	Description	Amount	
	HATCHER-SEP15	09/17/2015	HATCHER WAREHOUSE - SEPTEMBER 2015	$32.68	
62711	09/29/2015			**SAN GABRIEL VALLEY WATER CO.**	$106.64
	Invoice	Date	Description	Amount	
	841 7TH-SEP15	09/21/2015	08/19-09/18/15 SVC - 841 S SEVENTH	$106.64	
62712	09/29/2015			**SO CALIFORNIA EDISON COMPANY**	$151.92
	Invoice	Date	Description	Amount	
	2016-00000346	09/23/2015	08/21-09/22/15 SVC - 580 S BREA CYN	$27.47	
	2016-00000347	09/23/2015	08/21-09/22/15 SVC - 575 S BREA CYN	$27.63	
	2016-00000348	09/23/2015	08/21-09/22/15 SVC - 21380 VALLEY PED	$96.82	
62713	09/29/2015			**SOUTH COAST A.Q.M.D.**	$346.54
	Invoice	Date	Description	Amount	
	2851868	09/01/2015	ICE ELEC GEN-DIESEL - EL ENCANTO	$346.54	
62714	09/29/2015			**SUBURBAN WATER SYSTEMS**	$1,972.91
	Invoice	Date	Description	Amount	
	180060611543	09/23/2015	08/25-09/23/15 SVC - AZUSA & GEMINI	$1,972.91	
62715	09/29/2015			**VERIZON**	$274.78
	Invoice	Date	Description	Amount	
	2016-00000349	09/16/2015	09/16-10/15/15 SVC - BREA CYN PUMP STN	$65.19	
	2016-00000350	09/16/2015	09/16-10/15/15 SVC - PH AUTO PLAZA	$162.18	

CITY OF INDUSTRY
WELLS FARGO BANK
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Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	2016-00000351	09/16/2015	09/16-10/15/15 SVC - GENERATOR SITE-TELEMETRY	$47.41	
62716	10/08/2015			**ABORTA-BUG PEST CONTROL**	$95.00
	Invoice	Date	Description	Amount	
	16824	09/16/2015	QTRLY SVC-TRES HERMANOS	$95.00	
62717	10/08/2015			**ADMIN SURE**	$1,900.00
	Invoice	Date	Description	Amount	
	8856	09/15/2015	CLAIM ADMIN-OCT 2015	$1,900.00	
62718	10/08/2015			**ALEJANDRO GONZALEZ**	$83.55
	Invoice	Date	Description	Amount	
	09/17/15	09/24/2015	REIMBURSE FOR EXPENSES-LUNCH MEETING WITH	$45.44	
	09/13/15	09/24/2015	REIMBURSE FOR EXPENSES-FUEL AND CAR WASH	$38.11	
62719	10/08/2015			**AT & T**	$176.00
	Invoice	Date	Description	Amount	
	0126038208	09/23/2015	08/19-09/18/15 SVC - METROLINK	$176.00	
62720	10/08/2015			**AVANT-GARDE, INC**	$6,615.00
	Invoice	Date	Description	Amount	
	3812	09/18/2015	PROJECT MGMT SVC-CITY BRIDGES	$440.00	
	3813	09/18/2015	PROGRAM MGMT-AZUSA AVE BRIDGE	$6,175.00	
62721	10/08/2015			**BRYAN PRESS**	$171.68
	Invoice	Date	Description	Amount	
	0073481	09/03/2015	RECEIPTS FOR VEHICLE STORAGE	$171.68	
62722	10/08/2015			**CALIFORNIA CONTRACT CITIES**	$2,951.48
	Invoice	Date	Description	Amount	
	#INDUSTRY	09/16/2015	STORMWATER FUNDING OPTIONS	$2,951.48	

CITY OF INDUSTRY
WELLS FARGO BANK
October 8, 2015

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
62723	10/08/2015			**CASC ENGINEERING AND**	$7,711.00
	Invoice	Date	Description	Amount	
	34222	08/31/2015	NPDES ENG SVC-FOLLOW'S CAMP	$1,366.00	
	34221	08/31/2015	NPDES ENG SVC-COI	$6,345.00	
62724	10/08/2015			**CHEM PRO LABORATORY, INC**	$269.00
	Invoice	Date	Description	Amount	
	594020	08/23/2015	WATER TREATMENT-AUG 2015	$269.00	
62725	10/08/2015			**CITY OF INDUSTRY**	$1,194.31
	Invoice	Date	Description	Amount	
	2016-00000013	08/31/2015	IH FUEL PUMP-CITY VEHICLES	$76.05	
	2016-00000011	08/31/2015	IH FUEL PUMP-SECURITY VEHICLES	$1,118.26	
62726	10/08/2015			**CITY OF INDUSTRY-MEDICAL**	$120,000.00
	Invoice	Date	Description	Amount	
	REG 10/8/15	09/30/2015	TRANSFER FUNDS-MEDICAL	$120,000.00	
62727	10/08/2015			**CITY OF INDUSTRY-PAYROLL ACCT**	$100,000.00
	Invoice	Date	Description	Amount	
	P/R 9/30/15	09/29/2015	PAYROLL REIMBURSEMENT FOR 9/30/15	$100,000.00	
62728	10/08/2015			**CITY OF SOUTH EL MONTE**	$2,000.00
	Invoice	Date	Description	Amount	
	1070	09/15/2015	COALITION SVC SR60 PROJ-SEP 2015	$2,000.00	
62729	10/08/2015			**CNC ENGINEERING**	$150,991.19
	Invoice	Date	Description	Amount	
	43873	09/24/2015	INDUSTRY 66KV ELECTRICAL SUBSTATION FACILITY	$796.06	
	43874	09/24/2015	ON-CALL STREET MAINT PROGRAM	$1,429.41	

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Check	Date	Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo			
43875	09/24/2015	WALNUT DR SOUTH WIDENING	$1,019.72
43876	09/24/2015	CLARK AVE WIDENING	$1,727.80
43877	09/24/2015	2014-2015 SLURRY SEAL	$235.32
43878	09/24/2015	GENERAL ENGINEERING SVC-CIP	$38,881.01
43879	09/24/2015	GENERAL ENGINEERING SVC 9/7-9/20/15	$42,079.66
43880	09/24/2015	INDUSTRY HILLS LEASE	$313.76
43881	09/24/2015	TONNER CYN PROPERTY	$2,062.23
43882	09/24/2015	ATLAS-LEGAL DESCRIPTIONS	$1,333.48
43883	09/24/2015	PUENTE VALLEY OPERABLE UNIT	$313.76
43884	09/24/2015	MAINT OF CITY HALL OFFICES	$977.32
43885	09/24/2015	MAINT OF IMC BUILDING	$156.88
43886	09/24/2015	HOMESTEAD MUSEUM MAINT	$850.65
43887	09/24/2015	VALLEY BLVD RESURFACING	$9,580.30
43888	09/24/2015	PUC RAILROAD SAFETY UPGRADE	$3,019.94
43889	09/24/2015	LOS ANGELES SUB QUIET ZONE	$2,470.86
43890	09/24/2015	CITY STREETS AND UPRR CROSSINGS	$2,328.82
43891	09/24/2015	PUC RAILROAD SAFETY UPGRADE	$784.40
43892	09/24/2015	OPERATION AND MAINT OF METRO PARKING LOT	$313.76
43893	09/24/2015	SAN JOSE AVE RECONSTRUCTION	$156.88
43894	09/24/2015	LAUNDRY BLDG SETTLEMENT ISSUES	$3,257.38
43895	09/24/2015	INDUSTRY HILLS FUEL TANKS DISPENSING	$470.64
43896	09/24/2015	PROPERTY MGMT FOR CITY OWNED PROPERTIES	$2,538.48
43897	09/24/2015	AZUSA AVE BRIDGE REPAINTING	$235.32
43898	09/24/2015	HWY BRIDGE PROGRAM FUNDING	$235.32
43899	09/24/2015	FISCAL YEAR BUDGET	$2,875.17
43900	09/24/2015	STORM DRAIN IN AJAX AVE	$7,294.92
43901	09/24/2015	FOLLOW'S CAMP PROPERTY	$2,044.21
43902	09/24/2015	VARIOUS ASSIGNMENTS-SA TO IUDA	$5,111.61
43903	09/24/2015	CITY PROPERTY-110 ACRES SOUTH OF	$1,393.38
43904	09/24/2015	METROLINK STATION/COMMUTER RAIL STATION	$470.64
43905	09/24/2015	AQMD GRANT FO ELECTRICAL CAR CHARGING	$705.96

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WELLS FARGO BANK
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Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	43906	09/24/2015	NELSON AVE AND PUENTE AVE WIDENING	$156.88	
	43907	09/24/2015	CIVIC-FINANCIAL CENTER LANDSCAPING	$253.34	
	43908	09/24/2015	MAINT OF YARD AT 1123 HATCHER AVE	$156.88	
	43909	09/24/2015	ARENTH AVE RECONSTRUCTION	$3,040.08	
	43910	09/24/2015	COI MUNICIPAL CODE COMPLIANCE	$156.88	
	43911	09/24/2015	PECK RD STORM DRAIN DEBRIS REMOVAL	$156.88	
	43912	09/24/2015	FULLERTON RD GRADE SEPARATION	$7,795.24	
	43913	09/24/2015	FAIRWAY DR GRADE SEPARATION	$549.08	
	43914	09/24/2015	NOGALES GRADE SEAPARATION	$1,260.88	
62730	10/08/2015			**COMFORT SYSTEMS USA**	$5,921.49
	Invoice	Date	Description	Amount	
	235060	09/22/2015	A/C MAINT-EL ENCANTO	$1,973.83	
	234786	09/16/2015	A/C MAINT-EL ENCANTO	$1,973.83	
	234788	09/16/2015	A/C MAINT-EL ENCANTO	$1,973.83	
62731	10/08/2015			**COUNTRY ESTATE FENCE, INC.**	$834.77
	Invoice	Date	Description	Amount	
	22116	09/03/2015	FENCE SUPPLIES-TRES HERMANOS	$731.16	
	22115	09/03/2015	FENCE SUPPLIES-OLD RANCH RD/FERRERO PKY	$103.61	
62732	10/08/2015			**D M V RENEWAL**	$343.00
	Invoice	Date	Description	Amount	
	29260E1-15	09/21/2015	REGISTRATION RENEWAL-LIC 29260E1	$343.00	
62733	10/08/2015			**DEPT OF ANIMAL CARE & CONTROL**	$2,489.57
	Invoice	Date	Description	Amount	
	09/15/15	09/15/2015	SHELTER COSTS-AUG 2015	$2,489.57	
62734	10/08/2015			**DONLON BUILDERS**	$14,891.00
	Invoice	Date	Description	Amount	

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WELLS FARGO BANK
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Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	08/24/15	08/24/2015	REIMBURSEMENT OF COST FOR 804 S. AZUSA AVE.	$14,891.00	
62735	10/08/2015			**ELECTRA-MEDIA, INC**	$1,763.00
	Invoice	Date	Description	Amount	
	3804	09/15/2015	PH AUTO DISPLAY-OCT 2015	$1,763.00	
62736	10/08/2015			**ENVIRONS, INC.**	$6,381.33
	Invoice	Date	Description	Amount	
	2833	09/10/2015	LANDSCAPE PLANS-BIXBY DR	$26.51	
	2831	09/10/2015	LANDSCAPE PLANS-CIVIC CENTER	$6,354.82	
62737	10/08/2015			**FRAZER, LLP**	$33,450.00
	Invoice	Date	Description	Amount	
	139454	09/15/2015	COI-ACCTG SVC 9/1-9/15/15	$33,450.00	
62738	10/08/2015			**GAS COMPANY, THE**	$41.62
	Invoice	Date	Description	Amount	
	2016-00000359	09/25/2015	08/24-09/23/15 SVC - 15415 DON JULIAN RD	$41.62	
62739	10/08/2015			**GONSALVES & SON, JOE A.**	$5,000.00
	Invoice	Date	Description	Amount	
	25564	09/23/2015	LEGISLATIVE SVC-OCT 2015	$5,000.00	
62740	10/08/2015			**HADDICK'S AUTO BODY**	$2,234.00
	Invoice	Date	Description	Amount	
	047563	09/03/2015	AUTO MAINT-LIC 1210025	$247.52	
	047566	09/03/2015	AUTO MAINT-LIC 13740863	$14.02	
	047562	09/03/2015	AUTO MAINT-LIC 1279616	$998.74	
	047577	09/08/2015	AUTO MAINT-LIC 1279616	$599.47	
	148680	09/11/2015	CONTAINER STORAGE	$20.00	
	H-70994	08/22/2015	TOWING SVC-LIC 1279616	$105.00	

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Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	047570	09/08/2015	AUTO MAINT-LIC 1347776	$116.40	
	047571	09/08/2015	SMOG TEST-LIC 7W20338	$69.00	
	047578	09/08/2015	AUTO MAINT-LIC 1320295	$63.85	
62741	10/08/2015			**HOME DEPOT CREDIT SERVICE**	$29.81
	Invoice	Date	Description	Amount	
	3573876	09/18/2015	SUPPLIES FOR CITY VEHICLES	$29.81	
62742	10/08/2015			**HUNTER ELECTRIC SERVICE, INC.**	$1,044.00
	Invoice	Date	Description	Amount	
	2015-140	09/28/2015	REPAIR LIGHTING-CITY HALL	$430.00	
	2015-145	09/29/2015	REPAIR LIGHTING-IMC	$344.00	
	2015-135	09/28/2015	REPLACE OUTLET-HOMESTEAD	$270.00	
62743	10/08/2015			**INDUSTRY MANUFACTURERS**	$200,000.00
	Invoice	Date	Description	Amount	
	09/28/15	09/28/2015	CITY CONTRACT-SECOND QTR OF FY 15/16	$200,000.00	
62744	10/08/2015			**INDUSTRY SECURITY SERVICES**	$38,262.45
	Invoice	Date	Description	Amount	
	14-15357	09/18/2015	SECURITY SVC 9/11-9/17/15	$3,364.80	
	14-15345	09/18/2015	SECURITY SVC 9/11-9/17/15	$15,864.25	
	14-15385	09/25/2015	SECURITY SVC 9/18-9/24/15	$3,364.80	
	14-15374	09/25/2015	SECURITY SVC 9/18-9/24/15	$15,668.60	
62745	10/08/2015			**JANUS PEST MANAGEMENT**	$580.00
	Invoice	Date	Description	Amount	
	138279	10/01/2015	SVC-HOMESTEAD	$580.00	
62746	10/08/2015			**KLEINFELDER, INC.**	$6,258.50
	Invoice	Date	Description	Amount	

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CITY.WF.CHK - City General Wells Fargo					
	001075379	09/15/2015	ENVIRONMENTAL SVC-NOGALES/FULLERTON	$6,258.50	
62747	10/08/2015			**L A COUNTY DEPT OF PUBLIC**	$4,864.10
	Invoice	Date	Description	Amount	
	IN160000147	09/08/2015	PILOT ROUTINE MAINT	$4,864.10	
62748	10/08/2015			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	DP15-10/ZE15-2-A	09/22/2015	FEE-NOTICE OF DETERMINATION	$75.00	
62749	10/08/2015			**L A COUNTY REGISTRAR-**	$2,210.00
	Invoice	Date	Description	Amount	
	DP15-10/ZE15-2-B	09/22/2015	FEE-DEPT OF FISH/GAME	$2,210.00	
62750	10/08/2015			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	DP 15-7-A	09/23/2015	FEE-NOTICE OF DETERMINATION	$75.00	
62751	10/08/2015			**L A COUNTY REGISTRAR-**	$2,210.00
	Invoice	Date	Description	Amount	
	DP 15-7-B	09/23/2015	FEE-DEPT OF FISH/GAME	$2,210.00	
62752	10/08/2015			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	M-LINE	09/25/2015	FEE-NOTICE OF EXEMPTION FOR M-LINE	$75.00	
62753	10/08/2015			**L A COUNTY SHERIFF'S**	$17,966.60
	Invoice	Date	Description	Amount	
	160637NH	09/17/2015	HELICOPTER SVC-JUL 2015	$300.76	
	160690NH	09/22/2015	SPECIAL EVENT-DIRECTED PATROL	$17,665.84	

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Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
62754	10/08/2015			**LA PUENTE VALLEY COUNTY**	$286.48
	Invoice	Date	Description	Amount	
	BS; 09/15	09/16/2015	WATER MONITORING-BOY SCOUTS RESERVOIR	$286.48	
62755	10/08/2015			**LOS ANGELES AREA COUNCIL**	$1,468.62
	Invoice	Date	Description	Amount	
	#08/30/2015	08/30/2015	TONNER CYN WATER CHARGES FOR AUG 2015	$1,468.62	
62756	10/08/2015			**MERRITT'S ACE HARDWARE**	$26.11
	Invoice	Date	Description	Amount	
	088326	09/21/2015	MISC SUPPLIES	$26.11	
62757	10/08/2015			**METHOD TECHNOLOGIES**	$166.25
	Invoice	Date	Description	Amount	
	22172	09/18/2015	UPDATE CITY WEBSITE	$166.25	
62758	10/08/2015			**MR PLANT & INTERIOR BOTANICAL**	$710.00
	Invoice	Date	Description	Amount	
	OCT 2417	10/01/2015	PLANT MAINT-OCT 2018	$122.00	
	OCT 2418	10/01/2015	PLANT MAINT-OCT 2018	$588.00	
62759	10/08/2015			**MYERS & SONS HI-WAY SAFETY,**	$4,966.47
	Invoice	Date	Description	Amount	
	35615	09/11/2015	STOCK SIGNS	$2,165.61	
	35230	09/01/2015	STOCK SIGNS	$2,091.26	
	35618	09/11/2015	HANDICAP PARKING SIGN-ELECTRIC VEHICLE	$13.73	
	35885	09/17/2015	CUSTOM SIGN-ELECTRIC VEHICLE	$614.22	
	35313	09/03/2015	STOCK SIGNS	$81.65	
62760	10/08/2015			**OLMOS PROFESSIONAL SERVICES**	$8,782.00
	Invoice	Date	Description	Amount	

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Check	Date		Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo					
	187	09/30/2015	JANITORIAL SVC-IMC	$1,467.00	
	188	09/30/2015	JANITORIAL SVC-CITY HALL	$5,500.00	
	189	09/30/2015	JANITORIAL SVC-FIRE STATION	$1,815.00	
62761	10/08/2015		**PHILIPS, PAUL J.**		$45.78
	Invoice	Date	Description	Amount	
	09/18/15	09/28/2015	REIMBURSE FOR EXPENSES-LUNCH MEETING	$45.78	
62762	10/08/2015		**PLACEWORKS**		$21,393.48
	Invoice	Date	Description	Amount	
	57205	08/31/2015	INDUSTRY CLIMATE ACTION PLAN	$1,297.35	
	57143	08/31/2015	DONLON BUILDERS/15000 NELSOS AVE BLDG	$918.75	
	57144	08/31/2015	CT REALTY-DAVE-BALL/PARRIOTT PLACE BLDG	$6,402.59	
	57160	08/31/2015	MAJESTIC REALTY/OFFICE BLDG CROSSROADS	$6,376.88	
	57161	08/31/2015	CHALMERS EQUITY GROUP/WAREHOUSE OFFICE	$4,070.41	
	57142	08/31/2015	CT REALTY INVESTORS/WAREHOUSING DEV PLAN	$2,327.50	
62763	10/08/2015		**PROFESSIONAL ID CARDS, INC.**		$101.70
	Invoice	Date	Description	Amount	
	7579	07/12/2015	CUSTOM DESIGN BADGES-CODE ENFORCEMENT	$56.00	
	8808	09/23/2015	CUSTOM DESIGN BADGES-CODE ENFORCEMENT	$45.70	
62764	10/08/2015		**RICOH USA, INC.**		$1,202.68
	Invoice	Date	Description	Amount	
	5037921579	09/13/2015	METER READING	$175.69	
	5037992392	09/16/2015	METER READING	$1,026.99	
62765	10/08/2015		**ROWLAND WATER DISTRICT**		$2,262.97
	Invoice	Date	Description	Amount	
	2016-00000360	09/23/2015	08/18-09/14/15 SVC - 755 NOGALES (RC)	$120.88	
	2016-00000361	09/23/2015	08/18-09/14/15 SVC - AZUSA AVE (RC)	$96.24	

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Check	Date		Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo				
	2016-00000362	09/23/2015	08/18-09/14/15 SVC - 1100 AZUSA AVE	$152.66
	2016-00000363	09/23/2015	08/18-09/14/15 SVC - 17217 & 17229 CHESTNUT - IRR	$180.66
	1123DHATCH-SEP15	09/23/2015	08/18-09/15/15 SVC - 1123D HATCHER ST	$67.56
	1123CHATCH-SEP15	09/23/2015	08/18-09/15/15 SVC - 1123C HATCHER ST	$142.96
	1135HATCH-SEP15	09/23/2015	08/18-09/15/15 SVC - 1135 HATCHER ST	$58.86
	2016-00000368	09/23/2015	08/18-09/14/15 SVC - AZUSA AVE - CENTER	$116.86
	2016-00000369	09/23/2015	08/18-09/14/15 SVC - HURLEY ST & VALLEY	$280.09
	2016-00000370	09/23/2015	08/18-09/14/15 SVC - 17401 VALLEY BLVD	$410.59
	2016-00000371	09/23/2015	08/18-09/14/15 SVC - AZUSA AVE 205597	$119.76
	2016-00000372	09/23/2015	08/18-09/15/15 SVC - 930 AZUSA AVE	$387.39
	2016-00000373	09/23/2015	08/18-09/15/15 SVC - 18044 ROWLAND-LAWSON	$128.46
62766	10/08/2015		**SAN GABRIEL VALLEY ECONOMIC**	$25,000.00
	Invoice	Date	Description	Amount
	4319	10/01/2015	MEMBERSHIP RENEWAL-IMC	$25,000.00
62767	10/08/2015		**SAN GABRIEL VALLEY NEWSPAPER**	$3,066.66
	Invoice	Date	Description	Amount
	0010706839	08/28/2015	NOTICE OF PUBLIC HEARING	$319.12
	0010699339	08/10/2015	NOTICE OF INTENDED STREET VACATION	$316.36
	0010699357	08/10/2015	NOTICE OF INTENDED STREET VACATION	$316.36
	0010706834	08/28/2015	NOTICE OF PUBLIC HEARING	$302.56
	0010706825	08/28/2015	NOTICE OF PUBLIC HEARING	$363.28
	0010703584	08/20/2015	NOTICE OF INTENT PERMIT 14-8	$446.08
	0010703571	08/20/2015	NOTICE OF INTENT DEV PLAN 15-6	$446.08
	0010701965	08/14/2015	NOTICE OF PUBLIC HEARING	$269.44
	0010700607	08/11/2015	NOTICE OF SPECIAL PUBLIC HEARING	$287.38
62768	10/08/2015		**SATSUMA LANDSCAPE & MAINT.**	$144,849.13
	Invoice	Date	Description	Amount
	0915CHTA	09/29/2015	LANDSCAPE SVC-VARIOUS SITES	$34,925.00

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CITY.WF.CHK - City General Wells Fargo					
	0915TACH	09/29/2015	LANDSCAPE SVC-SEP 2015	$109,924.13	
62769	10/08/2015		**SC FUELS**		$16,644.97
	Invoice	Date	Description	Amount	
	2881571	09/22/2015	DIESEL FUEL-INDUSTRY HILLS PUMPS	$16,644.97	
62770	10/08/2015		**SO CAL INDUSTRIES**		$733.72
	Invoice	Date	Description	Amount	
	196802	09/16/2015	RR RENTAL-TONNER CYN	$93.87	
	197755	09/23/2015	RR RENTAL-TONNER CYN	$84.90	
	196803	09/16/2015	FENCE RENTAL-INDUSTRY HILLS	$554.95	
62771	10/08/2015		**SO CALIFORNIA EDISON COMPANY**		$1,691.95
	Invoice	Date	Description	Amount	
	2016-00000364	09/25/2015	08/25-09/24/15 SVC - 17378 E GALE B	$48.66	
	2016-00000365	09/25/2015	08/01-09/23/15 SVC - 600 S BREA CYN RD	$135.99	
	2016-00000366	09/25/2015	08/25-09/24/15 SVC - 745 ANAHEIM PUENTE RD CP	$62.85	
	2016-00000367	09/26/2015	07/27-09/24/15 SVC - VARIOUS SITES-BREA CYN	$1,444.45	
62772	10/08/2015		**SOUTHERN CONTRACTING**		$180,025.22
	Invoice	Date	Description	Amount	
	#25CITY-1389-RET	10/08/2015	RETENTION-66KV ELEC SUBSTATION FACILITY	$180,025.22	
62773	10/08/2015		**SQUARE ROOT GOLF &**		$188,948.42
	Invoice	Date	Description	Amount	
	1197H	09/30/2015	LANDSCAPE SVC-SEP 2015	$126,605.48	
	1196ELHM	09/30/2015	LANDSCAPE SVC-SEP 2015	$42,564.94	
	1195ELHM	09/30/2015	LANDSCAPE SVC-SEP 2015	$19,778.00	
62774	10/08/2015		**STAPLES BUSINESS ADVANTAGE**		$1,748.81
	Invoice	Date	Description	Amount	

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CITY.WF.CHK - City General Wells Fargo					
	8035241045	07/18/2015	OFFICE SUPPLIES	$220.31	
	8035241045-A	07/18/2015	OFFICE SUPPLIES	$99.53	
	8035241045-B	07/18/2015	OFFICE SUPPLIES	$79.11	
	8035241045-C	07/18/2015	OFFICE SUPPLIES	$66.03	
	8035241045-D	07/18/2015	OFFICE SUPPLIES	$19.61	
	8035241045-E	07/18/2015	OFFICE SUPPLIES	$66.69	
	8035978795	09/12/2015	OFFICE SUPPLIES	$376.85	
	8036066931	09/19/2015	OFFICE SUPPLIES	$820.68	
62775	10/08/2015			**STATE COMPENSATION INS. FUND**	$2,728.83
	Invoice	Date	Description	Amount	
	OCTOBER 2015	09/28/2015	PREMIUM FOR 10/1-11/1/15	$2,728.83	
62776	10/08/2015			**STOTZ EQUIPMENT**	$2,012.98
	Invoice	Date	Description	Amount	
	W09665	07/31/2015	REPAIR OF JOHN DEERE	$2,012.98	
62777	10/08/2015			**SUNRISE ROOFING**	$200.00
	Invoice	Date	Description	Amount	
	09/21/15	09/21/2015	ROOF REPAIR-CITY HALL	$200.00	
62778	10/08/2015			**THEE BEST ROOTER & PLUMBING**	$225.00
	Invoice	Date	Description	Amount	
	4641	09/19/2015	PLUMBING SVC-HOMESTEAD	$225.00	
62779	10/08/2015			**UNDERGROUND SERVICE ALERT OF**	$37.50
	Invoice	Date	Description	Amount	
	820150156	09/01/2015	DIG ALERTS	$37.50	
62780	10/08/2015			**VILLEGAS GENERAL BUILDING**	$1,350.00
	Invoice	Date	Description	Amount	

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CITY.WF.CHK - City General Wells Fargo						
	180	09/03/2015	INSTALL MOLDING AORUND LIGHT FIXTURES-		$1,350.00	
62781	10/08/2015			**VORTEX INDUSTRIES, INC.**		$364.10
	Invoice	Date	Description		Amount	
	08-959376-1	09/03/2015	REPAIR GATE-TONNER CYN		$364.10	
62782	10/08/2015			**WEATHERITE SERVICE**		$152.00
	Invoice	Date	Description		Amount	
	L164076	09/10/2015	A/C MAINT-IMC		$152.00	
62783	10/08/2015			**WREGIS**		$675.00
	Invoice	Date	Description		Amount	
	834	09/11/2015	ANNUAL FEE-RENEWABLE ENERGY SYSTEM		$675.00	

Check	Status	Count	Transaction Amount
	Total	**98**	**$2,296,787.84**

CITY COUNCIL

ITEM NO. 5.2

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

TO: Honorable Mayor and Members of the City Council

FROM: Paul Philips, City Manager

Date: October 1, 2015

Subject: Approval of Conflict Waiver for Casso & Sparks, LLP

BACKGROUND: On June 10, 2015, the Industry City Council appointed James M. Casso of Casso & Sparks, LLP, to serve as City Attorney. Casso & Sparks also was appointed to serve as legal counsel to the various City agencies, boards and commissions. Casso & Sparks also serves as the City of La Puente's City Attorney.

In the near future, it is anticipated that Industry and La Puente will be cooperatively working on three important public works projects. In order for Casso & Sparks to provide legal advice to both cities on these projects, under the Rules of Professional Conduct of the State Bar of California (the "Rules"), prior to engaging in this work, it is necessary for Casso & Sparks to obtain a conflict waiver from both Industry and La Puente.

DISCUSSION: The attached letter from Mr. Casso explains the Rules and how the conflict waiver works for both cities.

BUDGET IMPACT: The cost of services provided by Casso & Sparks for these projects is included in the City's 2015-2016 budget.

RECOMMENDATION: Staff recommends that the City Council approve the Conflict Waiver.

Attachment

James M. Casso
Principal
jcasso@cassosparks.com
626-512-5470
www.cassosparks.com

September 30, 2015

The Honorable Daniel Holloway
Mayor, City of La Puente
15900 E. Main Street
La Puente, CA 91744

The Honorable Mark Radecki
Mayor, City of Industry
15625 E. Stafford Street, Suite 100
City of Industry, CA 91744

RE: Conflict of Interest Waiver-Valley Boulevard Sound Wall, Nelson Street Bridge Renovation and Azusa Avenue Bridge Painting

Dear Mayors Holloway and Radecki:

As you are aware, I serve as the City Attorney for both the City of La Puente ("La Puente") and City of Industry ("Industry"). La Puente and Industry have requested that I work with both cities to draft agreements dealing with the construction of a sound wall along Valley Boulevard and certain public works projects for the Nelson Street Bridge and the Azusa Avenue Bridge. Under the Rules of Professional Conduct of the State Bar of California (the "Rules"), prior to engaging in this work, it is necessary for me to obtain a conflict waiver from both La Puente and Industry.

This letter will confirm that I have informed you about the potential conflict of interest inherent in any representation of both cities. It is important that you understand that since I would be representing both La Puente and Industry, each city would be my client. As a result, matters which one of you might discuss with me would not be protected by the attorney/client privilege from disclosure to the other of you. The Rules prohibit me from agreeing with either city to withhold information from the other. Of course, anything either La Puente or Industry discusses with me is privileged from disclosure to third parties. If the two cities have a difference of opinion concerning the proposed sound wall or the public work projects involving the bridges, I can point out the pros and cons of such differing opinions. The Rules prohibit me, as the lawyer for both of you, from advocating one of your positions over the other.

Although it is unlikely to occur, if conflicts do arise between the two of you of such nature that it is impossible in my judgment to perform my obligations to each of you in accordance with this letter, it would become necessary for me to withdraw as your joint attorney and to advise one or both cities to obtain independent counsel.

Please sign and return the enclosed copy of this letter. By signing and returning the letter you are acknowledging that you have read and understand this letter and wish me to proceed with your representation.

Very truly yours,

James M. Casso

James M. Casso

We have read the foregoing letter and understand its contents. We consent to having you represent both La Puente and Industry on the terms and conditions set forth therein. We understand the discussion of conflicts set forth above and agree that between La Puente and Industry, with respect to information either of us provides you, there shall be no confidential communications.

Date: _____

Agreed and accepted:

By:_____
Daniel C. Holloway, Mayor
City of La Puente

Date: _____

Agreed and accepted:

By:_____
Mark D. Radecki, Mayor
City of Industry

CITY COUNCIL

ITEM NO. 5.3

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

TO: Honorable Mayor and Members of the City Council

FROM: James M. Casso, City Attorney

DATE: October 2, 2015

SUBJECT: Consideration of Professional Services Agreement with Cordoba Corporation

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BACKGROUND: Pursuant to the City Council's direction, my office has drafted a professional services agreement with Cordoba Corporation ("Cordoba") for real estate and related advisory services for the City's owned property at Tonner Canyon and Follows Camp. Also, at the direction of Council, since August 1, 2015, Cordoba has been reviewing previously drafted and considered City studies on the potential uses of the Tonner Canyon property and Cordoba is currently analyzing potential uses for the Follows Camp property.

DISCUSSION: The City has owned both properties for a number of years. Potential uses for the Tonner Canyon property has been analyzed and uses for Follows Camp has been informally discussed but no definitive direction on potential uses has been given by the Council to City staff. Cordoba's services will include an analysis to assist the Council in determining that definitive direction and in ensuring that the City's proposed use is sensitive to the interests of the surrounding communities and compliant with any applicable federal, state or local laws and regulations.

BUDGET IMPACT: Cordoba will earn a monthly retainer of $45,000.00 and for other services as detailed in Exhibit "B" of the attached agreement.

RECOMMENDATION: Staff recommends that the City Council approve the Professional Services Agreement with Cordoba Corporation.

Attachment

CITY OF INDUSTRY PROFESSIONAL SERVICES AGREEMENT
WITH CORDOBA CORPORATION

This PROFESSIONAL SERVICES AGREEMENT ("Agreement"), is made and effective as of August 1, 2015 ("Effective Date"), between the City of Industry, a municipal corporation ("City"), and Cordoba Corporation, a California corporation ("Consultant"). The City and Consultant are hereinafter collectively referred to as the "Parties".

RECITALS

WHEREAS, City desires to engage Consultant to perform the services described herein, and Consultant desires to perform such services in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, City and Consultant agree as follows:

1. TERM

This Agreement shall commence on the Effective Date, and shall remain and continue in effect until tasks described herein are completed, but in no event later than March 31, 2016, unless sooner terminated pursuant to the provisions of this Agreement.

2. SERVICES

(a) Consultant shall perform the tasks ("Services") described and set forth in Exhibit A, attached hereto and incorporated herein as though set forth in full. ("Scope of Services"). Tasks other than those specifically described in the Scope of Services shall not be performed without prior written approval of the City. The Services shall not be performed by Consultant, unless prior written approval is first obtained from the City. In the event of conflict or inconsistency between the terms of this Agreement and Exhibit A, the terms of this Agreement shall prevail.

(b) City shall have the right to request, in writing, changes to the Services. Any such changes mutually agreed upon by the Parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement.

(c) Consultant shall perform all Services in a manner reasonably satisfactory to the City and in a first-class manner in conformance with the standards of quality normally observed by an entity providing professional auditing services, serving a municipal agency.

(d) Consultant shall comply with all applicable federal, state, and local laws, regulations and ordinances in the performance of this Agreement, including but not limited to, the conflict of interest provisions of Government Code Section 1090 and the Political Reform Act (Government Code Section 81000 *et seq.*)). During the term of this Agreement, Consultant shall not perform any work for another person or entity for whom Consultant was not working on the Effective Date if both (i) such work would require Consultant to abstain from a decision under this Agreement pursuant to a conflict of interest statute or law; and (ii) City has not consented in writing to Consultant's performance of such work. No officer or employee of City shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.* Consultant hereby

warrants that it is not now, nor has it been in the previous twelve (12) months, an employee, agent, appointee, or official of the City. If Consultant was an employee, agent, appointee, or official of the City in the previous twelve (12) months, Consultant warrants that it did not participate in any manner in the forming of this Agreement. Consultant understands that, if this Agreement is made in violation of Government Code §1090 *et. seq.*, the entire Agreement is void and Consultant will not be entitled to any compensation for Services performed pursuant to this Agreement, and Consultant will be required to reimburse the City for any sums paid to the Consultant. Consultant understands that, in addition to the foregoing, it may be subject to criminal prosecution for a violation of Government Code § 1090 and, if applicable, will be disqualified from holding public office in the State of California.

(e) Consultant represents that it has, or will secure at its own expense, all licensed personnel required to perform the Services. All Services shall be performed by Consultant or under its supervision, and all personnel engaged in the Services shall be qualified and licensed to perform such services.

3. MANAGEMENT

The City Manager shall represent the City in all matters pertaining to the administration of this Agreement, review and approval of all products submitted by Consultant, but shall have no authority to modify the Services or the compensation due to Consultant.

4. PAYMENT

(a) The City agrees to pay Consultant a monthly retainer of $45,000.00 and in accordance with the payment rates and terms and the hourly schedule of payment as set forth in Exhibit B ("Rate Schedule"), attached hereto and incorporated herein by this reference as though set forth in full, based upon actual time spent on the above tasks.

(b) Consultant shall not be compensated for any services rendered in connection with its performance of this Agreement which are in addition to those set forth herein, unless such additional services are authorized in advance and in writing by the City. Consultant shall be compensated for any additional services in the amounts and in the manner as agreed to by City and Consultant at the time City's written authorization is given to Consultant for the performance of said services.

(c) Consultant shall submit invoices monthly for actual services performed. Invoices shall be submitted on or about the first business day of each month, or as soon thereafter as practical, for services provided in the previous month. Payment shall be made within thirty (30) days of receipt of each invoice as to all non-disputed fees. If the City disputes any of Consultant's fees it shall give written notice to Consultant within thirty (30) days of receipt of an invoice of any disputed fees set forth on the invoice. Any final payment under this Agreement shall be made within 45 days of receipt of an invoice therefore.

5. SUSPENSION OR TERMINATION OF AGREEMENT

(a) The City may at any time, for any reason, with or without cause, suspend or terminate this Agreement, or any portion hereof, by serving upon the Consultant at least ten (10) days prior written notice. Upon receipt of said notice, the Consultant shall immediately cease all work under this Agreement, unless the notice provides otherwise. If the City suspends or terminates a portion of this Agreement such suspension or termination shall not make void or invalidate the remainder of this Agreement.

(b) In the event this Agreement is terminated pursuant to this Section, the City shall pay to Consultant the actual value of the work performed up to the time of termination, provided that the work performed is of value to the City. Upon termination of the Agreement pursuant to this Section, the Consultant shall submit an invoice to the City pursuant to Section 5 of this Agreement.

6. OWNERSHIP OF DOCUMENTS

(a) Consultant shall maintain complete and accurate records with respect to sales, costs, expenses, receipts, and other such information required by City that relate to the performance of services under this Agreement. Consultant shall maintain adequate records of services provided in sufficient detail to permit an evaluation of services. All such records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Consultant shall provide free access to the representatives of City or its designees at reasonable times to review such books and records; shall give City the right to examine and audit said books and records; shall permit City to make transcripts or copies therefrom as necessary; and shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a period of three (3) years after receipt of final payment.

(b) Upon completion of, or in the event of termination or suspension of this Agreement, all original documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared in the course of providing the services to be performed pursuant to this Agreement shall become the sole property of the City and may be used, reused, or otherwise disposed of by the City without the permission of the Consultant. With respect to computer files, Consultant shall make available to the City, at the Consultant's office, and upon reasonable written request by the City, the necessary computer software and hardware for purposes of accessing, compiling, transferring, copying and/or printing computer files. Consultant hereby grants to City all right, title, and interest, including any copyright, in and to the documents, designs, drawings, maps, models, computer files, surveys, notes, and other documents prepared by Consultant in the course of providing the services under this Agreement. All reports, documents, or other written material developed by Consultant in the performance of the Services pursuant to this Agreement, shall be and remain the property of the City.

7. INDEMNIFICATION

(a) Indemnity for professional liability

When the law establishes a professional standard of care for Consultant's Services, to the fullest extent permitted by law, Consultant shall indemnify, protect, defend and hold harmless the City and any and all of its officials, employees and agents ("Indemnified Parties") from and against any and all losses, liabilities, damages, costs and expenses, including legal counsel's fees and costs caused in whole or in part by any negligent or wrongful act, error or omission of Consultant, its officers, agents, employees or Subconsultants (or any agency or individual that Consultant shall bear the legal liability thereof) in the performance of professional services under this Agreement.

(b) Duty to Defend

In the event the City, its officers, employees, agents and/or volunteers are made a party to any action, claim, lawsuit, or other adversarial proceeding arising from the performance of the services encompassed by this Agreement, and upon demand by City, Consultant shall have an immediate duty to

defend the City at Consultant's cost or at City's option, to reimburse the City for its costs of defense, including reasonable attorney's fees and costs incurred in the defense of such matters.

Payment by City is not a condition precedent to enforcement of this indemnity. In the event of any dispute between Consultant and City, as to whether liability arises from the sole negligence of the City or its officers, employees, or agents, Consultant will be obligated to pay for City's defense until such time as a final judgment has been entered adjudicating the City as solely negligent. Consultant will not be entitled in the absence of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

8. INSURANCE

Consultant shall maintain prior to the beginning of and for the duration of this Agreement insurance coverage as specified in Exhibit C attached hereto and incorporated herein by reference.

9. INDEPENDENT CONSULTANT

(a) Consultant is and shall at all times remain as to the City a wholly independent consultant and/or independent contractor. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultants exclusive direction and control. Neither City nor any of its officers, employees, or agents shall have control over the conduct of Consultant or any of Consultant's officers, employees, or agents, except as set forth in this Agreement. Consultant shall not at any time or in any manner represent that it or any of its officers, employees, or agents are in any manner officers, employees, or agents of the City. Consultant shall not incur or have the power to incur any debt, obligation, or liability whatever against the City, or bind the City in any manner.

(b) No employee benefits shall be available to Consultant in connection with the performance of this Agreement. Except for the fees paid to Consultant as provided in the Agreement, City shall not pay salaries, wages, or other compensation to Consultant for performing services hereunder for City. City shall not be liable for compensation or indemnification to Consultant for injury or sickness arising out of performing services hereunder.

10. LEGAL RESPONSIBILITIES

The Consultant shall keep itself informed of State and Federal laws and regulations which in any manner affect those employed by it or in any way affect the performance of its service pursuant to this Agreement. The Consultant shall at all times observe and comply with all such laws and regulations. The City, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the Consultant to comply with this Section.

11. UNDUE INFLUENCE

Consultant declares and warrants that no undue influence or pressure was used against or in concert with any officer or employee of the City in connection with the award, terms or implementation of this Agreement, including any method of coercion, confidential financial arrangement, or financial inducement. No officer or employee of the City has or will receive compensation, directly or indirectly, from Consultant, or from any officer, employee or agent of Consultant, in connection with the award of this Agreement or any work to be conducted as a result of this Agreement. Violation of this Section shall be a material breach of this Agreement entitling the City to any and all remedies at law or in equity.

12. NO BENEFIT TO ARISE TO LOCAL OFFICERS AND EMPLOYEES

No member, officer, or employee of City, or their designees or agents, and no public official who exercises authority over or responsibilities with respect to the Project during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any agreement or sub-agreement, or the proceeds thereof, for work to be performed in connection with the Project performed under this Agreement.

13. RELEASE OF INFORMATION/CONFLICTS OF INTEREST

(a) All information gained by Consultant in performance of this Agreement shall be considered confidential and shall not be released by Consultant without City's prior written authorization. Consultant, its officers, employees, agents, or subconsultants, shall not without written authorization from the City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories, or other information concerning the work performed under this Agreement or relating to any project or property located within the City, unless otherwise required by law or court order. (b) Consultant shall promptly notify City should Consultant, its officers, employees, agents, or subconsultants be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions, or other discovery request ("Discovery"), court order, or subpoena from any person or party regarding this Agreement and the work performed there under or with respect to any project or property located within the City, unless Consultant is prohibited by law from informing the City of such Discovery, court order or subpoena. City retains the right, but has no obligation, to represent Consultant and/or be present at any deposition, hearing, or similar proceeding as allowed by law. Unless City is a party to the lawsuit, arbitration, or administrative proceeding and is adverse to Consultant in such proceeding, Consultant agrees to cooperate fully with the City and to provide the opportunity to review any response to discovery requests provided by Consultant. However, City's right to review any such response does not imply or mean the right by City to control, direct, or rewrite said response.

14. NOTICES

Any notices which either party may desire to give to the other party under this Agreement must be in writing and may be given either by (i) personal service, (ii) delivery by a reputable document delivery service, such as but not limited to, Federal Express, which provides a receipt showing date and time of delivery, or (iii) mailing in the United States Mail, certified mail, postage prepaid, return receipt requested, addressed to the address of the party as set forth below or at any other address as that party may later designate by notice:

To City:	Paul Philips, City Manager City of Industry 15625 E. Stafford Street, Suite 100 City of Industry, CA 91744
With a Copy To:	James M. Casso, City Attorney P.O. Box 4131 West Covina, CA 91791

To Consultant: George Pla
Cordoba Corporation
1401 North Broadway
Los Angeles, CA 90012

15. ASSIGNMENT

The Consultant shall not assign the performance of this Agreement, nor any part thereof, nor any monies due hereunder, without prior written consent of the City.

Before retaining or contracting with any subconsultant for any services under this Agreement, Consultant shall provide City with the identity of the proposed subconsultant, a copy of the proposed written contract between Consultant and such subconsultant which shall include and indemnity provision similar to the one provided herein and identifying City as an indemnified party, or an incorporation of the indemnity provision provided herein, and proof that such proposed subconsultant carries insurance at least equal to that required by this Agreement or obtain a written waiver from the City for such insurance.

Notwithstanding Consultant's use of any subconsultant, Consultant shall be responsible to the City for the performance of its subconstultant as it would be if Consultant had performed the Services itself. Nothing in this Agreement shall be deemed or construed to create a contractual relationship between the City and any subconsultant employed by Consultant. Consultant shall be solely responsible for payments to any subconsultants. Consultant shall indemnify, defend and hold harmless the Indemnified Parties for any claims arising from, or related to, the services performed by a subconsultant under this Agreement.

16. GOVERNING LAW/ATTORNEYS' FEES

The City and Consultant understand and agree that the laws of the State of California shall govern the rights, obligations, duties, and liabilities of the parties to this Agreement and also govern the interpretation of this Agreement. Any litigation concerning this Agreement shall take place in the municipal, superior, or federal district court in Los Angeles County, California. If any action at law or suit in equity is brought to enforce or interpret the provisions of this Agreement, or arising out of or relating to the Services provided by Consultant under this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees and all related costs, including costs of expert witnesses and consultants, as well as costs on appeal, in addition to any other relief to which it may be entitled.

17. ENTIRE AGREEMENT

This Agreement contains the entire understanding between the Parties relating to the obligations of the Parties described in this Agreement. All prior or contemporaneous agreements, understandings, representations, and statements, oral or written and pertaining to the subject of this Agreement or with respect to the terms and conditions of this Agreement, are merged into this Agreement and shall be of no further force or effect. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts such party deems material.

18. SEVERABILITY

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be

amended to, and solely to, the extent necessary to cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

19. COUNTERPARTS

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

20. CAPTIONS

The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are descriptive only and shall have no significance in the interpretation of this Agreement.

21. WAIVER

The waiver by City or Consultant of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by City or Consultant unless in writing.

22. REMEDIES

Each right, power and remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise shall be cumulative and shall be in addition to every other right, power, or remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise. The exercise, the commencement of the exercise, or the forbearance of the exercise by any party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by such party of any of all of such other rights, powers or remedies.

23. AUTHORITY TO EXECUTE THIS AGREEMENT

The person or persons executing this Agreement on behalf of Consultant represents and warrants that he/she has the authority to execute this Agreement on behalf of the Consultant and has the authority to bind Consultant to the performance of its obligations hereunder.

SIGNATURES OF NEXT PAGE

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date.

"CITY"	**"CONSULTANT"**
City of Industry	Cordoba Corporation
By:_____	By:_____
Paul Philips, City Manager	George Pla, President & CEO

Attest:

By:_____
Cecelia Dunlap, Deputy City Clerk

Approved as to form:

By:_____
James M. Casso, City Attorney

Attachments:	Exhibit A	Scope of Services
	Exhibit B	Rate Schedule
	Exhibit C	Insurance Requirements

EXHIBIT A

SCOPE OF SERVICES

Consultant shall perform real estate and related advisory services. The following activities are essential duties, including, but not limited to:

- Perform a desk audit review of all reports and technical studies performed to date on the City owned property commonly known as Tonner Canyon and Follows Camp (collectively, "City owned property");
- Provide an analysis on the optimal use of the City owned property, ensuring that the uses best meet current and potentially future market demanded uses, taking into account environmental concerns and community issues;
- Work with the City Manager and assigned key staff on developing future uses for City owned property, offering technical services, environmental planning, licensing and permitting as necessary from any federal, state or local governmental agencies;
- Develop a conceptual plan, taking into account capital costs, operations and maintenance costs, depreciation of assets and any applicable revenue generation;
- Develop a conceptual level plan and funding strategy related to the future use of the City owned property. Consultant shall provide the City and produce any conceptual-level planning and engineering documents and/or drawings for the future use of the City owned property; and
- Attend meetings with City staff, key stakeholders and/or user groups who may be affected by the proposed future use of the City owned property.

EXHIBIT B

RATE SCHEDULE

In addition to the $45,000.00 per month retainer, Consultant may charge the City the following hourly rates for services rendered pursuant to the Scope of Services set forth herein.

Name(s)	Classification/Title	Hourly Rate
George Pla	Principal in Charge	$300
Randall Martinez	Project Executive	$250
Maria Mehranian	Project Executive	$250
Cathy Higley	Senior Planner/Transp. Advisor	$275
Lucy Labruzzo	Senior Energy Advisor	$240
Angel Alvarez, PE	Senior Infrastructure Advisor	$240
Roberto Ramirez, PE	Senior Civil Engineer	$170
Narbeh Issagholian	Planner	$153
Joe Villa	CADD Design Manager	$110

EXHIBIT C

INSURANCE REQUIREMENTS

Without limiting Consultant's indemnification of City, and prior to commencement of the Services, Consultant shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to Agency.

General liability insurance. Consultant shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than $1,000,000.00 per occurrence, $2,000,000.00 general aggregate, for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.

Automobile liability insurance. Consultant shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000.00 combined single limit for each accident.

Professional liability (errors & omissions) insurance. Consultant shall maintain professional liability insurance that covers the Services to be performed in connection with this Agreement, in the minimum amount of $1,000,000 per claim and in the aggregate. Any policy inception date, continuity date, or retroactive date must be before the effective date of this agreement and Consultant agrees to maintain continuous coverage through a period no less than three years after completion of the services required by this agreement.

Workers' compensation insurance. Consultant shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least $1,000,000.00).

Consultant shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of Agency, its officers, agents, employees and volunteers.

Proof of insurance. Consultant shall provide certificates of insurance to City as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsement must be approved by City's Risk Manager prior to commencement of performance. Current certification of insurance shall be kept on file with City at all times during the term of this contract. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Services hereunder by Consultant, his agents, representatives, employees or subconsultants.

Primary/noncontributing. Coverage provided by Consultant shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall

also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Consultant, or City will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VI (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non estoppel). Consultant acknowledges and agrees that any actual or alleged failure on the part of the City to inform Consultant of non-compliance with any requirement imposes no additional obligations on the Agency nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Consultant maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Consultant agrees to oblige its insurance agent or broker and insurers to provide to City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that City and its officers, officials, employees, and agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess liability policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of Insureds. A severability of interests provision must apply for all additional insureds ensuring that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is

brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass Through Clause. Consultant agrees to ensure that its subconsultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by Consultant, provide the same minimum insurance coverage and endorsements required of Consultant. Consultant agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. Consultant agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to City for review.

City's right to revise specifications. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Consultant ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Consultant, the City and Consultant may renegotiate Consultant's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by the City. The City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by the City.

Timely notice of claims. Consultant shall give the City prompt and timely notice of claims made or suits instituted that arise out of or result from Consultant's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

CITY COUNCIL

ITEM NO. 5.4

CALL TO ORDER

The Regular Meeting of the City Council of the City of Industry, California, was called to order by Mayor Mark Radecki at 9:00 a.m. in the City of Industry Council Chamber, 15651 East Stafford Street, California.

FLAG SALUTE

The flag salute was led by Mayor Mark Radecki.

PRESENT: Mark Radecki, Mayor
Cory Moss, Mayor Pro Tem
Roy Haber, Council Member
Jeff Parriott, Council Member
Newell Ruggles, Council Member

STAFF PRESENT: James Casso, City Attorney; Cecelia Dunlap, Deputy City Clerk; John Ballas, City Engineer; and Brian James, Planning Director.

PUBLIC COMMENTS

Mr. Jason Farned, Public Information Officer of the San Gabriel Valley Mosquito and Vector Control District presented a PowerPoint presentation to the City Council, which provided information on the West Nile virus, informed on new mosquito species, and ways to take preventative measures.

CONSENT CALENDAR

Mayor Pro Tem Moss recused herself from check number 61992 for item 1 (Register of Demands) because she had a potential financial conflict of interest in that she is employed by CNC Engineering.

MOTION BY COUNCIL MEMBER RUGGLES, AND SECOND BY COUNCIL MEMBER PARRIOTT THAT THE RECOMMENDATIONS BE ACCEPTED FOR THE REMAINING ITEMS LISTED ON THE CONSENT CALENDAR. MOTION CARRIED 5-0, WITH MAYOR PRO TEM MOSS RECUSING FROM CHECK NUMBER 61992 ON ITEM 1 (REGISTER OF DEMANDS).

1. CONSIDERATION OF REGISTER OF DEMANDS

APPROVED THE REGISTER OF DEMANDS AND AUTHORIZED THE APPROPRIATE CITY OFFICIALS TO PAY THE BILLS.

2. CONSIDERATION OF THE MINUTES OF THE MAY 28, 2015 REGULAR MEETING

APPROVED AS SUBMITTED.

3. CONSIDERATION OF PROPOSITION A ASSIGNMENT AGREEMENT BETWEEN THE CITY OF INDUSTRY AND THE CITY OF SAN GABRIEL

APPROVED THE AGREEMENT.

4. CONSIDERATION OF A LEGAL SERVICES AGREEMENT BETWEEN THE CITY OF INDUSTRY AND CASSO & SPARKS, LLP, TO PROVIDE CITY ATTORNEY SERVICES

APPROVED THE AGREEMENT.

CONSIDERATION OF SUBMISSION OF THE ENHANCED WATERSHED MANAGEMENT PROGRAM PLAN TO THE LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD AND AN AUTHORIZATION TO SUBMIT LETTER

City Engineer Ballas presented a staff report to the City Council.

Ms. Jolene Guerrero of the Los Angeles County Department of Public Works, Watershed Management Division, provided a report to the City Council.

MOTION BY COUNCIL MEMBER HABER, AND SECOND BY COUNCIL MEMBER PARRIOTT TO APPROVE THE SUBMISSION OF THE ENHANCED WATERSHED MANAGEMENT PROGRAM PLAN, AND AUTHORIZED THE CITY ENGINEER TO SIGN THE AUTHORIZATION TO SUBMIT LETTER. MOTION CARRIED 5-0.

CONSIDERATION OF A COVENANT AND AGREEMENT TO HOLD PROPERTY AS ONE PARCEL AFFECTING PARCEL LOCATED AT 425 9TH AVENUE

City Engineering Ballas provided a staff report to the City Council.

MOTION BY MAYOR PRO TEM MOSS, AND SECOND BY COUNCIL MEMBER RUGGLES TO APPROVE THE COVENANT AND AGREEMENT TO HOLD PROPERTY AS ONE PARCEL. MOTION CARRIED 5-0.

CONSIDERATION OF THE SECOND AMENDED AND RESTATED WATER SUPPLY AGREEMENT BETWEEN THE CITY OF INDUSTRY AND LA PUENTE VALLEY COUNTY WATER DISTRICT TO FACILITATE THE CONVEYANCE OF TREATED WATER FROM 111 HUDSON AVENUE EASTERLY THROUGH THE INDUSTRY WATERWORKS SYSTEM TO AZUSA AVENUE AND INTO THE ROWLAND WATER DISTRICT POTABLE WATER SYSTEM

City Engineer Ballas presented a staff report to the City Council.

Mr. Greg Galindo, General Manager for the La Puente Valley County Water District presented a report to the City Council.

Mr. Tom Collins of the Rowland Water District presented a report to the City Council.

MOTION BY COUNCIL MEMBER RUGGLES, AND SECOND BY COUNCIL MEMBER HABER TO APPROVE THE AGREEMENT. MOTION CARRIED 5-0.

ADJOURNMENT

There being no further business, the City Council adjourned at 9:30 a.m.

MARK D. RADECKI
MAYOR

CECELIA DUNLAP
DEPUTY CITY CLERK

CITY COUNCIL

ITEM NO. 5.5

CALL TO ORDER

The Special Meeting of the City Council of the City of Industry, California, was called to order by Mayor Mark Radecki at 9:40 a.m. in the City of Industry Council Chamber, 15651 East Stafford Street, California.

PRESENT: Mark Radecki, Mayor
Cory Moss, Mayor Pro Tem
Roy Haber, Council Member
Jeff Parriott, Council Member
Newell Ruggles, Council Member

STAFF PRESENT: James Casso, City Attorney; Cecelia Dunlap, Deputy City Clerk.

PUBLIC COMMENTS

There were no public comments.

CLOSED SESSION

Deputy City Clerk Dunlap announced there was a need for Closed Session as follows:

A. PUBLIC EMPLOYEE APPOINTMENT
Title: Acting City Manager pursuant to Government Code Section 54957(b)(1)

Mayor Radecki recessed the meeting into Closed Session at 9:41 a.m.

RECONNVENE CITY COUNCIL MEETING

Mayor Radecki reconvened the meeting at 10:15 a.m. All members of the City Council were present. City Attorney Casso reported out of closed session.

With regard to Closed Session item A, with a 5-0 vote, the City Council agreed to appoint Paul J. Philips as Acting City Manager and directed the City Attorney to draft an employment agreement, which would be presented to the City Council at its July 9, 2015 meeting.

Mr. Philips indicated what a privilege it was to work for the City of Industry and looked forward to starting his employment.

ADJOURNMENT

There being no further business, the City Council adjourned at 10:22 a.m.

MARK D. RADECKI
MAYOR

CECELIA DUNLAP
DEPUTY CITY CLERK

CITY COUNCIL

ITEM NO. 6.1

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: City Council October 1, 2015

From: Paul J. Philips, City Manager

Staff: Brian James, Planning Director

Subject: Development Plan 15-10 and Zone Exception 15-2

Overview

This project, which is located at 489 and 499 Parriott Place, involves the following two applications submitted by CT Realty Investors for the development of a property that is owned by the Successor Agency to the Redevelopment Agency:

- Chapter 17.40 of the Municipal Code allows the granting of an exception from development standards when specific findings can be made. Section 17.32.020 of the Municipal Code allows a maximum 42 inch tall wall within 30 feet of the front curb. Zone Exception 15-2 is to allow a ten foot tall screen wall to be located within the required 30 foot setback from public streets for the purpose of screening the loading area.
- Section 17.36.020 of the Municipal Code requires approval of a Development Plan by the City Council for new construction. Development Plan 15-10 is a request to develop a vacant 6.4 acre site with two industrial buildings. The proposed buildings would be 84,660 square feet on a 4.1 acre lot and 45,510 square feet on a 2.3 acre lot.

A Lot Line Adjustment was performed by the City in conjunction with the sale of the property to create the two parcels (41. Acres and 2.3 acres). The Lot Line Adjustment included the vacation of a 0.178 acre remnant portion of El Encanto Road on the east side of Parriott Place, which was approved by the City Council on September 10, 2015. The Lot Line Adjustment was acted on by the City Council on September 24, 2015.

Project Description

As shown in the attached site plan and floor plans (Attachments 1, 2, 3, 4, and 5), the proposed project would include two buildings as follows:

Building A (Southern Site)

Building A would be 84,660 square feet on a 4.1 acre lot (176,455 square feet). The building would include two stories and 10,000 square feet of office space and would be oriented so that the office faces to the west, toward the intersection of Don Julian Road and Parriott Place. The loading area is proposed to face north and is screened from Parriott Place by both buildings and a ten foot tall

screen wall. There would be nine dock-high loading bays and one grade-level loading door in the loading area, which would be secured by an eight foot tall sliding metal gate and the ten foot tall solid wall. Building A would be accessed from Parriott Place via two driveways that would provide access to 130 parking spaces as follows:

- 105 standard spaces (9'x19')
- 20 compact spaces (8'x16')
- 5 accessible and van accessible spaces

In addition, there would be a bike rack accommodating nine bicycle parking spaces installed near the office and a total of 25,938 square feet of landscaping (14.7 percent) located primarily along the street frontage. A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed in the southwestern corner of the building.

As shown on the attached elevations and perspective (Attachments 6 and 8), the building is proposed to be approximately 41 feet high and the office area would be slightly taller and be adorned with glazing to differentiate it from the warehouse area.

Building B (Northern Site)

Building B would be 45,510 square feet on a 2.3 acre lot (100,218 square feet). The building would include two stories and 7,000 square feet of office space and would be oriented so that the office faces to the west, toward Parriott Place. The loading area is proposed to face north and is screened from Parriott Place by a ten foot tall screen wall. The screen wall is proposed to be located approximately 18 feet from the curb on the northern side of the property. There would be five dock-high loading bays in the loading area, which would secured by an eight foot tall sliding metal gate and the ten foot tall solid wall. Building B would be accessed from Parriott Place via two driveways that would provide access to 80 parking spaces as follows:

- 59 standard spaces (9'x19')
- 15 compact spaces (8'x16')
- 4 accessible and van accessible spaces

In addition, there would be a bike rack accommodating nine bicycle parking spaces installed near the office and a total of 18,571 square feet of landscaping (18.5 percent) located primarily along the street frontage. A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed in the southwestern corner of the building.

As shown on the attached elevations and perspective (Attachments 7 and 8), the building is proposed to be approximately 41 feet high and the office area would be slightly taller and be adorned with glazing to differentiate it from the warehouse area.

Successor Agency Property Status

This site has been identified as Property 28 on the Long Range Property Management Plan and was acquired as part of a larger acquisition near El Encanto Hospital. The property was purchased by CT Realty Corp. for $8,301,500.

Location and Surroundings

As shown on the attached location map (Attachment 9), the project site is located on the northeastern corner of Parriott Place and Don Julian Road. The addresses that will be assigned to the project site are 489 and 499 Parriott Place. The site is 6.4 acres in area and is comprised of portions of Los Angeles County Tax Assessor Parcel Numbers (APN) 8208-027-911 and 8208-027-912. The project site is largely surrounded by warehouses and manufacturing facilities (e.g. Gaytan Foods and Marquez Brothers Enterprises, Valley Power Systems, and Win Sys Logistics) except to the west. Located across Parriott Place and approximately 600 feet west of the project site are the El Encanto Healthcare and Habilitation Center, Pio Pico Mausoleum, and Homestead Museum. These uses are within the Institutional zone and are important cultural facilities in the City. The Museum and Mausoleum have large landscaped frontages and meandering sidewalks along Don Julian Road and serve a park-like function in the City.

The project site is graded and flat and has been partially developed. The northern portion of the property is currently vacant and undeveloped and the southern portion of the property is developed with a parking lot.

Staff Analysis

Development Plan Application

The proposed development project is consistent with the Zoning ("M" – Manufacturing) and General Plan (Employment) designations of the site and complies with the following development and design standards in Section 17.36, *Design Review*, of the Industry Municipal Code. Specifically, the project:

- Meets development standards. Chapter 17.36 includes standards regarding height, lot coverage, and trash/recycling enclosures to which the proposed project complies.
- Meets screening and loading requirements. Section 17.36.060.R requires that loading areas not located at the rear of the building be screened by a minimum eight foot tall wall. The loading bays of both buildings face north, with the loading area of Building B fronting directly onto a public street. Due to the sensitivity of the surrounding uses to the west, the ten foot tall screen walls and eight foot tall solid metal sliding access gates effectively screen the loading bays of both buildings.
- Meets building setback standards. Section 17.36.060.L of the Municipal Code requires that all buildings and structures be set back a minimum of 30 feet from the curb. As proposed, the two buildings would be setback 30 feet from the curb.
- Meets vehicular parking requirements. Section 17.36.060.K of the Municipal Code requires that buildings between 25,000 and 100,000 square feet provide 50 parking spaces plus one space per 750 square feet of floor area over 25,000 square feet. Based on this formula, Building A is required to provide 130 and Building B 78 parking spaces and 130 and 80 parking spaces, respectively, are proposed. In addition, Section 17.36.060 K of the Municipal Code limits the amount of compact parking to 20 percent of the total parking. There are 20 compact spaces (15.3 percent) proposed for Building A and 15 compact spaces (19.2 percent) proposed for Building B in compliance with the development standards.
- Exceeds landscaping requirements. Section 17.36.060.Q of the Municipal Code requires that a minimum of 12 percent of the site be devoted to landscaping and 14.7 percent (25,938 square feet) is proposed for Building A and 18.5 percent (18,571 square feet) is proposed for Building B. Landscaping and irrigation will be designed to comply with current water efficiency requirements.

- Meets design guidelines. Section 17.36.060 A-J of the Municipal Code call for well-designed and coordinated buildings, walls, lighting, and landscaping. The architectural treatment of the buildings and walls present a coordinated and professional appearance along Parriott Place and provide enough variety in design to minimize the blank appearance of large tilt-up industrial buildings.
- Exceeds access requirements. Sections 17.36.060.K and N of the Municipal Code require a minimum driveway and drive-aisle width of 26 feet. Driveways ranging in width from 28 feet to 40 feet are proposed to provide access from Parriott Place. Drive-aisle widths of 26 to 28 are proposed to provide internal circulation.
- Exceeds bicycle-parking requirements. Chapter 17.68 of the Municipal Code requires that the development accommodate four bicycles for the first 50,000 square feet and one bicycle per each additional 50,000 square feet. Based on this formula, five bicycles must be accommodated in Building A and four in Building B and parking for nine bicycles are proposed for both sites.
- Complies with drainage and water quality requirements. The project was found complete prior to the effective date of Ordinance 792, which enacted the Low Impact Development provisions, and is therefore subject to Municipal Chapters 13.16 and 13.17 existing prior to the adoption of Ordinance 792. The applicant is currently working with the City Engineer to ensure compliance with the drainage and water quality standards. Compliance with Municipal Chapters 13.16 and 13.17 will be required prior to issuance of the grading plan and/or the final approval of the building.

In regards to the Development Plan application, Staff recommends that the City Council approve Development Plan 15-10 based on the following findings:

- The proposed improvement is consistent with the General Plan designation of Employment and conforms to the zoning designation of Manufacturing for the subject property in the City of Industry because, as described above, the project would accommodate two industrial buildings, which are permitted uses in both the Employment General Plan land use designation and Manufacturing zoning district. Also as noted above, the proposed project complies with the development standards of the Industrial zone.
- The proposed development is compatible with the surrounding area, which consists of industrial uses and El Encanto hospital, Pio Pico Mausoleum, and Homestead Museum because, as described above, the proposed buildings comply with the City's development standards, adequately screen the loading areas, present a professional and coordinated architectural design, and provide a large landscape frontage in keeping with the adjacent uses.
- There is adequate street access and traffic capacity for the proposed development on Parriott Place, which serves the project site because, as noted in the attached Initial Study/Mitigated Negative Declaration (Exhibit A of Attachment 11), the total trip generation for the project is estimated to generate 463 daily vehicle trips, of which 91 would be trucks and the remainder passenger cars. Given the distribution of trips on surrounding roads, the project would add less than 30 trips at each nearby intersection, which would not significantly impact road capacity.
- The proposed development will have no significant impact on the environment with the implementation of mitigation measures as indicated in the attached Initial Study, and a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Programs have been prepared in accordance with the requirements of the California Environmental Quality

Act of 1970, as amended; and

- Due to the foregoing, the use requested will not be a menace to or endanger the public health, safety or general welfare to the City.

Zone Exception Application

Sections 17.40.020 and 17.40.030 of the Municipal Code allow for the granting of an exception when: 1) it is necessary for the preservation of a substantial property right, 2) it will not be materially detrimental to the public welfare or to the surrounding properties, and 3) if there are practical hardships in the application of the development standards but the spirit of the standards will still be preserved, public safety secured, and substantial justice done. In addition, if there are no protests, an exception may be granted even if it is not necessary for the preservation of a substantial property right.

State Planning and Zoning Law (Section 65906) requires that exceptions be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of the zoning ordinance deprives the property of privileges enjoyed by nearby properties in the same zone. State law also requires that any exception not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity. The proposed project would not meet code standards and requires approval of a Zone Exception for the following development standard:

- Section 17.32.020 of the Municipal Code allows a maximum wall height of 42 inches within 30 feet of the front curb. As proposed, a ten foot tall screen wall along the northern portion of Building B would be located 18 feet from the front curb (see Attachment 3).

In regards to the Zone Exception application, Staff recommends that the City Council approve Zone Exception 15-2 based on the following findings:

- Because of the curvature of Parriott Place and the odd shape of the lot, the most efficient location for the loading bays face directly onto a public street. Section 17.36.060 R of the Municipal Code requires that loading bays that are located on the front or side of a building be screened by a masonry wall, accessory structures, and/or landscaping. The proposed ten foot tall wall effectively screens the truck loading area and, by being located in the setback, also allows the applicant to provide the necessary loading clearance and maneuvering area as well as required parking and trash/recycling enclosure while still proving an approximately 12 foot wide landscaping area, mitigating potential noise impacts, and preserving the character of the surrounding area.
- Granting the Exception would preserve a substantial property right by allowing a well-designed, marketable, and efficient industrial building while preserving the visual character of the surrounding area by screening the loading area and minimizing noise impacts to the nearby sensitive use (El Encanto) as addressed in the noise section of the Initial Study/Mitigated Negative Declaration (Exhibit A of Attachment 11).
- The screen wall in the front setback will not be materially detrimental to public welfare or surrounding properties and will be safe. Because of the proximity of the Homestead Museum and El Encanto Hospital, a ten foot tall screen wall with landscaping is necessary to screen the loading area, maintain the high quality visual character of the area, and mitigate potential noise impacts. An approximately 12 foot wide landscape area would be provided between the sidewalk and the screen wall, which is consistent with the requirement for a healthy and professional looking appearance. With the restriction regarding right-in and right-out from the northern driveway of Building B and restrictions on

the height of obstructions within the sight-line of the northern driveway (addressed in more detail below), potential issues regarding visibility would be addressed and safety maintained.

- The spirit of the City's development standards will be preserved and justice done because the project is designed to be consistent with all of the development standards except the location of the screen wall in the front setback and allows a viable and marketable industrial building that maintains the character of the nearby Homestead Museum, Pio Pico Mausoleum, and El Encanto Hospital.
- Due to the special circumstances applicable to this project site (curvature of Parriott Place and resulting odd shaped parcel), the Zone Exception does not represent a grant of special privileges and is necessary to allow normal development enjoyed by other Industrially zoned properties and maintain the character of the nearby Homestead Museum, Pio Pico Mausoleum, and El Encanto Hospital.

Public Hearing

The required public hearing notice (Attachment 10) was posted on the site, City Hall, Gale Avenue fire station, and council chambers, distributed to surrounding property owners, and published in the San Gabriel Tribune by September 25, 2015.

Environmental Analysis

An Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to determine if the proposed use could have a significant impact on the environment (Exhibit A of Attachment 11). The Initial Study determined that the proposed project would not have a significant effect on the environment with the implementation of mitigation measures. The mitigation measures are contained in a Mitigation Monitoring and Reporting Program, which has been prepared in conformance with Section 21081.6 of the Public Resources Code and which provides a vehicle to monitor compliance with the mitigation measures (Exhibit A of Attachment 11). Resolution CC 2015-31 (Attachment 11) approving the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program accompanies this application for adoption by the City Council. The mitigation measures address:

- The need to use low volatile organic content (VOC) paint to ensure compliance with South Coast Air Quality Management District thresholds for VOC emissions.
- The need to stop grading work within 100 feet of a find and notify a qualified archeologist if tribal cultural resources are discovered.
- The need to conduct a soil vapor survey prior to issuance of a building permit to evaluate the potential presence of volatile organic contaminants on the site.
- The need to restrict the northern project driveway of Building B to right-in/right-out movements to account for a possible sight distance impairment.
- The need to restrict the height of objects within the sight-line of the northern driveway of Building B to maintain visibility.

The Notice of Intent to adopt a Mitigated Negative Declaration (Exhibit A of Attachment 11) was posted on the site, fire stations, and council chambers, and published in the San Gabriel Tribune by September 3, 2015.

The City received comments on the Initial Study/Mitigated Negative Declaration regarding the

consultation with Native American Tribes per AB 52 (Exhibit A of Attachment 11). AB 52 requires that the City provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested to be notified. If, after being notified, a tribe requests consultation, the City must consult with the tribe in good faith. Consultation is deemed concluded when either the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when a party concludes that a mutual agreement cannot be reached.

The City received consultation requests from the Gabrieleño Band of Mission Indians – Kizh Nation and the Soboba Band of Luiseño Indians, who later deferred consultation to the Gabrieleño Band of Mission Indians – Kizh Nation. Consultation occurred in good faith and the Gabrieleño Band of Mission Indians – Kizh Nation requested that a tribal monitor be present during earth moving operations. However, since no substantial evidence that a tribal cultural resource exists on the site was provided or uncovered during the Initial Study process and there is no evidence of a substantial impact, the City determined that an on-site monitor was not necessary. An alternative mitigation measure was offered by the City requiring work to stop within 100 feet of the find until a qualified archeologist can assess its significance and develop appropriate treatment measures in consultation with the tribe. This alternative measure was rejected by the tribe and, per AB 52, the City concluded that a mutual agreement could not be reached. Given that this decision could potentially impact the project, the applicant was consulted and they concurred with the City's alternative mitigation measure.

Even though CEQA and State CEQA Guidelines do not require written responses to comments received on an Initial Study/Mitigated Negative Declaration, the City has prepared responses to provide full disclosure to the Council and public. The Response to Comments (Exhibit A of Attachment 11) incorporates the comments received on the Initial Study/Mitigated Negative Declaration, responses to those comments, and any changes to the Initial Study/Mitigated Negative Declaration that result from the comments received. The response to comments is part of, considered, and adopted with the Mitigated Negative Declaration. Through the Response to Comments process, the City received comments from the Tongva Ancestral Territorial Tribal Nation, which did not comply with the notification requirements of AB 52, claiming affiliation with the project site. In order to be responsive yet still comply with AB 52, Mitigation Measure CR-1 was strengthened to accommodate a situation where multiple tribes prove traditional and cultural affiliation with the project site and will be revised as follows:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation <u>and other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1,</u> the City of Industry, and other appropriate agencies.

Recommendation

Because: 1) the Zone Exception preserves a substantial property right, is not materially detrimental to the public welfare or surrounding properties, safety is preserved, and there are practical hardships that result from the odd shape of the lot; and 2) the Development Plan application proposes a project that complies with a majority of development standards of the Municipal Code and satisfies the above-mentioned findings, Staff recommends that the City Council:

1) Adopt Resolution No. CC 2015-31 (Attachment 11) approving the Initial Study/Mitigated Negative Declaration including the Response to Comments and the Mitigation Monitoring and Reporting Program; and

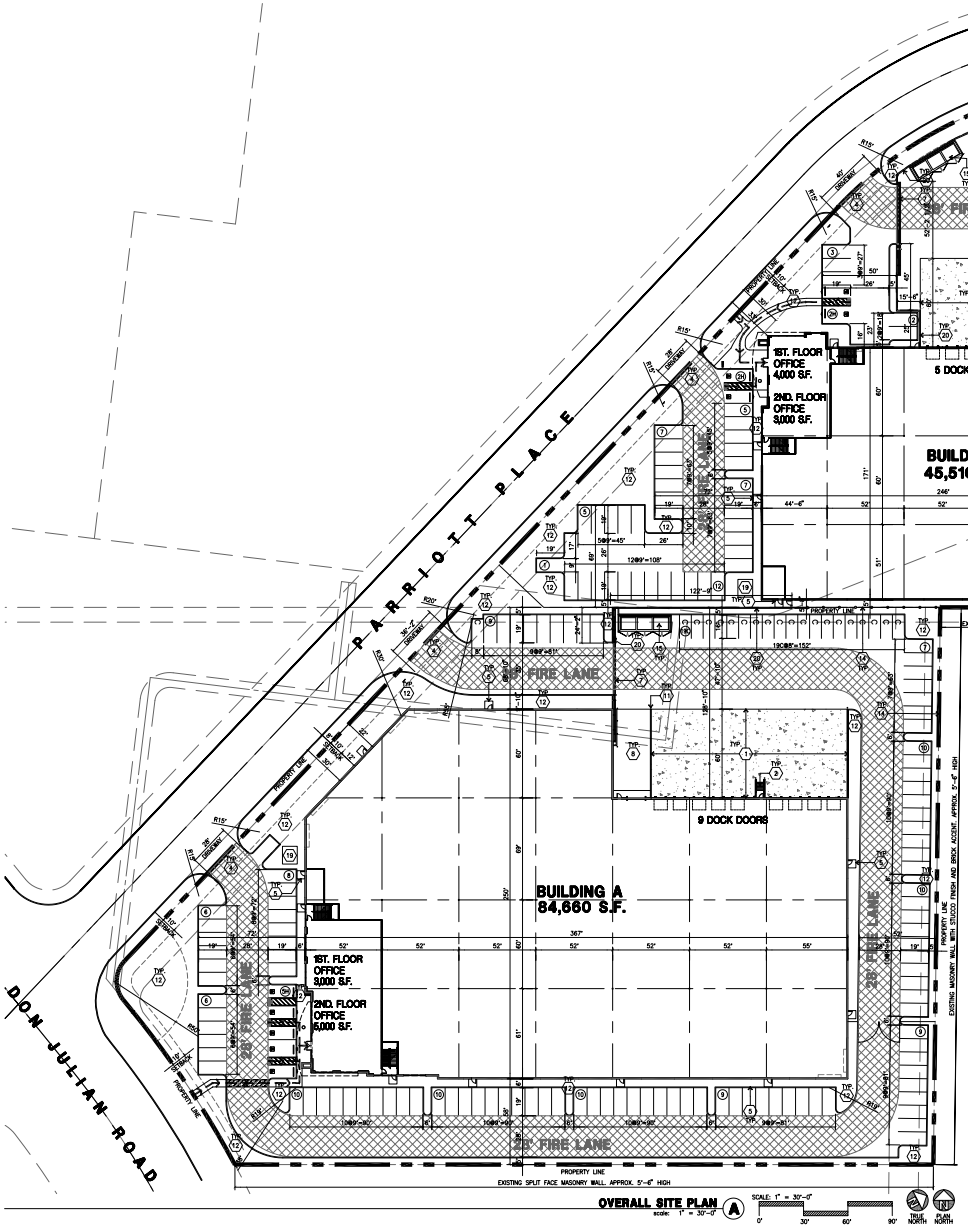
2) Adopt Resolution No. CC 2015-32 (Attachment 12) approving Development Plan No. 15-10 and Zone Exception 15-2 with the Standard Requirements and Conditions of Approval contained in the Resolution.

Attachments

- Attachment 1: Overall Site Plan
- Attachment 2: Building A Site Plan
- Attachment 3: Building B Site Plan
- Attachment 4: Building A Floor Plan
- Attachment 5: Building B Floor Plan
- Attachment 6: Building A Elevations
- Attachment 7: Building B Elevations
- Attachment 8: Site Perspective
- Attachment 9: Location Map
- Attachment 10: Public Hearing Notice
- Attachment 11: Resolution CC 2015-31 including: Notice of Intent to Adopted a Mitigated Negative Declaration; Initial Study/Mitigated Negative Declaration for Development Plan 15-10 and Zone Exception 15-2, August 2015; Mitigation Monitoring and Reporting Program for Development Plan 15-10 and Zone Exception 15-2, August 2015; Response to Comments.
- Attachment 12: Resolution CC 2015-32

Attachment 1
Overall Site Plan

DP 15-10/ZE 15-2
Overall Site Plan



OVERALL SITE PLAN
scale: 1" = 30'-0"

SCALE: 1" = 30'-0"
0' 30' 60' 90'

3 CONCRETE WALKWAY, MEDIUM BROOM FINISH
4 DRIVEWAY APRONS TO BE CONSTRUCTED
5 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR.
6 APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
7 PROVIDE 8' HIGH METAL GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY. CONTRACTOR TO DESIGN & DETAIL GATES. DRAWINGS AND CALCULATIONS PRIOR TO FABRICATION. PROVIDE CONDUIT FOR FUTURE.
8 CONCRETE RAMP
9 BIKE RACK TYPICAL. 9 BIKES PER RACK.
10 PRE-CAST CONC. WHEEL STOP.
11 CONC. FILLED GUARD POST "6 DIA. U.N.O. 42" H.
12 LANDSCAPE. SEE LANDSCAPE DRAWINGS FOR DETAILS
13 NOT USED
14 8' HIGH WROUGHT IRON FENCE
15 TRASH ENCLOSURE.
16 HANDICAP ENTRY SIGN.
17 HANDICAP PARKING STALL SIGN
18 APPROXIMATE LOCATION OF FIRE HYDRANT
19 APPROXIMATE LOCATION OF TRANSFORMER SEE K/DAB A4.1 FOR SCREENING
20 10' HIGH CONCRETE TILT-UP SCREEN WALL

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY TBD
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. ALL VERTICAL MOUNTING POLES OF CHAIN LINK FENCING SHALL BE CAPPED.
16. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
17. NOT USED.
18. FUTURE TENANT TO PROVIDE BULLETING STATING THE FOLLOWING: CURRENT MAPS, ROUTS AND SCHEDULES FOR PUBLIC TRANSIT ROUTES SERVING THE SITE
TELEPHONE NUMBERS OF REFERRALS ON TRANSPORTATION INFORMATION INCLUDING NUMBERS FOR THE REGIONAL RIDESHARING AGENCY AND LOCAL TRANSIT OPERATORS
RIDESHARING PROMOTIONAL MATERIAL SUPPLIED BY COMMUTER-ORIENTED ORGANIZATIONS
BICYCLE ROUTE AND FACILITY INFORMATION, INCLUDING REGIONAL/LOCAL BICYCLE SAFETY INFORMATION
A LISTING OF FACILITIES AVAILABLE FOR CARPOOLERS, VAN POOLERS, BYCICLIST, TRANSIT RIDERS AND PEDESTRIAN SITE

PROJECT INFORMATION

Owner
CT REALTY INVESTORS
65 ENTERPRISE
ALISO VIEJO, CA 92656
TEL: (949) 431-6422
CONTACT: DAVE BALL

Applicant
HPA
18831 BARDEEN AVE, STE #100
IRVINE, CA 92612
TEL: (949) 863-1770
CONTACT: HOON KEUN PARK

Assessors Parcel Number
8208-027-911 PARTIAL
8208-027-912 PARTIAL

Zoning
I (INDUSTRIAL)

CONSTRUCTION TYPE
II-B

OCCUPANCY
S-1/B

SITE PLAN LEGEND

CONCRETE PAVING – SEE "C" DRWGS. FOR THICKNESS
STANDARD PARKING STALL – 9' X 19'
COMPACT PARKING STALL – 8' X 16'
HANDICAP PARKING STALL, 9' X 19' + 5' W/ ACCESSIBLE AISLE
PATH OF TRAVEL

TABULATION

	BLDG. A	BLDG. B	TOTAL
SITE AREA			
in s.f.	176,455	100,218	276,673 s.f.
in acres	4.1	2.3	6.4 ac
BUILDING AREA			
office - 1st floor	3,000	4,000	7,000 s.f.
office - 2nd floor	5,000	3,000	8,000 s.f.
warehouse	76,660	38,510	115,170 s.f.
TOTAL	84,660	45,510	130,170 s.f.
COVERAGE	48.0%	45.4%	47.0%
PARKING REQUIRED			
0-25K @ 1/500 s.f.	50	50	100 stalls
25K-100K @ 1/750 s.f.	80	28	108 stalls
Above 100K @ 1/1000	N/A	N/A	N/A stalls
TOTAL	130	78	208 stalls
PARKING PROVIDED			
standard (9' x 19')	105	89	194 stalls
compact (8' x 16')	20	15	35 stalls
accessible (9' x 19')	5	4	9 stalls
TOTAL	130	78	208 stalls
LANDSCAPE REQUIREMENT			
in percentage	12%	12%	12%
LANDSCAPE PROVIDED			
in s.f.	25,938	18,571	44,509 s.f.
in percentage	14.7%	18.5%	16.1%
ZONING ORDINANCE FOR CITY			
Industrial - I			
MAXIMUM FLOOR AREA RATION			
F.A.R. - .50			
SETBACKS			
front / Street - 30' from the curb line of any street or highw ay, w hether the street is improved or not			

VICINITY MAP

HPA architecture
hpa, inc.
18831 bardeen avenue, - ste. #100
irvine, ca
92612
tel: 949 863-1770
fax: 949 863-0651
email: hpa@hparchs.com

Owner:
CT REALTY
65 Enterprise
Aliso Viejo, CA. 92656
Direct: (949) 431-6422
Main: (949) 431-6400
dball@ctinvestors.com

Project:
CITY OF INDUSTRY - PARRIOTT PLACE
499 & 499 Parriot Place
City of Industry, CA

Consultants:
CIVIL Thienes
STRUCTURAL
MECHANICAL
PLUMBING
ELECTRICAL
LANDSCAPE
FIRE PROTECTION
SOILS ENGINEER
MATERIAL HANDLING

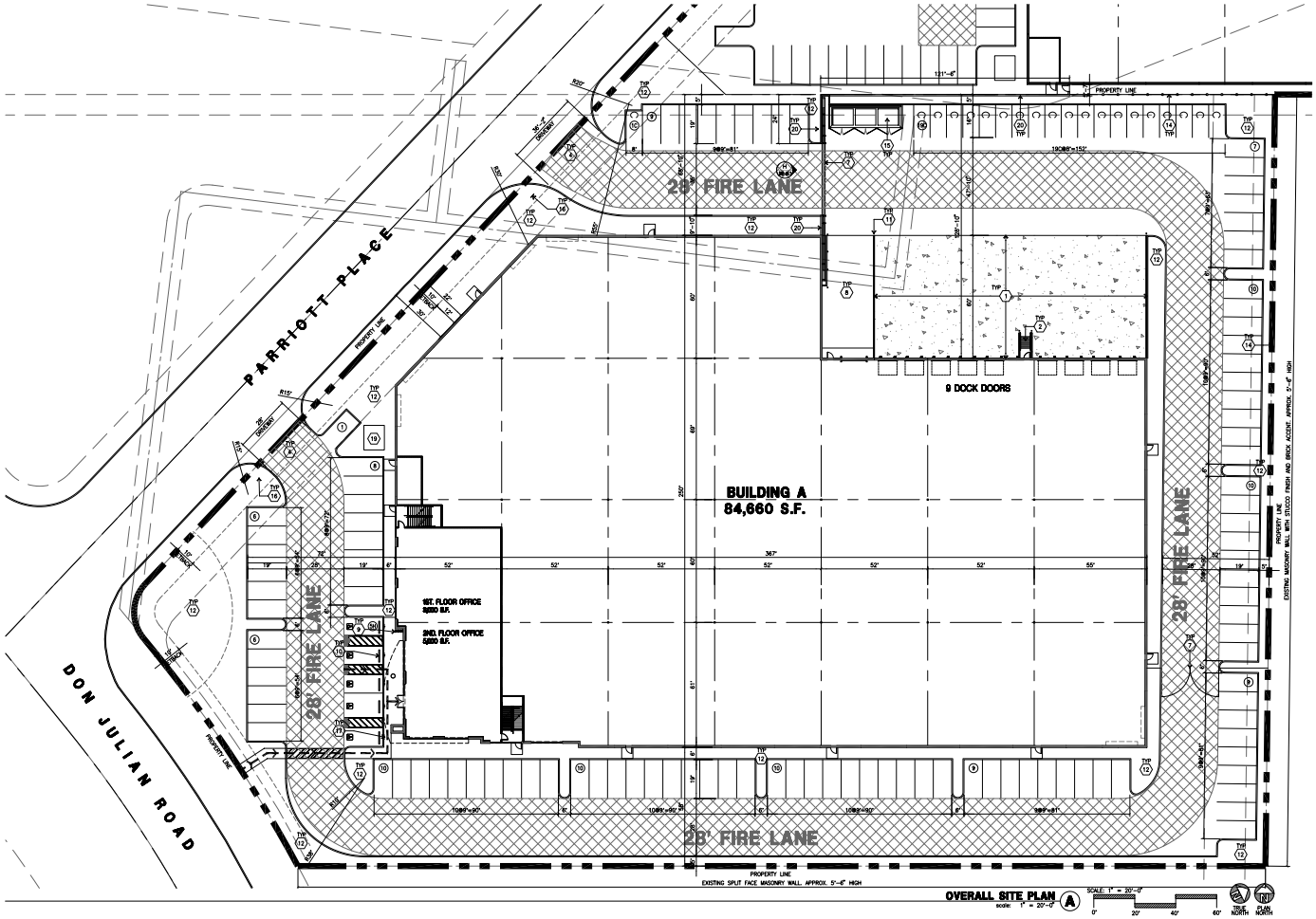
Title: OVERALL SITE PLAN

Project Number: 14093
Drawn by:
Date:
Revision:

Sheet:
DAB1.1

Attachment 2
Building A Site Plan

DP 15-10/ZE 15-2
Building A Site Plan



OVERALL SITE PLAN (A) SCALE: 1" = 20'-0"

SCALE: 1" = 20'-0"

0' 20' 40' 60'

GRID NORTH (N) TRUE NORTH

SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT.
2. EXTERIOR CONCRETE STAIR.
3. CONCRETE WALKWAY, MEDIUM BROOM FINISH
4. DRIVEWAY APRONS TO BE CONSTRUCTED
5. 5'-4"X5'-4"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
6. PROVIDE 8' HIGH METAL GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY. CONTRACTOR TO DESIGN & DETAIL GATES. DRAWINGS AND CALCULATIONS PRIOR TO FABRICATION. PROVIDE CONDUIT FOR FUTURE.
8. CONCRETE RAMP
9. BIKE RACK TYPICAL. 9 BIKES PER RACK.
10. PRE-CAST CONC. WHEEL STOP.
11. CONC. FILLED GUARD POST "6 DIA. U.N.O. 42" H.
12. LANDSCAPE. SEE LANDSCAPE DRAWINGS FOR DETAILS
13. NOT USED
14. 8' HIGH WROUGHT IRON FENCE
15. TRASH ENCLOSURE.
16. HANDICAP ENTRY SIGN.
17. HANDICAP PARKING STALL SIGN
18. APPROXIMATE LOCATION OF FIRE HYDRANT
19. APPROXIMATE LOCATION OF TRANSFORMER SEE K/DAB A-1 FOR SCREENING
20. 10' HIGH CONCRETE TILT-UP SCREEN WALL

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY TBD
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
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9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
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16. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
17. NOT USED.
18. FUTURE TENANT TO PROVIDE BULLETING STATING THE FOLLOWING:
    CURRENT MAPS, ROUTS AND SCHEDULES FOR PUBLIC TRANSIT ROUTES SERVING THE SITE
    TELEPHONE NUMBERS OF REFERRALS ON TRANSPORTATION INFORMATION INCLUDING NUMBERS FOR THE REGIONAL RIDESHARING AGENCY AND LOCAL TRANSIT OPERATORS
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    A LISTING OF FACILITIES AVAILABLE FOR CARPOOLERS, VAN POOLERS, BYCICLIST, TRANSIT RIDERS AND PEDESTRIAN SITE

SITE PLAN LEGEND

- CONCRETE PAVING – SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL – 9' X 19'
- COMPACT PARKING STALL – 8' X 16'
- HANDICAP PARKING STALL, 9' X 19' + 5' W/ ACCESSIBLE AISLE
- PATH OF TRAVEL

TABULATION

	BLDG A
SITE AREA	
in s.f.	176,605 s.f.
in acres	4.1 ac
BUILDING AREA	
office – 1st floor	3,000 s.f.
office – 2nd floor	3,000 s.f.
warehouse	78,660 s.f.
TOTAL	84,660 s.f.
COVERAGE	48.0%
PARKING REQUIRED	
1/1000 @ 0-10000 s.f.	60 stalls
2/M 10K @ 17500 s.f.	85 stalls
Above 100K @ 71000	NA stalls
TOTAL	125 stalls
PARKING PROVIDED	
standard (9' x 19')	105 stalls
compact (8' x 16')	20 stalls
accessible (9' x 19')	9 stalls
TOTAL	134 stalls
LANDSCAPE REQUIREMENT	
in percentage	12%
LANDSCAPE PROVIDED	
in s.f.	25,938 s.f.
in percentage	14.7%
ZONING ORDINANCES FOR CITY:	
MAXIMUM FLOOR AREA RATIOS	
F.A.R. – .60	
SETBACKS	
Front / Street - 30' from the curb line of any street or highway, whether the street is improved or not	

VICINITY MAP

HPA architecture

hpa, inc.
18831 bardeen avenue, - ste. #100
irvine, ca.
92612
tel: 949 863 1770
fax: 949 863 0951
email: hpa@hparchs.com

Owner:

CT REALTY

65 Enterprise
Aliso Viejo, CA. 92656
Direct: (949) 431-8422
Main: (949) 431-8400
dbell@ctinvestors.com

Project:

CITY OF INDUSTRY - PARRIOTT PLACE

459 Parriot Place
City of Industry, CA

Consultants:

CIVIL Thienes
STRUCTURAL
MECHANICAL
PLUMBING
ELECTRICAL
LANDSCAPE
FIRE PROTECTION
SOILS ENGINEER
MATERIAL HANDLING

Title: OVERALL SITE PLAN

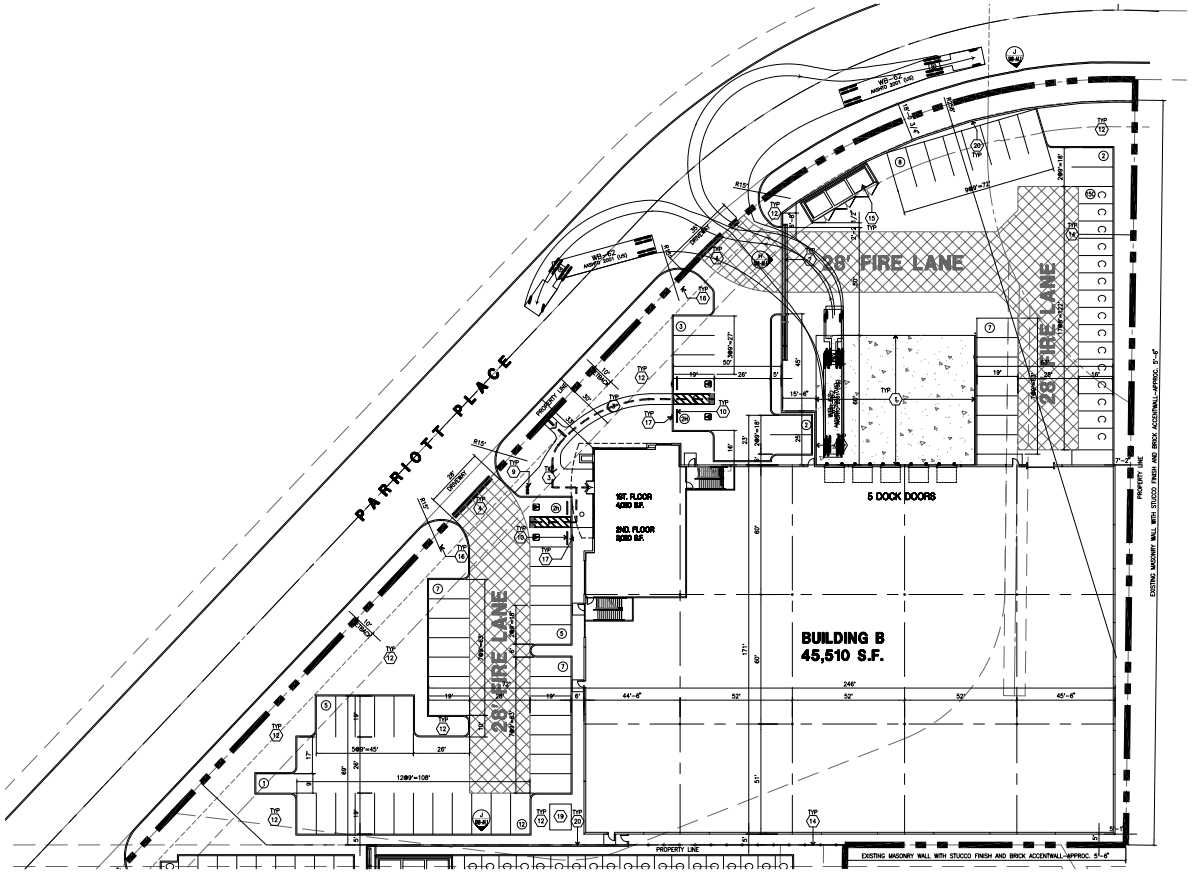
Project Number: 14093
Drawn by:
Date:
Revision:

Sheet:

A-DAB1.1

Attachment 3
Building B Site Plan

DP 15-10/ZE 15-2
Building B Site Plan



OVERALL SITE PLAN (A)
scale: 1" = 20'-0"

SCALE: 1" = 20'-0"
0' 20' 40' 60'
TRUE NORTH
PLAN NORTH

SITE PLAN KEYNOTES

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16. HANDICAP ENTRY SIGN.
17. HANDICAP PARKING STALL SIGN
18. APPROXIMATE LOCATION OF FIRE HYDRANT
19. APPROXIMATE LOCATION OF TRANSFORMER SEE E/DWG A4.1 FOR SCREENING
20. 10' HIGH CONCRETE TILT-UP SCREEN WALL

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY TBD
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
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SITE PLAN LEGEND

- CONCRETE PAVING – SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL – 9' X 19'
- COMPACT PARKING STALL – 8' X 16'
- HANDICAP PARKING STALL, 9' X 19' + 5' W/ ACCESSIBLE AISLE
- PATH OF TRAVEL

TABULATION

	BLDG. B
SITE AREA	
in s.f.	108,219 s.f.
in acres	2.3 ac
BUILDING AREA	
office - 1st floor	4,000 s.f.
office - 2nd floor	3,000 s.f.
warehouse	38,510 s.f.
TOTAL	45,510 s.f.
FOOTPRINT	45.4%
PARKING REQUIRED	
0-20K @ 1/500 s.f.	50 stalls
20K-100K @ 1/750 s.f.	28 stalls
Above 100K @ 1/1000	35 stalls
TOTAL	78 stalls
PARKING PROVIDED	
standard (9' x 19')	59 stalls
compact (8' x 16')	12 stalls
accessible (9' x 19')	4 stalls
TOTAL	75 stalls
LANDSCAPE REQUIREMENT	
in percentage	12%
LANDSCAPE PROVIDED	
in s.f.	16,571 s.f.
in percentage	16.5%
ZONING ORDINANCE FOR CITY	
Industrial - I	
MAXIMUM FLOOR AREA RATIOIN	
0.5:1 - 0.5	
SET BACK	
Road / Street - 30' from the curb line of any street or higher ay, a neither the street is improved or not	

VICINITY MAP

HPA architecture
hpa, inc.
18831 bardeen avenue, - ste. #100
irvine, ca
92612
tel: 949 863 1770
fax: 949 863 0951
email: hpa@hparchs.com

Owner:
CT REALTY
65 Enterprise
Aliso Viejo, CA 92656
Direct: (949) 431-8422
Main: (949) 431-8400
dbell@ctinvestors.com

Project:
CITY OF INDUSTRY - PARRIOTT PLACE
469 Parriot Place
City of Industry, CA

Consultants:
CIVIL Thienes
STRUCTURAL
MECHANICAL
PLUMBING
ELECTRICAL
LANDSCAPE
FIRE PROTECTION
SOILS ENGINEER
MATERIAL HANDLING

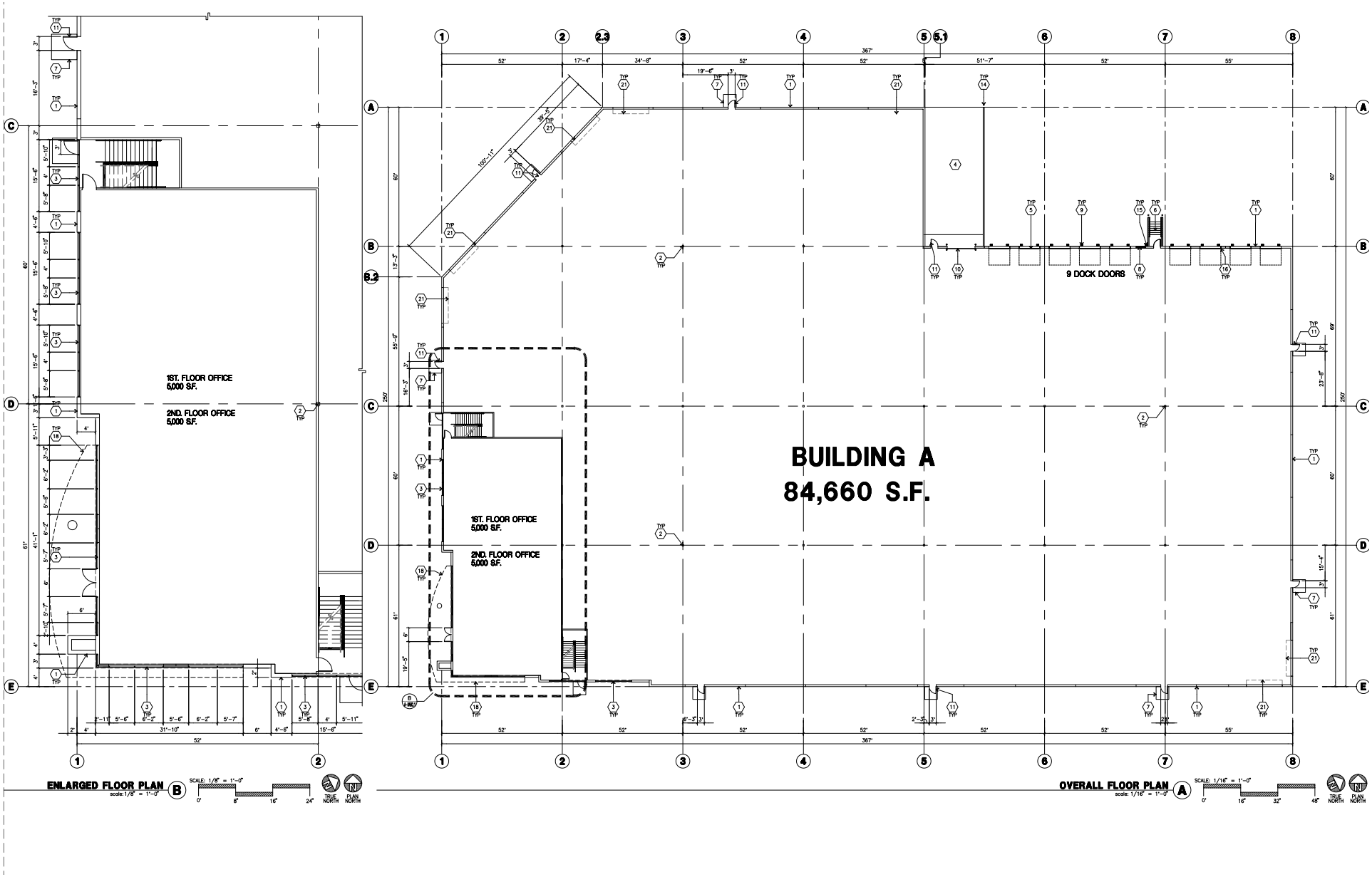
Title: OVERALL SITE PLAN

Project Number: 14088
Drawn by:
Date:
Revision:

Sheet:
B-DAB1.1

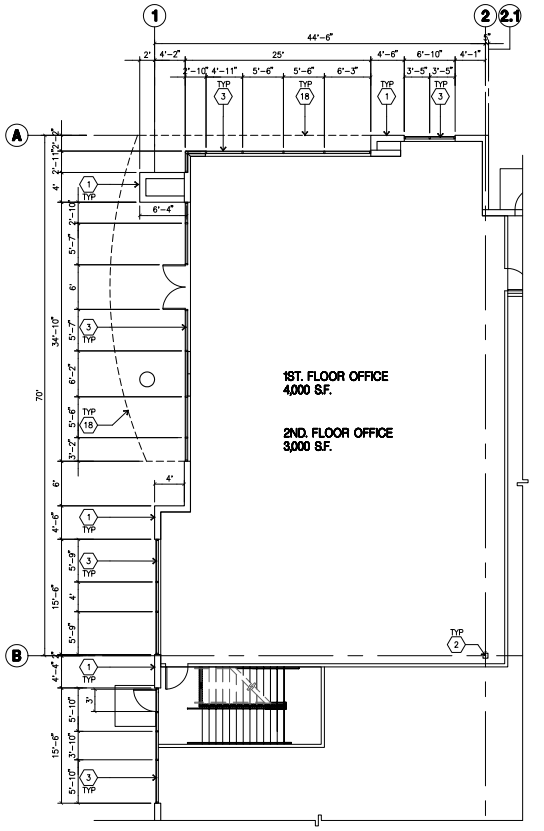
Attachment 4
Building A Floor Plan

DP 15-10/ZE 15-2
Building A Floor Plan

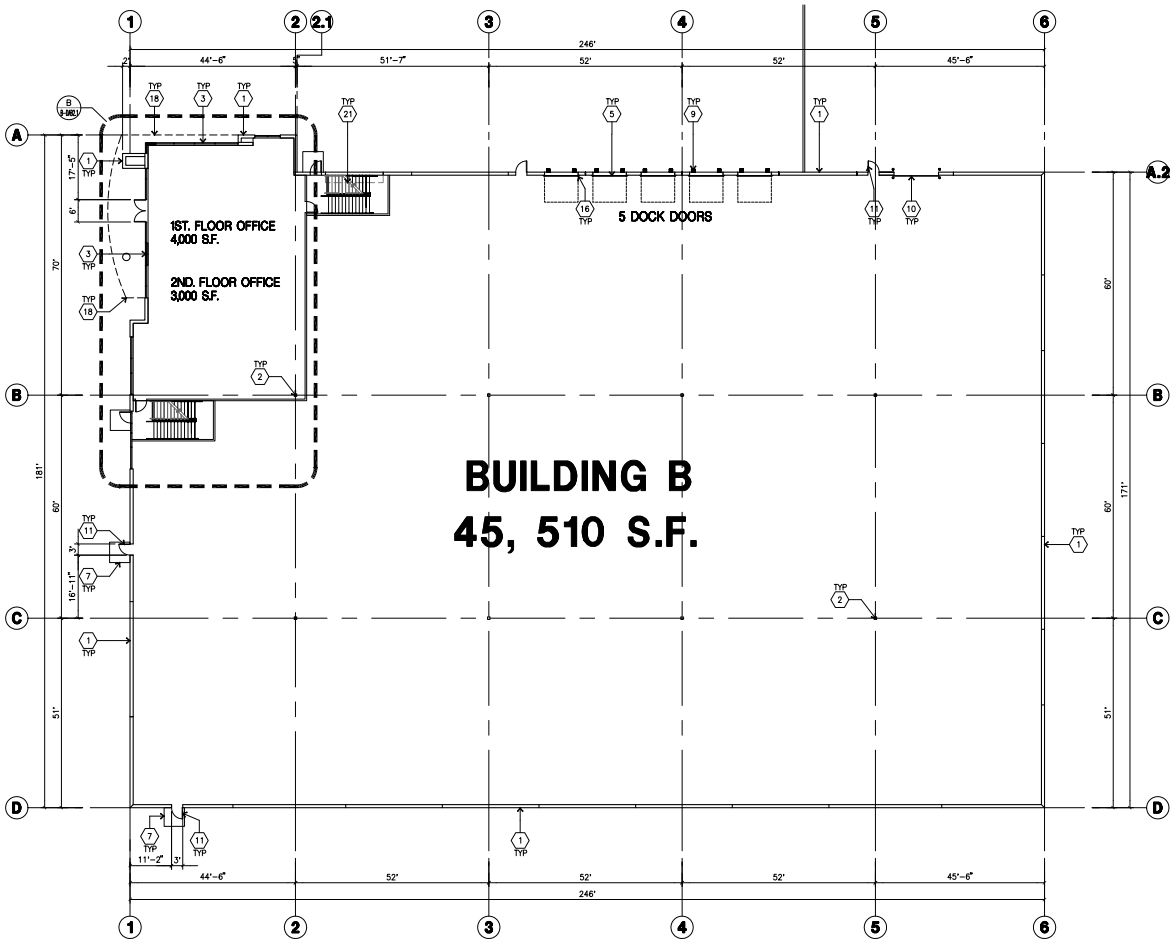


Attachment 5
Building B Floor Plan

DP 15-10/ZE 15-2
Building B Floor Plan



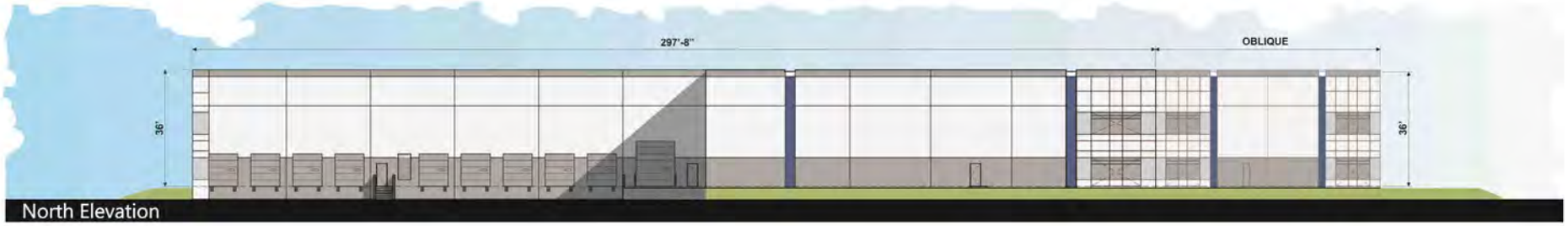
ENLARGED FLOOR PLAN B
scale: 1/8" = 1'-0"



OVERALL FLOOR PLAN A
scale: 1/16" = 1'-0"

Attachment 6
Building A Elevations

DP 15-10/ZE 15-2
Building A Elevations

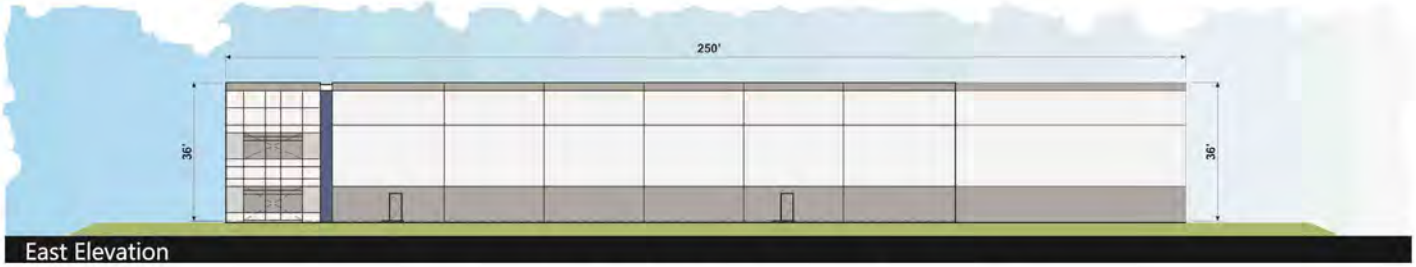


North Elevation

Southwest Elevation

West Elevation

South Elevation



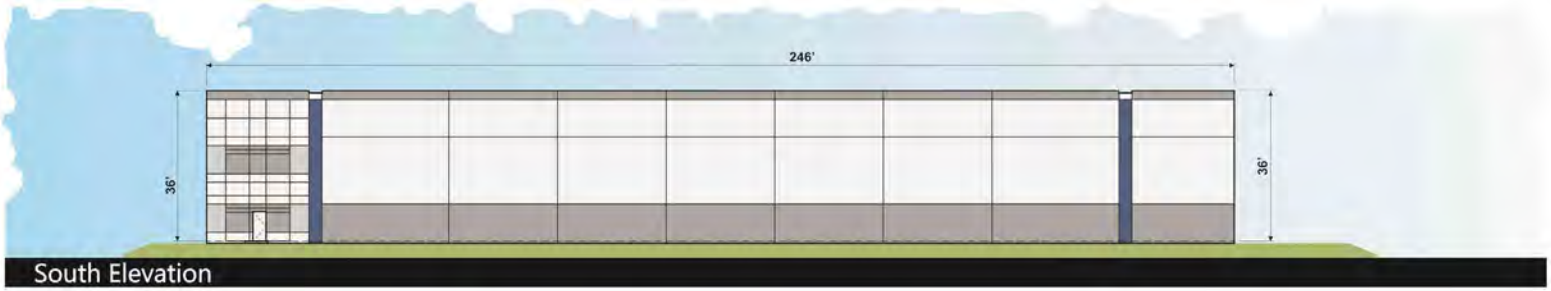
East Elevation

Attachment 7
Building B Elevations

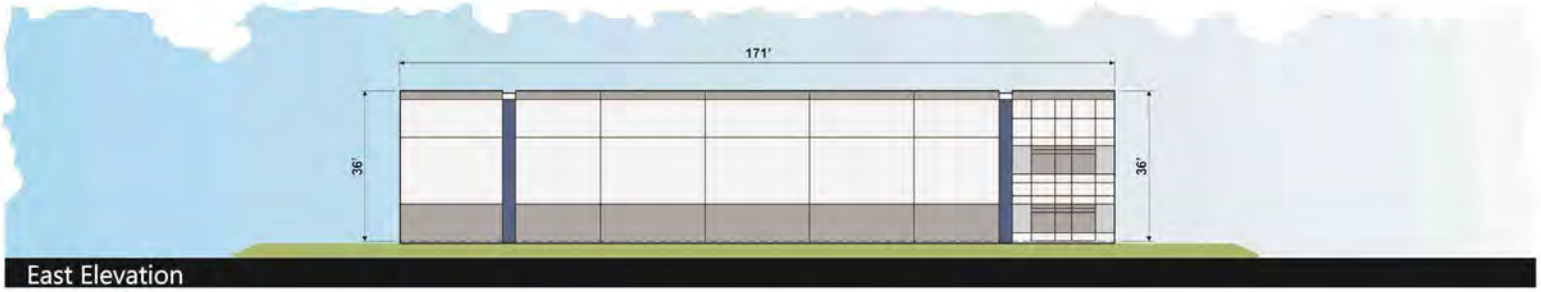
DP 15-10/ZE 15-2
Building B Elevations

North Elevation

West Elevation



South Elevation



East Elevation

Attachment 8
Site Perspective

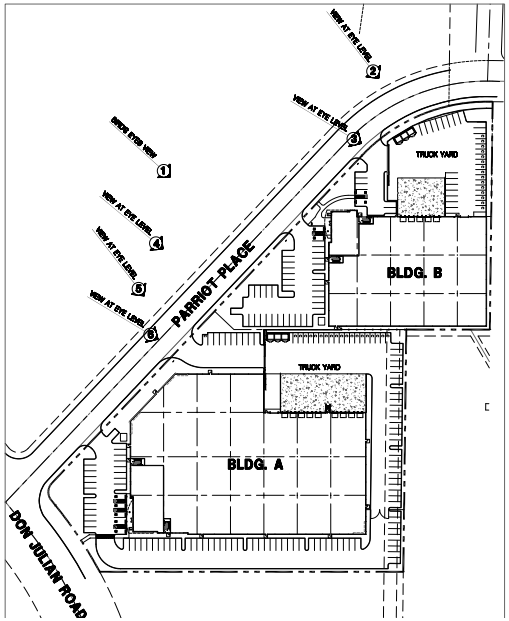
DP 15-10/ZE 15-2
Site Perspective

VIEW 5 (5)
scale: NTS

VIEW 1 (1)
scale: NTS

VIEW 6 (6)
scale: NTS

VIEW 2 (2)
scale: NTS



VIEW 3 (3)
scale: NTS

VIEW 4 (4)
scale: NTS

HPA architecture

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Owner:

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Project:

CITY OF INDUSTRY - PARRIOTT PLACE

499 & 499 Parriot Place
City of Industry, CA

Consultants:

CIVIL	Thienes
STRUCTURAL	
MECHANICAL	
PLUMBING	
ELECTRICAL	
LANDSCAPE	
FIRE PROTECTION	
SOILS ENGINEER	
MATERIAL HANDLING	

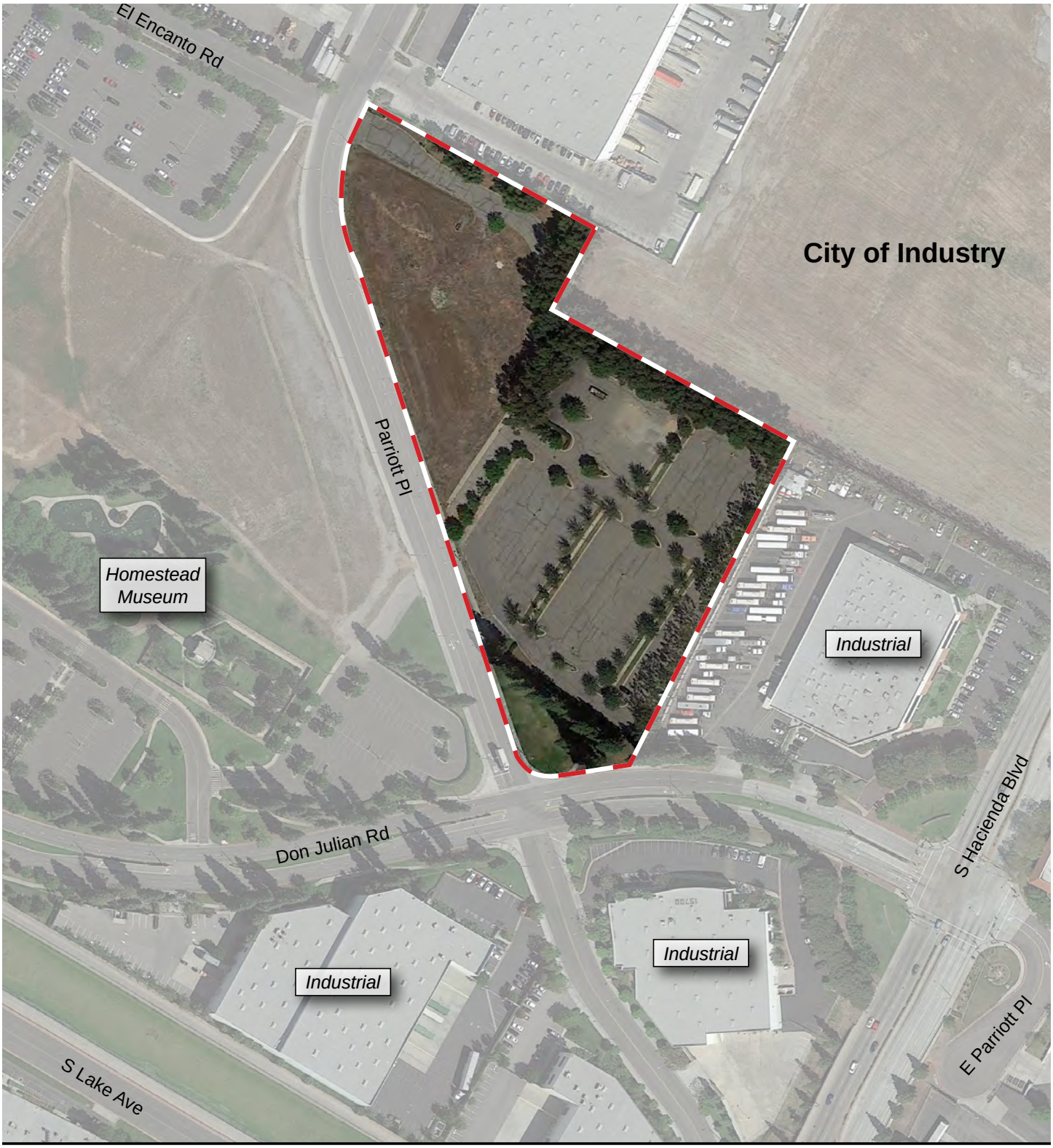
Title: 3D views to bldg B truck yard

Project Number: 14092
Drawn by:
Date:
Revision:

Sheet:

Attachment 9
Location Map

DP 15-10/ZE 15-2
Location Map



Subject Property

Attachment 10
Public Hearing Notice

NOTICE OF PUBLIC HEARING

Zone Exception No. 15-2 and Development Plan 15-10

On September 25, 2015, notice has been given that the City Council of the City of Industry shall hold a public hearing to consider: 1) Zone Exception 15-2 to allow a ten foot tall screen wall to be located within the required 30 foot setback from public streets for the purpose of screening the loading area; and 2) Development Plan 15-10 to allow development of two industrial buildings (84,660 square feet on a 4.1 acre lot and 45,510 square feet on a 2.3 acre lot) at 489 and 499 Parriott Place in the City of Industry (APN 8208-027-911 and 8208-027-912).

A copy of all relevant material, including the application, is on file in the City Administrative Offices, 15625 East Stafford Street, Suite 100, City of Industry, California 91744.

The time, date and place of such hearing shall be as follows:

Time: 9:00 a.m.

Date: October 8, 2015

Place: City Council Chamber
15651 East Stafford Street
City of Industry, CA 91744

Any person wishing to be heard regarding this matter may appear at the above time, date and place. Written comments may be sent via U.S. Mail or by hand delivery to the City of Industry, at 15625 Stafford Street, Suite 100, City of Industry, CA 91744.

If you challenge the project in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City Council of the City of Industry at, or prior to, the public hearing.

Cecelia Dunlap
Deputy City Clerk of the City of Industry

Attachment 11
Resolution CC 2015-31

Including:

- **Notice of Intent to Adopted a Mitigated Negative Declaration**
- **Initial Study/Mitigated Negative Declaration**
- **Mitigation Monitoring and Reporting Program**
- **Response to Comments**

RESOLUTION NO. CC 2015-31

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA MAKING FINDINGS AND ADOPTING THE INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR A DEVELOPMENT PLAN AND ZONE EXCEPTION FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS AT THE PROPERTY LOCATED AT 489 AND 499 PARRIOTT PLACE IN THE CITY OF INDUSTRY

RECITALS

WHEREAS, on June 26, 2015, CT Realty Investors ("Applicant") filed a complete application requesting the approval of Development Plan No. 15-10 and Zone Exception 15-2 described herein ("Application"); and

WHEREAS, the Application applies to a 6.4 acre property at 489 and 499 Parriott Place, City of Industry, California, Assessor's Parcel Numbers 8208-027-911 and 8208-027-912 ("Property"); and

WHEREAS, the Applicant desires to construct two industrial buildings (84,660 square feet and 45,510 square feet) within the "M"-Manufacturing Zone (the "Project"), and in accordance with Section 17.36.020 of the City's Municipal Code ("Code"), a Development Plan is required for this type of activity; and

WHEREAS, the Application includes a request to allow a ten foot tall screen wall to be located within the required 30 foot setback and, in accordance with Chapter 17.40 of the Code, a Zone Exception is required for this request; and

WHEREAS, the Land Use Element of the General Plan designates the Property as Employment. The Project is consistent with the General Plan as it would allow the construction of industrial buildings similar to other properties in the same land use designation, and does not conflict with the established goals and objectives of the Land Use Element; and

WHEREAS, given the curvature of Parriott Place and resulting odd shape of the Property, and in order to comply with other development standards stipulated in Chapter 17.36 of the City's Code, such as the truck maneuvering area, parking, and trash/recycling enclosure, there is inadequate room to also comply with screening requirements without placing a wall exceeding 42 inches in height within 30 feet of the front curb as stipulated in Section 17.32.020 of the City's Code. A ten foot tall wall to screen is proposed to be located 18 feet from the front curb to screen the loading area, minimize noise impacts, and maintain the character of the area; and

WHEREAS, pursuant to Section 17.40.020 of the City's Code, the City Council may grant an exception to the City's development standards where (1) the exception is

necessary for the preservation of a substantial property right, and (2) the exception will not be materially detrimental to the public welfare nor to the property of other persons located in the vicinity thereof; and

WHEREAS, Section 17.40.030 of the City's Code provides that an exception to the City's development standards may be granted where practical difficulties or unnecessary hardships interfere with carrying out the strict letter of the Municipal Code, and the spirit of the Code will be observed, public safety secured, and substantial justice done; and

WHEREAS, in accordance with CEQA, California Environmental Quality Act ("CEQA"), California Public Resources Code section 21000 *et seq.,* the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, sections 15000 *et seq.*, and the Environmental Impact Report Guidelines of the City, an initial study was performed, the result of which was preparation and circulation of a mitigated negative declaration ("IS/MND") analyzing the proposed Project and concluding that approval of the Project could not have a significant effect on the environment because the impacts of the Project could all be mitigated to levels below established CEQA thresholds of significance with the adoption of mitigation measures and enforcement of such measures through a Mitigation Monitoring and Reporting Program ("MMRP"); and

WHEREAS, the Initial Study/Mitigated Negative Declaration was circulated for public and agency review and comment on September 3, 2015, through, and including, September 24, 2015. Copies of the Initial Study/Mitigated Negative Declaration were made available to the public at the Planning Department on September 3, 2015, and the Initial Study/Mitigated Negative Declaration was distributed to interested parties and agencies. On September 3, 2015, a Notice of Intent to Adopt a Mitigated Negative Declaration, including the time and place of the City Council meeting to review the Application and Initial Study/Mitigated Negative Declaration, was published in the local newspaper and posted at the Project site, City Hall, Council Chambers and Fire Station 118; and

WHEREAS, the Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a number of significant effects on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level. The mitigation measures address the use of low volatile organic content ("VOC") paint, the need to stop grading work and notify a qualified archeologist if buried tribal cultural resources are discovered, the need to conduct a soil vapor survey to evaluate the potential presence of volatile organic contaminants on the site, and the need to restrict the northern project driveway of Building B to right-in/right-out movements to account for a possible sight distance impairment; and

WHEREAS, on October 8, 2015, the City Council of the City of Industry conducted a duly noticed public meeting to consider the Initial Study/Mitigated Negative Declaration and MMRP, and considered all testimony written and oral; and

WHEREAS, the City Council has reviewed and carefully considered the information in the Initial Study/Mitigated Negative Declaration and the MMRP, including all comment letters submitted, and makes the findings contained in this Resolution, and adopts the Initial Study/Mitigated Negative Declaration and the MMRP, as an objective and accurate document that reflects the independent judgment and analysis of the City in the discussion of the Project's environmental impacts; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF INDUSTRY DOES HEREBY RESOLVE, DETERMINE, FIND, AND ORDER AS FOLLOWS:

SECTION 1: That based on the entirety of the record before it, which includes without limitation, the California Environmental Quality Act, Public Resources Code §§ 21000, et seq. ("CEQA") and the CEQA Guidelines, 14 California Code of Regulations § 15000, *et seq.*; the Environmental Impact Report Guidelines of the City of Industry; the Initial Study/Mitigated Negative Declaration and MMRP, prepared for the Project, including all written comments received; all reports, minutes, and public testimony submitted as part of the City Council's duly noticed public meeting of October 8, 2015; and any other evidence (within the meaning of Public Resources Code §21080(e) and §21082.2), the City Council of the City of Industry hereby finds as follows:

a. The foregoing recitals are true and correct and made a part of this Resolution.

b. The IS/MND for the Project including any comment letters received, are attached hereto as Exhibit A and are incorporated by reference as part of this Resolution, as if each were set forth fully herein.

c. The documents and other material constituting the record for these proceedings are located at the Office of the City Clerk, City of Industry, 15625 E. Stafford, Suite 100, City of Industry, CA 91744.

d. The proposed Project is consistent with the City's General Plan because the land use, development standards, densities and intensities, buildings and structures proposed are compatible with the goals, policies, and land use designations established in the General Plan (see Gov't Code, § 65860), and none of the land uses, development standards, densities and intensities, buildings and structures will operate to conflict with or impede achievement of the any of the goals, policies, or land use designations established in the General Plan.

e. In accordance with CEQA, the City Council has considered the Initial Study and Mitigated Negative Declaration and MMRP for the Project, including all

comments received on the Initial Study and Mitigated Negative Declaration, and based on the entirety of the record, as described above, the City Council, exercising its independent judgment and analysis, makes the following findings regarding the environmental analysis of the Project:

i. Design features of the Project, as well as the mitigation measures proposed in the Initial Study and Mitigated Negative Declaration and included in the MMRP, will operate to ensure the impacts of the proposed Project will not exceed established CEQA thresholds of significance. Therefore, and as further documented in the Initial Study and Mitigated Negative Declaration for the Project, additional mitigation measures beyond those established in the MMRP are not required for the Project.

ii. For the reasons stated in this Resolution, the City Council finds that there is no substantial evidence in the record supporting a fair argument that approval of the Project will result in a significant environmental effect.

f. That the City Council of the City of Industry hereby makes the findings contained this Resolution, and adopts the Initial Study/Mitigated Negative Declaration for the Project, including the MMRP.

SECTION 2: The provisions of this Resolution are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of the Resolution or their applicability to other persons or circumstances.

SECTION 3: That the City Clerk shall certify to the adoption of this Resolution and that the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Industry at a regular meeting held on October 8, 2015 by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
Mark D. Radecki, Mayor

ATTEST:

_____
Cecelia Dunlap, Deputy City Clerk

Exhibit A.1
Notice of Intent to Adopted a Mitigated Negative Declaration

NOTICE OF INTENT TO ADOPT A
MITIGATED NEGATIVE DECLARATION
DEVELOPMENT PLAN 15-10 AND ZONE EXCEPTION 15-2
489 AND 499 PARRIOTT PLACE, CITY OF INDUSTRY

Purpose: In accordance with the State of California Public Resources Code Section 21092, Title 14 of the California Code of Regulations Guidelines for implementation of Section 15063 of the California Environmental Quality Act, and the Industry Municipal Code, this is to advise you that the Planning Department of the City of Industry has prepared an initial study of environmental impacts on the following project and is recommending the environmental determination described below.

Project Description: The proposed project includes two applications: 1) Zone Exception 15-2 to allow a ten foot tall screen wall to be located within the required 30 foot setback from public streets for the purpose of screening the loading area; and 2) Development Plan 15-10 to develop a vacant 6.4 acre site with two industrial buildings. The proposed buildings would be 84,660 square feet on a 4.1 acre lot and 45,510 square feet on a 2.3 acre lot.

Location: The proposed project is located at 489 and 499 Parriott Place in the City of Industry, Los Angeles County (Assessor Parcel Numbers 8208-027-911 and 8208-027-912).

Environmental Determination: Based on the findings of the Initial Study, the Planning Department has determined that the proposed project would not result in significant environmental impacts with implementation of mitigation measures. Measures to reduce impacts involving air quality, tribal cultural resources, hazards and hazardous materials, and transportation and traffic would be incorporated into the final project. Accordingly, the City intends to adopt a Mitigated Negative Declaration pursuant to Section 21080 (c) of the Public Resources Code.

The project site is not included on the list of hazardous materials facilities, hazardous waste properties, or hazardous waste disposal sites named under Section 65962.5 of the California Government Code (Cortese List).

Public Review and Comment Period: Copies of the proposed Mitigated Negative Declaration and Initial Study are available in the Planning Department at the address listed below. **A 20-day public review period for the Mitigated Negative Declaration begins September 3, 2015, and ends September 23, 2015**. Written comments on the adequacy of the document must be received by the City prior to 5:00 PM on September 23, 2015. If you would like to comment, please send written comments to:

Brian James, Planning Director
15625 E. Stafford Street, Suite 100
P.O. Box 3366
City of Industry, CA 91744
bdjames@cityofindustry.org
(626) 333-2211

Public Hearings: The Planning Commission is scheduled to consider the Mitigated Negative Declaration and proposed project at a special meeting to be held on September 24, 2015, at 11:00 AM and the City Council is scheduled to consider the Mitigated Negative Declaration and proposed project at a regularly scheduled meeting to be held on October 8, 2015, at 9:00 AM. Both meetings in the City of Industry Council Chambers located at 15651 E. Stafford Street, City of Industry, CA 91744. To confirm the date and time of the meeting, please check the City's website: www.cityofindustry.org.

Exhibit A.2
Initial Study/Mitigated Negative Declaration for Development Plan 15-10 and Zone Exception 15-2, August 2015

August 2015 | Initial Study

PROPOSED PARRIOTT WAREHOUSE PROJECT

Development Plan 15-10 and Zone Exception 15-2, City of Industry

Prepared for:

City of Industry
Contact: Brian James, Planning Director
15625 East Stafford, Suite 100
City of Industry, California 91774-0366
626.333.2211

Prepared by:

PlaceWorks
Contact: Dwayne Mears, Principal, Environmental Services
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

IND-07.143

PLACEWORKS

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1. Introduction

CT Realty Investors, the project applicant, is seeking approval of a Development Plan (No. 15-10) and Zone Exception (15-2) for the construction of two tilt-up industrial buildings on 6.4 acres of land located on the east side of Parriott Place, between Proctor Avenue and Don Julian Road. The assigned addresses of the project site are 489 and 499 Parriott Place, City of Industry, Los Angeles County.

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended, to determine if approval of the discretionary action requested and subsequent development could have a significant impact on the environment. This analysis will also provide the City of Industry with information to document the potential impacts of the proposed project.

1.1 PROJECT LOCATION

The project site is in the City of Industry in the San Gabriel Valley in Los Angeles County, California. The City of Industry extends approximately 14 miles east-west across the southern San Gabriel Valley (see Figure 1, *Regional Location*). The San Gabriel Valley extends east-west from near central Los Angeles on the west to the eastern Los Angeles County boundary; and is bounded to the north by the San Gabriel Mountains and to the south by the Puente Hills. The project site is on the northwest side of the City of Industry. Regional access to the site is from the Pomona Freeway (State Route [SR] 60) via the Hacienda Boulevard interchange.

The project site is located on the east side of Parriott Place, between Proctor Avenue and Don Julian Road (see Figure 2*, Local Vicinity*). The assigned addresses of the project site are 489 and 499 Parriott Place, City of Industry, Los Angeles County. The site is 6.4 acres in area and is comprised of portions of Los Angeles County Tax Assessor Parcel Numbers (APN) 8208-027-911, and 8208-027-912.

1.2 ENVIRONMENTAL SETTING

1.2.1 Existing Land Use

The project site is an irregular shaped property that has been partially developed. The northern portion of the property is currently vacant and undeveloped (see Figure 3, *Aerial Photograph*). The majority of this portion of the site is bare soil, however, a paved drive aisle runs along the eastern and southern border. In addition, several eucalyptus trees line a block wall that runs along the eastern side and partially along the southern side of this portion of the property.

The southern portion of the property is developed with a parking lot, and is surrounded by block wall on its eastern, southern sides, and partially on its western side. Various ornamental trees are scattered throughout the parking lot in this portion of the project site, including various mature pine trees located in a grassy

setback area on the southern part of the project site. The project site is accessible from Parriott Place on the west, via two paved cement driveways with a curb and gutter.

1.2.2 Surrounding Land Use

The project site is situated in an industrial area occupied primarily by warehouses, manufacturing facilities, and various businesses (see Figure 3, *Aerial Photograph*). However, El Encanto Healthcare and Habilitation Center facilities are located approximately 600 feet from the west side of the project site across Parriott Place. Parriott Place is a four-lane road with no street parking provided along either side. Roadway traffic was relatively quiet during a recent weekday afternoon visit, and activities at nearby businesses were subdued.

Adjacent businesses/features include:

North – Gaytan Foods and Marquez Brothers Enterprises

East – Valley Power Systems, Inc.

South – Win Sys Logistics, Inc., and Delta Products Corp.

West – El Encanto Healthcare and Habilitation Center and Workman and Temple Family Homestead Museum

Adjacent Property Zoning:

North – Industrial (I)

East – Industrial (I)

South – Industrial (I)

West – Institutional (INST)

1.3 PROJECT DESCRIPTION

1.3.1 Environmental Information Forms

Copies of the Development Plan Application and Zone Exception Application for a screen wall submitted by the project applicant, and the Development Plan Review Form completed by the City of Industry Planning Department are provided in Appendix A. In addition, the project applicant provided design drawings that depict the proposed site plan and building elevations, which are depicted in Figures 4, 5 and 6, respectively, of this Initial Study.

1.3.2 Demolition

The project site contains no buildings, and is primarily paved with a parking lot and drive aisles. The northern part of the site is undeveloped. Therefore, the project would not involve the demolition of any existing

structures. Concrete and asphalt pavement would be removed as part of site grading activities. It is anticipated that these materials would be transported off-site and recycled by a local waste management firm.

1.3.3 Construction

The project would build the following improvements (see Figure 5, Site Plan):

Two concrete tilt-up warehouse/office buildings would be constructed on an approximately 6.4 acre site consisting of a 4.1-acre, and 2.3-acre building area. The first building (Building A) would be 84,660 square-feet in size, including two stories of office space with 5,000 square feet on the first floor, and 5,000 square feet on the second floor. The building would occupy 47.9 percent of the 4.1-acre area. The building would be approximately 41 feet high (see Figure 5, Elevations-Building A) and would front Parriott Place with an approximate 30-foot setback. Building A would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 36-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site.

A total of 105 standard and 20 compact parking spaces, including 5 van accessible spaces would be provided in marked stalls around the building. A bike rack accommodating 9 bicycle parking spaces would be installed near the site entrance.

A loading dock at the northeast corner of the building, would accommodate 9 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater collection and removal.

A total of 25,938 square feet of landscaping (14.7 percent) would be provided, primarily along the property borders and building perimeter. Site property would be secured with the existing 5 to 6-foot high split face masonry wall on the south and east sides, an 8-foot high wrought iron fence on the north side, and a 10-foot, high concrete tilt-up wall on the north and west sides around the truck loading area.

A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed in the southwestern corner to service the building.

The second building would be 45,510 square-feet in size, including two stories of office space with 4,000 square feet on the first floor, and 3,000 square feet on the second floor. The building would occupy 45.4 percent of the 2.3-acre area. The building would be approximately 41 feet high (see Figure 6, Elevations-Building B) and would front Parriott Place with an approximate 30-foot setback. Building B would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 40-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site.

A total of 59 standard and 15 compact parking spaces, including 4 van accessible spaces would be provided in marked stalls on the northeast and western sides of the building. A bike rack accommodating 9 bicycle parking spaces would be installed near the entrance.

A loading dock on the northern side of the building, would accommodate 5 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater collection and removal.

A total of 18,229 square feet of landscaping (18.2 percent) would be provided, primarily along the property borders and building perimeter. Site property would be secured with the existing 5 to 6-foot high split face masonry wall on the east and partially on the south side, an 8-foot high wrought iron fence on the south side, and a 10-foot high concrete tilt-up wall on the north and west sides in the front setback.

A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed to service the building.

1.3.4 Operation

The buildings would be built on speculation; thus, the prospective occupants are currently unknown. The buildings are intended for industrial warehouse/office use.

1.3.5 Project Phasing

The proposed project would have a single construction phase. Construction would begin upon project approval by the City of Industry and is expected to require approximately twelve months to complete. It is anticipated that construction would occur from October 2015 through October 2016. Operation of the warehouse/office buildings would commence shortly thereafter.

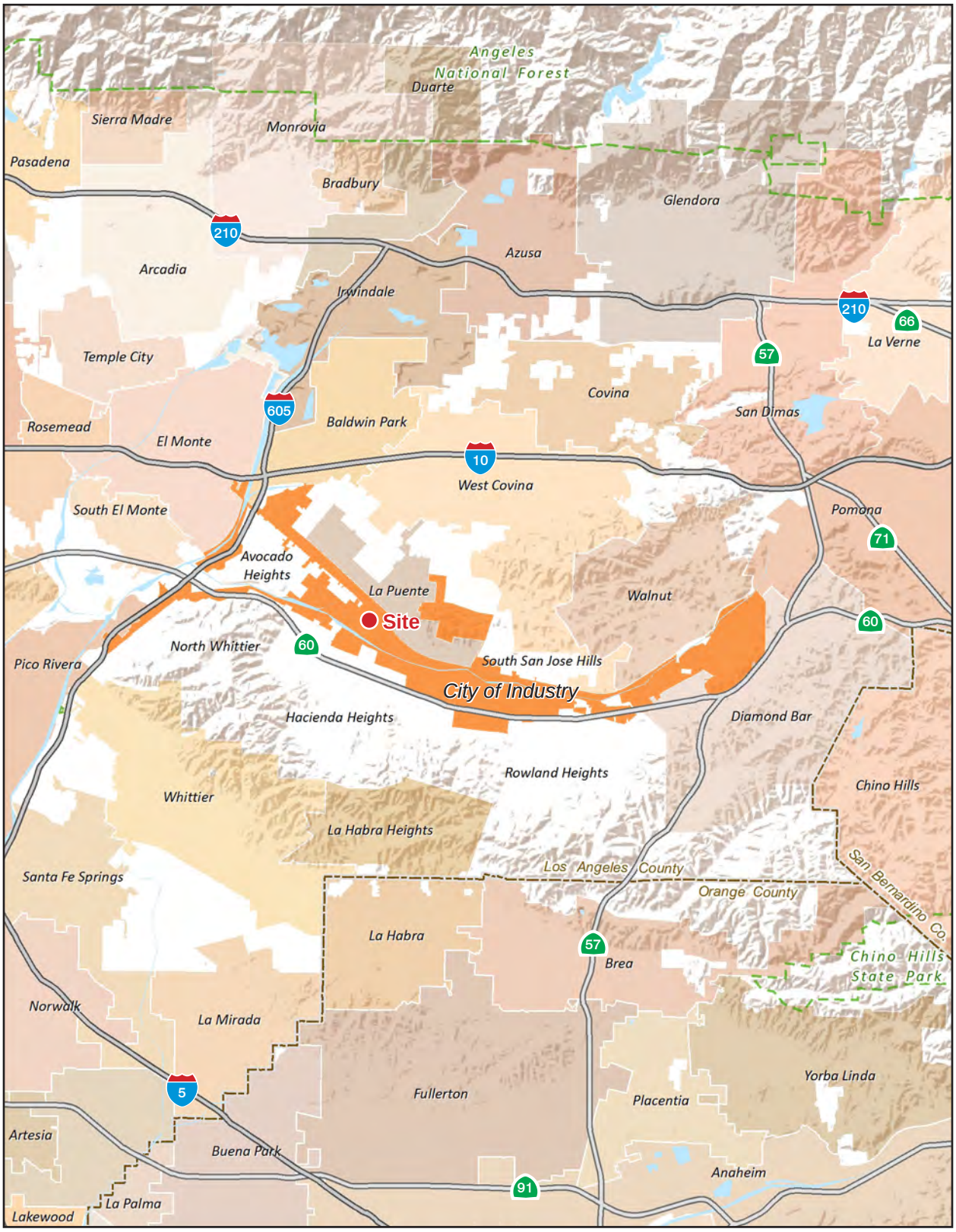
1.4 EXISTING ZONING AND GENERAL PLAN

The proposed project would be constructed within Los Angeles County APN 8208-027-911, and 8208-027-912. The existing zoning for the project site is Industrial (I) and the General Plan land use designation is Employment. Accordingly, the proposed project would be consistent with the General Plan and is allowed under the current zoning designation.

1.5 CITY ACTION REQUESTED

CT Realty Investors, the project applicant, is seeking approval of a Development Plan (No. 15-10), and Zone Exception (15-2) for the construction of two Tilt-up industrial buildings on 6.4 acres of land located on the east side of Parriott Place, between Proctor Avenue and Don Julian Road. The assigned addresses of the project site are 489 and 499 Parriott Place, City of Industry, Los Angeles County. The proposed project is consistent with the existing General Plan land use and current zoning designations. The project would require the City of Industry to approve a lot line adjustment which the City will process separately, design review, and a zone exception for a screen wall in the front setback.

Figure 1 - Regional Location



Note: Unincorporated county areas shown in white.

0 3
Scale (Miles)

Source: ESRI, 2015

1. Introduction

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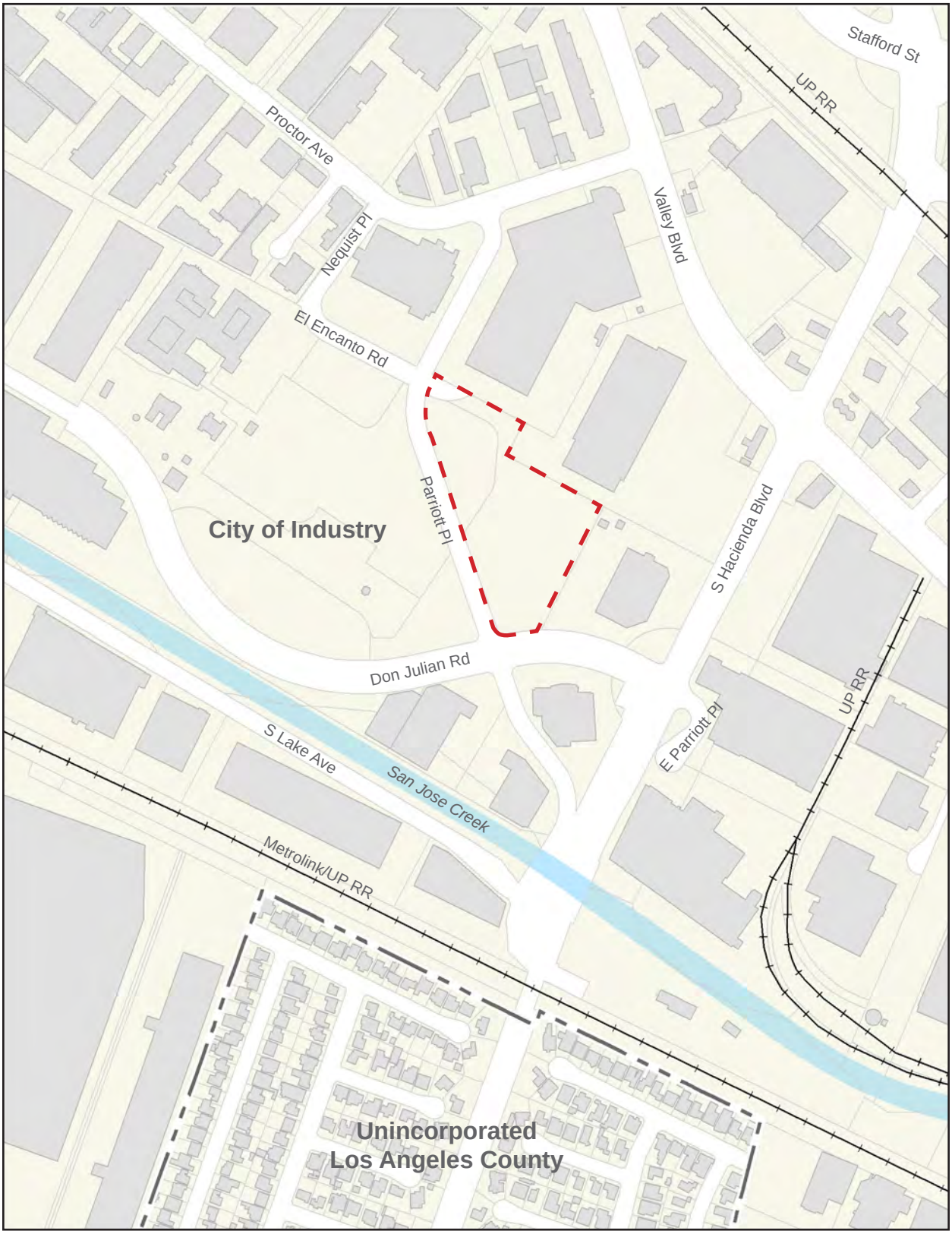
Figure 2 - Local Vicinity



Subject Property

City Boundary

0 500
Scale (Feet)

Source: ESRI, 2015

1. Introduction

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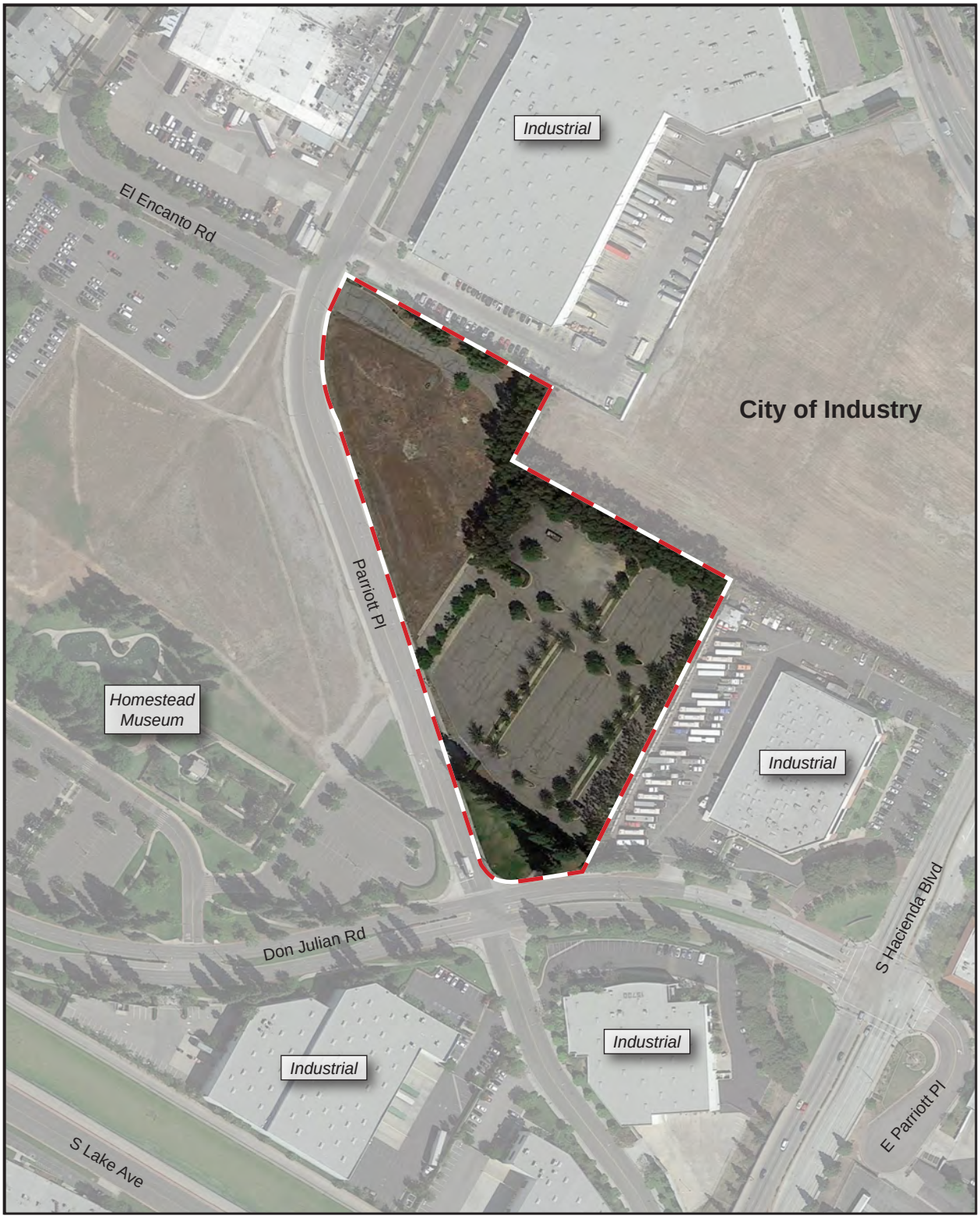
Figure 3 - Aerial Photograph



Subject Property
City Boundary

0 250
Scale (Feet)

Source: Google Earth Pro, 2015

1. Introduction

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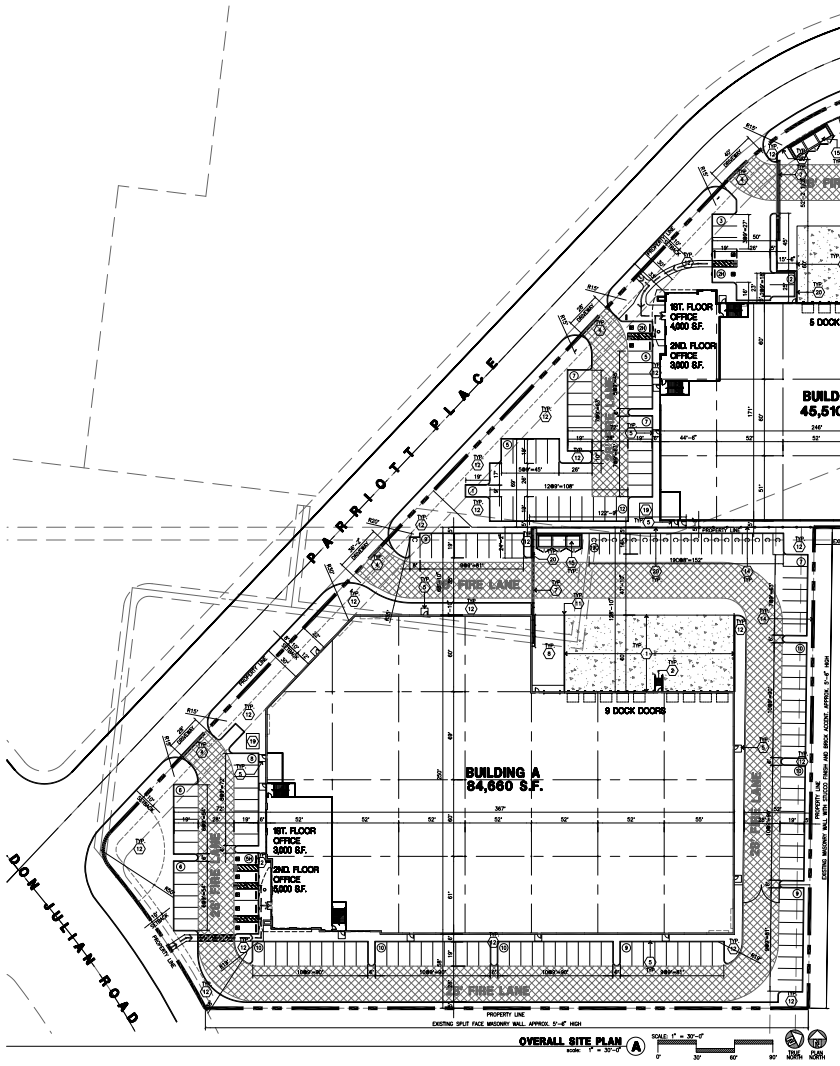
Figure 4 - Site Plan

1. Introduction



SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT.
2. EXTERIOR CONCRETE STAIR.
3. CONCRETE WALKWAY, MEDIUM BROOM FINISH
4. DRIVEWAY APRONS TO BE CONSTRUCTED
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH PROVIDE WALK TO PUBLIC WAY OR DRIVE WAY AS REQ. BY CITY INSPECTOR.
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO VERIFY WITH S.C.E.
7. PROVIDE 8' HIGH METAL GATES W/ KNOX-BOX PER FIRE DEPARTMENT STANDARDS PER DRIVEWAY. CONTRACTOR TO DESIGN & DETAIL GATES. DRAWINGS AND CALCULATIONS PRIOR TO FABRICATION. PROVIDE CONDUIT FOR FUTURE.
8. CONCRETE RAMP
9. BIKE RACK TYPICAL. 9 BIKES PER RACK.
10. PRE-CAST CONC. WHEEL STOP.
11. CONC. FILLED GUARD POST "6 DIA. U.N.O. 42" H,
12. LANDSCAPE. SEE LANDSCAPE DRAWINGS FOR DETAILS
13. NOT USED
14. 8' HIGH WROUGHT IRON FENCE
15. TRASH ENCLOSURE.
16. HANDICAP ENTRY SIGN.
17. HANDICAP PARKING STALL SIGN
18. APPROXIMATE LOCATION OF FIRE HYDRANT
19. APPROXIMATE LOCATION OF TRANSFORMER SEE K/DAB A4.1 FOR SCREENING
20. 10' HIGH CONCRETE TILT-UP SCREEN WALL

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY TBD
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES.
5. THE ENTIRE PROJECT SHALL BE PERMANENTLY MAINTAINED WITH AN AUTOMATIC IRRIGATION SYSTEM.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C"DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH U.N.O.
11. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
12. CONSTRUCTION DOCUMENTS PERTAINING TO THE LANDSCAPE AND IRRIGATION OF THE ENTIRE PROJECT SITE SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND APPROVED BY PUBLIC FACILITIES DEVELOPMENT PRIOR TO ISSUANCE OF BUILDING PERMITS.
13. PRIOR TO FINAL CITY INSPECTION, THE LANDSCAPE ARCHITECT SHALL SUBMIT A CERTIFICATE OF COMPLETION TO PUBLIC FACILITIES DEVELOPMENT.
14. ALL LANDSCAPE AND IRRIGATION DESIGNS SHALL MEET CURRENT CITY STANDARDS AS LISTED IN GUIDELINES OR AS OBTAINED FROM PUBLIC FACILITIES DEVELOPMENT.
15. ALL VERTICAL MOUNTING POLES OF CHAIN LINK FENCING SHALL BE CAPPED.
16. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
17. NOT USED.
18. FUTURE TENANT TO PROVIDE BULLETING STATING THE FOLLOWING:
    CURRENT MAPS, ROUTS AND SCHEDULES FOR PUBLIC TRANSIT ROUTES SERVING THE SITE
    TELEPHONE NUMBERS OF REFERRALS ON TRANSPORTATION INFORMATION INCLUDING NUMBERS FOR THE REGIONAL RIDESHARING AGENCY AND LOCAL TRANSIT OPERATORS
    RIDESAHRING PROMOTIONAL MATERIAL SUPPLIED BY COMMUTER-ORIENTED ORGANIZATIONS.
    BICYCLE ROUTE AND FACILITY INFORMATION, INCLUDING REGIONAL/LOCAL BICYCLE SAFETY INFORMATION
    A LISTING OF FACILITIES AVAILABLE FOR CARPOOLERS, VAN POOLERS, BYCICLIST, TRANSIT RIDERS AND PEDESTRIAN SITE

PROJECT INFORMATION

Owner
CT REALTY INVESTORS
89 ENTERPRISE
ALISO VIEJO, CA 92656
TEL: (949) 831-8422
CONTACT: DAVE BALL

Applicant
HPA
18831 BARDEEN AVE, STE #100
IRVINE, CA 92612
TEL: (949) 863-1770
CONTACT: HOON KEUN PARK

Assessors Parcel Number
8238-027-911 PARTIAL
8238-027-912 PARTIAL

Zoning
I (INDUSTRIAL)

CONSTRUCTION TYPE
II-B

OCCUPANCY
S-1/B

TABULATION

	BLDG. A	BLDG. B	TOTAL
SITE AREA			
in s.f.	174,458	100,218	274,673 s.f.
in acres	4.1	2.3	6.4 ac.
BUILDING AREA			
office - 1st floor	3,000	4,000	7,000 s.f.
office - 2nd floor	3,000	3,000	6,000 s.f.
w ambulate	79,660	38,510	118,170 s.f.
TOTAL	84,660	45,510	130,170 s.f.
COVERAGE	48.5%	45.4%	47.5%
FLOOR AREA RATIO			
2nd floor @ 1000 s.f.	50	50	100 stalls
2nd floor @ 1750 s.f.	60	29	89 stalls
Above 10,000 @ 1/1000	525	525	525 stalls
TOTAL	1,035	604	1,639 stalls
PARKING PROVIDED			
standard (9' x 19')	105	59	164 stalls
compact (8' x 16')	20	15	35 stalls
accessible (9' x 19')	5	4	9 stalls
TOTAL	130	78	208 stalls
LANDSCAPE REQUIREMENT			
10% of parking	12%	12%	12%
LANDSCAPE PROVIDED			
in s.f.	25,938	18,571	44,509 s.f.
in percentage	14.7%	18.5%	16.1%
ZONING ORDINANCE FOR CITY			
Industrial - I			
MAXIMUM FLOOR AREA RATIO			
F.A.R. - 50			
SETBACK			
Front - 30' Street - 30' from the curb line of any street or highway, whether the street is improved or not			

SITE PLAN LEGEND

- CONCRETE PAVING – SEE "C" DRWGS. FOR THICKNESS
- STANDARD PARKING STALL – 9' X 19'
  COMPACT PARKING STALL – 8' X 16'
- HANDICAP PARKING STALL, 9' X 19' + 5' W/ ACCESSIBLE AISLE
- PATH OF TRAVEL

0 150
Scale (Feet)

Source: Orange Coast Petroleum Equipment, Inc., 2015

1. Introduction

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Figure 5 - Elevations-Building A

Source: HPA Architecture, 2015

1. Introduction

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Figure 6 - Elevations-Building B

Source: HPA Architecture, 2015

1. Introduction

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2. Environmental Checklist

2.1 BACKGROUND

1. **Project Title:** CT Realty Investors Industrial Buildings

2. **Lead Agency Name and Address:**
City of Industry
15625 East Stafford, Suite 100
P.O. Box 3366
City of Industry, CA 91744-0366

3. **Contact Person and Phone Number:**
Brian James, Planning Director
626.333.2211

4. **Project Location:** The project site is located on the east side of Parriott Place, between Proctor Avenue and Don Julian Road. The assigned addresses of the project site are 489 and 499 Parriott Place, City of Industry, Los Angeles County. The site is 6.4 acres in area and is comprised of portions of Los Angeles County Tax Assessor Parcel Numbers (APN) 8208-027-911, and 8208-027-912.

5. **Project Sponsor's Name and Address:**
CT Realty Investors
65 Enterprise
Aliso Viejo, CA 92656

6. **General Plan Designation:** Employment

7. **Zoning:** Industrial (I)

Description of Project Two concrete tilt-up warehouse/office buildings would be constructed on an approximately 6.4 acre site consisting of a 4.1-acre, and 2.3-acre building area. The first building (Building A) would be 84,660 square-feet in size, including two stories of office space with 5,000 square feet on the first floor, and 5,000 square feet on the second floor. The building would occupy 47.9 percent of the 4.1-acre area. The building would be approximately 41 feet high and would front Parriott Place with an approximate 30-foot setback. Building A would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 36-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site. The second building would be 45,510 square-feet in size, including two stories of office space with 4,000 square feet on the first floor, and 3,000 square feet on the second floor. The building would occupy 45.4 percent of the 2.3-acre area. The building would be approximately 41 feet high and would front Parriott Place with an approximate 30-foot setback. Building B would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 40-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site. The buildings would be built on speculation; thus, the

prospective occupants are currently unknown. The buildings are intended for industrial warehouse/office use. The proposed project would have a single construction phase. Construction would begin upon project approval by the City of Industry and is expected to require approximately twelve months to complete. It is anticipated that construction would occur from October 2015 through October 2016. Operation of the warehouse/office buildings would commence shortly thereafter.

8. Surrounding Land Uses and Setting (Briefly describe the project's surroundings):

Adjacent businesses/features include:

North – Gaytan Foods and Marquez Brothers Enterprises

East – Valley Power Systems, Inc.

South – Win Sys Logistics, Inc., and Delta Products Corp.

West – El Encanto Healthcare and Habilitation Center and Workman and Temple Family Homestead Museum

Adjacent Property Zoning:

North – Industrial (I)

East – Industrial (I)

South – Industrial (I)

West – Institutional (INST)

9. Other Public Agencies Whose Approval Is Required (e.g. permits, financing approval, or participation agreement):

Los Angeles County Fire Department
Los Angeles County Public Works Department
Los Angeles County Building Department
South Coast Air Quality Management District
State Water Resource Control Board

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

2.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g. the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) **Earlier Analysis Used.** Identify and state where they are available for review.

   b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

2. Environmental Checklist

c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d)	Expose sensitive receptors to substantial pollutant concentrations?			X	
e)	Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. Would the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	
VI. PALEONTOLOGICAL RESOURCES. Would the project:				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
VII. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?		X		
VIII. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
IX. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	
X. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
XI. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site				X

2. Environmental Checklist

	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			X	
f)	Otherwise substantially degrade water quality?			X	
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j)	Inundation by seiche, tsunami, or mudflow?				X
XII. LAND USE AND PLANNING. Would the project:					
a)	Physically divide an established community?				X
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XIII. MINERAL RESOURCES. Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XIV. NOISE. Would the project result in:					
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?			X	
XV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XVI. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X
XVII. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XVIIII. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	

2. Environmental Checklist

	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?		X		
e)	Result in inadequate emergency access?				X
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:					
a)	Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?				X
b)	Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			X	
e)	Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				X
XX. MANDATORY FINDINGS OF SIGNIFICANCE.					
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

2.4 REFERENCES

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2. Environmental Checklist

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3. Environmental Analysis

Section 2.3 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

a) Have a substantial adverse effect on a scenic vista?

No Impact. The project site is situated in a highly urbanized area of the City of Industry, and with the exception of the Workman and Temple Family Homestead Museum, and El Encanto Healthcare and Habilitation Center on the west side of the project site, adjacent properties are developed with buildings similar in appearance to the proposed warehouse/office structure. The San Gabriel Mountains to the north and Puente Hills to the south provide the greatest opportunities for scenic vistas in the City of Industry. However, views of these two ranges are largely obscured at the site by existing development. Construction of the 41-foot-high warehouse/office buildings would not further alter open spaces or scenic vistas in the vicinity of the site. Therefore, no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The project site consists of a vacant undeveloped partially paved lot, and a paved parking lot in a fully urbanized area of the City of Industry and does not contain any scenic resources. The site does not contain historic buildings or rock outcrops, and only non-biologically sensitive trees are present along the site perimeter and in tree wells throughout the parking lot for landscape aesthetics. Additionally, the project site is not adjacent to or near a state scenic highway. The nearest officially-designated state scenic highway is SR-2 (Caltrans 2012a), which traverses the Angeles National Forest over 20 miles to the north. Therefore, no impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. The proposed project would not degrade the existing visual character or quality of the project site and its surroundings. The project would infill an existing industrial warehouse area and the height (41 feet), mass, and design of the buildings would be similar to existing industrial buildings present along the north, east and south sides of the project site (see Figure 3, Aerial Photograph). Building materials and neutral colors would be selected so that the buildings would not conflict or be incompatible with the existing character of the site surroundings (see Figure 6, Building Elevations). Exterior signage would be limited to minimal corporate identifications. Therefore, no impact to the visual character or quality of the site and its surroundings would occur.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed project would introduce new sources of light at the project site, including building and loading dock/docking bay lights, parking area lights, and security lighting. Nighttime lighting would be installed to accommodate safety and security while minimizing impacts on surrounding areas. However, the new sources of lighting have the potential to increase nighttime light and glare in the project area.

The lighting to be installed would be consistent with, and similar to, existing lighting in the adjacent industrial/commercial areas adjacent to the site. The locations of outdoor work areas and many parking areas would help shield new sources of light from El Encanto Healthcare and Habilitation Center across Parriott Place.

The City of Industry ensures that the lighting of new developments is installed in accordance with all applicable lighting requirements and guidelines through its Development Plan review process. All lighting would be designed, arranged, directed, or shielded to preventing excess illumination and light spillover onto adjoining land uses, including the adjacent residential neighborhood. Parking area lighting would be the minimum necessary that is consistent with the City's requirements and guidelines. In addition, the building exterior would not contain significant amounts of glass or reflective construction materials that could impose distracting glare on residents and passersby (see Figures 5 and 6, *Building Elevations*). Therefore, project impacts associated with light and glare are not expected to be significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site has no agricultural resources and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as mapped on the Important Farmland Finder maintained by the California Department of Conservation (CDC 2015). In addition, there are no agricultural uses in the vicinity of the site. Therefore, the proposed project would not convert farmland to nonagricultural uses and no impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site has no agricultural resources and is not zoned for agricultural use. The Williamson Act applies to parcels consisting of at least 20 acres of Prime Farmland or at least 40 acres of farmland not designated as Prime Farmland; the project site is not under a Williamson Act contract. Therefore, no impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The project site is in a fully urbanized area of the City of Industry and does not lie within or adjacent to forest land or timberland. The site is zoned for industrial use and project development would not change the zoning or result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is zoned for industrial use. There is no forest land on or near the project site and no forest land would be converted to non-forest use. Therefore no impact would occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed project has no agricultural or forest resources and is not designated as Farmland, as mapped on the Important Farmland Finder maintained by the California Department of Conservation (CDC 2015). Therefore, the proposed project would not convert Farmland to non-agricultural uses or forest land to non-forest use. No impact would occur.

3.3 AIR QUALITY

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix B.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O_3), carbon monoxide (CO), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen dioxides (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Act as in either attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (SCAQMD), is designated as nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2014a).

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

3. Environmental Analysis

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the air quality management plan (AQMP). It fulfills the CEQA goal in informing decision makers of the environmental efforts of the project under consideration at an early enough stage to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals contained in the AQMP. The most recent adopted comprehensive plan is the 2012 AQMP, which was adopted on December 7, 2012 (see Appendix B to this Initial Study for a description of the 2012 AQMP).

Regional growth projections are used by SCAQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. The proposed project is not considered a regionally significant project that would warrant Intergovernmental Review by SCAG under CEQA Guidelines section 15206.

While the proposed project would result in an increase in employment in the City of Industry, the project would not substantially affect the regional growth projections because the land use is consistent with the City of Industry underlying General Plan land use designation. Therefore, the project would not affect the regional emissions inventory or conflict with strategies in the AQMP to attain the AAQS. Furthermore, regional emissions generated by construction and operation of the proposed project would be less than the SCAQMD emissions thresholds with mitigation. As a result, the project would not be considered by SCAQMD to be a substantial source of air pollutant emissions and would not conflict or obstruct implementation of the AQMP. Therefore, impacts are less than significant and no mitigation measures are required.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact With Mitigation Incorporated. The following describes project-related impacts from short-term construction activities and long-term operation of the proposed project.

Short-Term Air Quality Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by site preparation, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of volatile organic compounds (VOCs) from application of asphalt, paints, and coatings.

Construction of the 6.40-acre project site would involve demolition of the existing asphalt, site preparation, site grading, construction of the proposed manufacturing and warehouse buildings, and on-site paving and

landscaping. Construction activities would start as early as October 2015 and would take approximately 12 months. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, based on the project's preliminary construction schedule and equipment list provided by the Applicant. Results of the construction emission modeling are shown in Table 1, *Maximum Daily Regional Construction Emissions*. As shown in the table, construction related VOC emissions generated from paints used in architectural coating would exceed the SCAQMD regional significance threshold for VOC. However, as shown in Table 2, *Maximum Daily Regional Construction Emissions With Mitigation*, implementation of Mitigation Measure AQ-1, which would require use of lower VOC-content paints, would reduce construction-related emissions to below the significance threshold. Therefore, air quality impacts from project-related construction activities would be less than significant with incorporation of mitigation.

Table 1 Maximum Daily Regional Construction Emissions

	Criteria Air Pollutants (lbs/day)[1,2]					
Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2015						
Demolition	5	51	40	<1	4	3
Site Preparation	5	57	44	<1	11	7
Grading	4	41	28	<1	5	4
Building Construction	4	33	27	<1	3	2
Year 2016						
Building Construction	4	31	26	<1	3	2
Building Construction + Paving + Architectural Coating	78	56	45	<1	5	4
Maximum Daily Emissions	78	57	45	<1	11	7
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Regional Threshold?	Yes	No	No	No	No	No

Source: CalEEMod Version 2013.2.2
Notes: Totals may not total to 100 percent due to rounding.
[1] Construction phasing is based on the preliminary information provided by the Applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.
[2] Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Modeling also assumes a VOC content of 100 grams per liter for paints pursuant to SCAQMD Rule 1113.

Table 2 Maximum Daily Regional Construction Emissions With Mitigation

	Criteria Air Pollutants (lbs/day)[1,2]					
Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2015						
Demolition	5	51	40	<1	4	3
Site Preparation	5	57	44	<1	11	7
Grading	4	41	28	<1	5	4
Building Construction	4	33	27	<1	3	2
Year 2016						
Building Construction	4	31	26	<1	3	2

Table 2 Maximum Daily Regional Construction Emissions With Mitigation

Source	Criteria Air Pollutants (lbs/day)[1,2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Building Construction + Paving + Architectural Coating	71	56	45	<1	5	4
Maximum Daily Emissions	71	57	45	<1	11	7
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2013.2.2
Notes: Totals may not total to 100 percent due to rounding.
[1] Construction phasing is based on the preliminary information provided by the Applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.
[2] Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers. Modeling also assumes a VOC content of 90 grams per liter for paints per Mitigation Measure AQ-1.

Long-Term Operation-Related Air Quality Impact

Long-term air pollutant emissions associated with the project would be generated by equipment used onsite and truck idling (area sources), natural gas used for heating (energy), and trips generated by the proposed manufacturing and warehousing buildings (transportation). Trip generation is based on the trip generation rates from the Institute of Transportation Engineers Trip Generation Manual (9th Edition), fleet mix from the Fontana Truck Trip Generation Study (City of Fontana 2003), and trip length provided for the City of Industry Climate Action Plan (ongoing) for passenger vehicles and trucks. Regional daily criteria air pollutants generated by the project were modeled with CalEEMod and are shown in Table 3, *Maximum Daily Regional Operational Phase Emissions*.

Table 3 Maximum Daily Regional Operational Phase Emissions

Source	Criteria Air Pollutants (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	4	0	<1	0	0	0
Energy	<1	<1	<1	0	<1	<1
Transportation[1]	2	12	32	<1	5	2
Offroad[2]	1	12	8	<1	1	1
Total Emissions	7	23	40	<1	6	2
SCAQMD Regional Threshold	55	55	550	150	150	55
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2013.2.2. Highest winter or summer emissions. Totals may not add up to 100 percent due to rounding. Bold: Exceed Threshold.
[1]Transportation emissions based on truck trip generation rates from the ITE Trip Generation Manual, 9th Generation, and fleet mix based on the Fontana Truck Trip Generation Study. Fleet mix is adjusted to correct for a longer trip length for truck trips. Truck trip length and passenger vehicle trip length for the City of Industry is based the average trip length as provided by Iteris for the City's Climate Action Plan.
[2] Assumes 2 diesel-powered forklifts at the facility operating for 4 hours per each shift and a total of 3 work-shifts per day.

As shown in the table, air pollutant emissions generated from operation-related activities would be less than their respective SCAQMD regional significance threshold values. Therefore, impacts to the regional air quality from project-related operation activities would be less than significant and no mitigation measures are necessary.

Mitigation Measures

AQ-1 A note shall be added to the building plans stating that the construction contractor shall only use interior and exterior paints with a VOC content of 90 grams per liter (g/L) or less for the building structures to reduce VOC emissions. Prior to issuance of construction permits, the construction contractor shall provide documentation to the satisfaction of the City of Industry Planning Department that verifies use of coatings with a VOC content of 90 g/L or less.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The SoCAB is designated as nonattainment for O_3 and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS, and nonattainment for lead under the National AAQS (CARB 2014a). According to SCAQMD methodology, any project that does not exceed or can be mitigated to less than the daily threshold values would not add significantly to a cumulative impact (SCAQMD 1993). With mitigation, construction and operational activities would not result in emissions in excess of SCAQMD's significance thresholds. Therefore, the project would not result in a cumulatively considerable net increase in criteria pollutants and impacts would be less than significant. No additional mitigation measures are required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

Construction

LSTs

Localized significance thresholds (LSTs) are based on the California AAQS, which are the most stringent AAQS that have been established to provide a margin of safety in the protection of public health and welfare. They are designated to protect those sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. Construction LSTs are based on the size of the project site, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). Receptors proximate to the proposed project site are the surrounding residences.

Air pollutant emissions generated by construction activities are anticipated to cause temporary increases in air pollutant concentrations. Table 4, *Localized Construction Emissions*, shows the maximum daily construction emissions (pounds per day) generated during onsite construction activities compared with the SCAQMD's LSTs. As shown in the table, the construction of the proposed project would not generate construction-related onsite emissions that would exceed the LSTs. Thus, project-related construction activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations. Therefore, localized

3. Environmental Analysis

air quality impacts from construction activities would be less than significant and no mitigation measures are necessary.

Table 4 Localized Construction Emissions

Source	Pollutants(lbs/day)[1,2]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Year 2015 – Demolition n	48	36	3	2
SCAQMD 1.00-acre LST	83	673	54	18
Exceeds LST?	No	No	No	No
Year 2015 – Building Construction	30	19	2	2
Year 2016 – Building Construction	29	19	2	2
Year 2016 – Building Construction, Paving, and Architectural Coating	53	35	3	3
SCAQMD 1.31-acre LST	95	785	57	19
Exceeds LST?	No	No	No	No
2015 – Grading	40	27	5	4
SCAQMD 2.50-acre LST	131	1,161	66	23
Exceeds LST?	No	No	No	No
2015 – Site Preparation	57	43	11	7
SCAQMD 3.50-acre LST	152	1,422	74	26
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2013.2.2., and SCAQMD, Localized Significance Methodology, 2006, October, Appendix B. Bold: Exceed Threshold.
Notes: In accordance with SCAQMD methodology, only onsite stationary sources and mobile equipment occurring on the proposed project site are included in the analysis. Construction NO_X and CO LSTs are based on non-sensitive receptors within 82 feet (25 meters) in SRA 11. Construction PM_{10} and $PM_{2.5}$ LSTs are based on sensitive receptors within 595 feet (181 meters) in SRA 11.
[1] Construction phasing is based on the preliminary information provided by the Applicant. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.
[2] Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

Operational

LSTs

Land uses that have the potential to generate substantial stationary sources of emissions or would require a permit from SCAQMD include industrial land uses, such as chemical processing, and warehousing operations where substantial truck idling could occur onsite. Table 5, *Localized Onsite Operational Emissions*, shows localized maximum daily operational emissions.

Table 5 Localized Onsite Operational Emissions

Source	Pollutants (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources[1]	0	<1	0	0
Off-Road Sources[1]	12	8	1	1
Truck Idling[2]	1	<1	<1	<1
Maximum Daily Onsite Operation Emissions	13	8	1	1
SCAQMD LST	183	1,814	21	8
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2013.2.2., and SCAQMD, Localized Significance Methodology, 2006, October, Appendix B. Bold: Exceed Threshold.
Notes: In accordance with SCAQMD methodology, only onsite stationary sources and mobile equipment occurring on the proposed project site are included in the analysis. Operational LSTs for NO_X and CO are based on non-sensitive receptors within 82 feet (25 meters) of a 5.0-acre site in SRA 11. Operational LSTs for PM_{10} and $PM_{2.5}$ are based on sensitive receptors within 595 feet (181 meters) of a 5.0-acre site in SRA 11.
[1] Area and off-road sources based on CalEEMod Version 2013.2.2.
[2] Truck idling is based on EMFAC2014 idle emission rates for medium duty trucks (MDV), medium-heavy duty diesel instate trucks (T6 Instate Heavy), and heavy-heavy duty diesel tractor construction truck (T7 Tractor) for the buildout year (2016), and assumes 7.5 minutes of idling per trip (15 minutes of idling per truck), which is consistent with the recommendations of SCAQMD.

As shown in this table, the maximum daily NO_x, CO, PM_{10}, and $PM_{2.5}$ operational emissions generated from onsite operation-related activities would be less than their respective SCAQMD operational phase LSTs. Thus, the project-related operational activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations. Therefore, operational LST impacts would be less than significant and no mitigation measures are necessary.

Carbon Monoxide Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

The SoCAB has been designated as attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2011). The proposed project could generate up to 42 peak hour trips (PM peak hour) and 463 average daily trips overall. These trip generations are significantly less than the volumes cited above. Furthermore, the SoCAB has since been designated as attainment under both the national and California AAQS for CO. The project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project site. Localized air quality impacts related to mobile-source emissions would be less than significant and no mitigation measures are required.

3. Environmental Analysis

Health Risk Assessment

A Health Risk Assessment (HRA) was prepared to determine if toxic air emissions associated with operational activities at the facility (i.e., diesel truck emissions) could pose a risk to nearby sensitive receptors, such as residents, schools, hospitals, etc. (see Appendix C). The nearest sensitive receptors include the El Encanto Healthcare and Habilitation Center (El Encanto) approximately 600 feet west of the project site and the single family residential uses approximately 1,150 feet to the south. If operational emissions from the warehouse/office facility do not pose a risk to residents at the El Encanto nursing care facility, then there also would be no risk to sensitive receptors that are located at greater distances. The HRA evaluated both carcinogenic and non-carcinogenic health risks, as discussed below. These calculated risk levels were calculated based on the latest methodology released by the Office of Environmental Health Hazard Assessment and SCAQMD recommendations.

Carcinogenic Health Risks

Health risks associated with exposure to carcinogenic compounds at the proposed project site can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. California has established that a project would result in a significant impact with regard to increasing exposure to carcinogens regulated under Proposition 65 if the project increases cancer risk by one in 100,000 (1.0×10^{-5}) or more. The SCAQMD has established a maximum incremental cancer risk of 10 in a million (10×10^{-6}) for CEQA projects.

Based on the air dispersion modeling results, the maximum exposed individual (MEI) was determined to be the residence El Encanto nursing care facility. Results of the health risk assessment (see Appendix C) indicate that the incremental cancer risk for the MEI, based on the maximum ground floor concentration for a 30-year, 24-hour outdoor exposure duration is 0.17 in a million (1.7×10^{-7}). In comparison to the significance threshold of 10 in a million (10×10^{-6}), carcinogenic risks are below the threshold value for residents at a nursing care facility that could be impacted by implementation of the project. Therefore, cancer risk impacts to off-site sensitive receptors would be less than significant and no mitigation measures are necessary.

Noncarcinogenic Health Risks

To quantify noncarcinogenic impacts, the hazard index approach was used. The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds a value of 1.0, a health hazard is presumed to exist. The health risk assessment performed for the proposed project indicates that the hazard index identified for each toxicological endpoint totaled less than 1.0 for the MEI (see Appendix C). Therefore, noncarcinogenic impacts to off-site sensitive receptors would be less than significant and no mitigation measures are necessary.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. The proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to SCAQMD Rule 402, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. Warehousing operations would not result in the types of odors generated by the aforementioned land uses. Additionally, the proposed project would be subject to and would be required to comply with SCAQMD Rule 402, which would minimize potential odor-related nuisances. Emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people. Therefore, impacts associated with operation- and construction-generated odors would be less than significant and no mitigation measures are required.

3.4 BIOLOGICAL RESOURCES

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

No Impact. The project site has been previously graded, and there are no native habitats, sensitive natural communities, or riparian habitats on or in the vicinity of the project site. The area surrounding the project site is a highly urbanized and built-out area of the City of Industry that is devoted primarily to industrial uses. Therefore, there would be no adverse impacts on candidate, sensitive, or special status species, either directly or via modification of an existing habitat.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant Impact. Sensitive natural communities provide habitat for sensitive animal or plant species. No such communities exist on or in the vicinity of the project site. Riparian habitats are those occurring along the banks of rivers and streams. There are no riparian features on or adjacent to the project site. Therefore, a less than significant impact is anticipated.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Wetlands are defined by Section 404 of the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. There are no wetlands on or adjacent to the project site. Therefore, a less than significant impact is anticipated.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Wildlife corridors are typically made up of undeveloped wildlife areas and open space between larger patches of wildlife habitat. The project site is a vacant undeveloped partially paved lot, and a paved parking lot surrounded by developed urban land uses and, therefore, does not contain or support wildlife habitat or nursery use and is not used for overland wildlife movement. No impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project site and surrounding area do not contain biological resources that are protected by any local policies or ordinances, such as a tree preservation policy or ordinance. The City of Industry Municipal Code does not contain ordinances protecting trees or other biological resources on private property. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is located in a developed, disturbed, urban environment and is surrounded by contiguous development. It is not located within an adopted Habitat Conservation Plan area, as designated by the United States Fish and Wildlife Service (USFWS 2015b), or a Natural Community Conservation Plan area, as designated by the California Department of Fish and Game (CDFW 2015). Nor is the project site within an existing or proposed Significant Ecological Area (SEA)[1] designated by the County of Los Angeles (LACDRP 2015). The nearest designated SEA is the Rio Hondo College Wildlife Sanctuary, which is approximately 3.5 miles west of the project site. No impact would occur.

[1] Significant Ecological Areas (SEAs) are ecologically important land and water areas designated by Los Angeles County. SEAs are not preserves; however, development projects proposed in SEAs are subject to increased environmental and design review with the aim of balancing development with ecological resources.

3.5 CULTURAL RESOURCES

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

No Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally a resource is considered to be "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

The project site does not contain any structures. There are no resources listed on the National Register of Historic Places and no California Historical Landmarks on the project site (COHP 2015; NPS 2015). Therefore, no impact to historical resources would occur as a result of the proposed project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact. No archaeological resources are known to exist within or near the project site. The entire site has been disturbed by previous grading. Construction of the slab-on-grade concrete tilt-up industrial warehouse/office buildings would require additional grading and trenching, but these activities would not require excavation to significant depths (perhaps 5 feet or so) and would occur within relatively confined areas. Therefore, it is very unlikely that project ground-disturbing activities would uncover or damage buried archaeological resources. A less than significant impact to archaeological resources is anticipated as a result of project implementation.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No human remains are known to exist within the project site. Given the past ground disturbance and current condition of the site, it is very unlikely that any human remains would be uncovered during project construction. However, California Health and Safety Code Section 7050.5 requires that in the event that human remains are discovered within a project site, disturbance of the site shall halt until the county coroner has conducted an investigation into the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has

reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. The proposed project would be required to adhere to existing laws regarding the discovery of human remains and, therefore, no impact would occur.

3.6 PALEONTOLOGICAL RESOURCES

a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. No unique paleontological and geologic resources are known to exist within or near the project site. The site is relatively flat and surrounded by developed land; there are no exposed rock formations or other unique geological features on or near the site. As discussed in Section 3.5.b, it is very unlikely that the shallow ground-disturbing activities required for construction of the project buildings would uncover or contact buried paleontological or unique geologic resources. No impact would occur.

3.7 TRIBAL CULTURAL RESOURCES

a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in § 21074?

Less Than Significant with Mitigation Incorporated. Section 21074 defines tribal cultural resource as either of the following:

1. Site features, places, cultural landscapes, sacred places, and objects of cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.

    b. Included in a local register of historical resources as defined in subdivision (k) of section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of section 5024.1. In applying the criteria set forth in subdivision (c) of section 5024.1, lead agency shall consider the significance of the resource to a California Native American tribe.

There are no resources listed on the National Register of Historic Places or California Historical Resources on the project site (NPS 2015; COHP 2015). Therefore, no impact to historical resources would occur as a result of the proposed project. In addition, the City of Industry does not list any historical resources associated with the project site in a local register, and does not have substantial evidence indicating that a significant resource is located on the project site associated with California Native American tribes.

The project site has been extensively used and is graded, relatively flat, and partially developed. The northern part of the project site has been graded, used for stockpiling, and regraded several times. The southern

portion of the project site has been graded and is developed as a paved parking lot. There are no existing buildings or structures that would require demolition and project construction would not be expected to involve a significant level of excavation.

Based on communications from the Gabrieleño Band of Mission Indians – Kizh Nation, the project site is located within its traditional use territory. The Soboba Band of Luiseño Indians (SBLI) was also provided with notification of the proposed project in a letter dated July 15, 2015. Communication from SBLI was received on August 5, 2015, in which they deferred issues with respect to consultation to the Gabrieleño Band of Mission Indians – Kizh Nation.

While no impacts to tribal cultural resources are anticipated, the following mitigation measure would reduce potential impacts to a less than significant level should any be encountered during project activities. With the implementation of the mitigation measure identified below, a less than significant impact to tribal cultural resources would occur as a result of the proposed project.

Mitigation Measure:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

3.8 GEOLOGY AND SOILS

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Fault rupture impacts can occur when a structure is situated on top of an active fault that produces surface displacement during an earthquake event. The project site is not located within an Alquist-Priolo Earthquake Fault Zone[2], as delineated by the California Geological Survey, nor is it situated on or near any known active fault. Two potentially active faults, the Walnut Creek and San Jose Faults, are located approximately 850 feet northwest and 0.9 miles east of the site, respectively (CGS 2010; CGS 2015). Potentially active faults are defined as those where surface rupture has occurred during the past 1,600,000 years.

[2] The Alquist-Priolo Earthquake Fault Zoning Act was passed to prevent construction of buildings used for human occupancy on the surface of active faults, in order to minimize the hazard of surface rupture of a fault to people and buildings. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that the sites are not threatened by surface rupture from future earthquakes.

The Walnut Creek Fault is classified as a Quaternary fault (age undifferentiated). A technical study of this northeast-trending fault concluded that there is no geomorphic evidence (i.e., visible surface expressions) for the existence of the fault, which is known to be present only in the subsurface alluvium of the San Jose Hills (Smith 1977). Rather, the presence of the fault is suggested by groundwater level differences and petroleum exploration data. Because the known active and potentially active faults do not cross the site, project development would not expose people or structures to substantial hazards arising from surface rupture of a known active fault. Compliance with the latest version of the California Building Code (see following response) would mitigate impacts related to seismic activity to an acceptable level and no mitigation measures are necessary.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Similar to the rest of southern California, the project site is subject to ground shaking and potential damage in the event of seismic activity. Major active faults near the project site include the Whittier, Cucamonga, Chino and Puente Hills[3] Faults (CGS 2015). More regionally, the San Andreas Fault is capable of producing an earthquake that could cause significant damage at the site. Each of these faults is classified as active, with strong seismic capabilities. Lesser faults that are closer to the site include the Walnut Creek and San Jose Faults. The expected ground-motion characteristics of future earthquakes in the region depend on the distance to the epicenter and magnitude of the earthquake, as well as the soil profile of the site.

Based on the available data, the impacts associated with ground shaking at the project site would not be greater than at other sites in seismically active southern California. Structures for human occupancy must be designed to meet or exceed California Building Code (CBC) standards for earthquake resistance. The CBC contains provisions for earthquake safety based on factors that include occupancy type, the types of soil and rock on-site, and the strength of ground motion with specified probability of occurring at the site. The project would have a geotechnical investigation conducted per CBC requirements; the geotechnical investigation would calculate seismic design parameters that must be used in the design of the proposed buildings.

The City of Industry's Building Regulations are found in Title 15 of the City's Municipal Code (Buildings and Construction). Chapter 15.04 (Building Code) adopts the most recent version of the Los Angeles County Building Code[4] by reference. The proposed project would be required to adhere to the provisions of the Los Angeles County Building Code, which are imposed on project developments during the City's building plan check and Development Plan review process. Compliance with the requirements of the Los Angeles County Building Code for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. Therefore, impacts would be less than significant and no mitigation measures are necessary.

[3] Also known as the Puente Hills blind thrust system.
[4] The Los Angeles County Building Code is a customized amendment of the California Building Code.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to unconsolidated, saturated sand or silt deposits that lose their load-supporting capability when subjected to intense shaking. Like much of the available land in the City of Industry, the project site is located in an area that is underlain by unconsolidated sediments that include interbedded silts, sands, and gravel. The thickness of these unconsolidated sediments beneath the site has not been determined. Unconsolidated silts, sands, and gravel may produce surface cracking, differential settlement, and, depending upon groundwater depth, liquefaction during high-intensity seismic ground shaking.

The California Geological Survey, a branch of the State Department of Conservation, has a mandate to identify and map the state's most prominent earthquake hazards pursuant to the Seismic Hazards Mapping Act of 1990. These hazards include areas where earthquakes are likely to cause shaking, liquefaction, or ground failure. In 1999, the California Geological Survey updated existing seismic hazard maps for portions of southern California, including the area that encompasses the City of Industry. The updated map that covers the project site (Baldwin Park 7.5-minute quadrangle) indicates that the site is located in a state-mapped liquefaction zone, which is defined as follows:

> "Areas where historic occurrence of liquefaction or local geological, geotechnical, or groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required" (CDC 1999).

Cities, counties, or another local permitting authority must regulate certain development "projects" within these seismic hazard zones. If a project site is located in one of these zones, development permits must be withheld until the geological and soil conditions of the project site are investigated and appropriate mitigation measures, if necessary, are incorporated into Development Plans.

Future workers or site visitors potentially could be subjected to impacts due to seismically induced liquefaction. However, the new structures proposed for the site would be constructed in accordance with grading and engineering standards outlined in the Los Angeles County and California Building Codes, which would help safeguard the buildings and structures from liquefaction that might occur during future seismic events. Additionally, as standard procedure by the City of Industry, grading and soil compaction requires the preparation of site-specific grading plans, soils and geotechnical reports (which must address liquefaction, subsidence, and other potential soil stability hazards), and hydrology studies, which are required to be submitted to the City for review and approval prior to the commencement of any grading activities.[5] Based on the available information, impacts due to seismic-related ground failure and construction of the proposed project are anticipated to be less than significant. No mitigation measures are necessary.

[5] However, if the City finds that no undue hazard exists, based on previous studies conducted in the immediate vicinity of the project site, the preparation of the geotechnical report may be waived.

iv) Landslides?

No Impact. As discussed in the previous section, the California Department of Conservation is mandated by the Seismic Hazards Act of 1990 to identify and map the state's most prominent earthquake hazards, including hazard areas that are at risk for earthquake-induced landslides. If a project site is located in one of the landslide hazard areas, the City of Industry is required to prepare a geotechnical report defining and delineating landslide hazards in the project area. Based on the Baldwin Park 7.5-minute quadrangle map (CDC 1999), the proposed project site is not located in a mapped landslide hazard area and is not subject to landslide hazards. Moreover, the project site and surrounding land are virtually flat. Therefore, no impact related to landslide hazards would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Erosion is the movement of rock fragments and soil from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be accelerated dramatically by ground-disturbing activities if effective erosion control measures are not used. The project site and surrounding area are in a highly urbanized area that is virtually flat and contains minimal rises or changes in elevation. No major slopes or bluffs are on or adjacent to the site.

Project construction would entail grading activities that would temporarily disturb surface soils on-site and potentially result in the erosion of exposed areas of soil. Since the project site is greater than one acre, it would be subject to National Pollution Discharge Elimination System (NPDES) requirements. Under the NPDES, a Storm Water Pollution Prevention Plan (SWPPP) would be required, along with best management practices (BMPs) designed to prevent erosion and siltation during the project's construction phase. Categories of BMPs typically used in SWPPPs are described in Table 6.

The project applicant would also be required to adhere to the applicable provisions outlined in Chapter 13.16 (Storm Water and Urban Runoff Pollution Control) of the City of Industry's Municipal Code, which contains requirements to preserve water quality and prevent erosion during construction. In particular, Section 13.16.070(C) of the Municipal Code requires that stormwater runoff control measures during construction be adequate to accomplish the following:

- Retain on-site sediments generated on or brought to the project site using treatment control or BMPs
- Retain construction-related materials and wastes, spills, and residues at the project site and prevent discharges to the streets, municipal storm drain, receiving water, or adjacent properties
- Contain non-stormwater runoff from equipment and vehicle washing at the project site
- Control erosion from slopes and channels through the use of effective BMPs, such as limitation of grading during the wet season, inspection of graded areas during rain events, planting and maintenance of vegetation on slopes, and covering any slopes susceptible to erosion.

Table 6 Construction Best Management Practices

Category	Purpose	Examples
Water erosion controls	Cover and/or bind soil surfaces to prevent soil particles from being detached and transported by water.	Mulch, geotextiles, mats, hydroseeding, earth dikes, and swales.
Sediment controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basins; and cleaning measures such as street sweeping.
Wind erosion controls	The aims and methods of wind erosion control are similar to those of erosion control described above.	Same as water erosion controls above.
Tracking controls	Minimize the tracking of soil off-site by vehicles.	Stabilized construction roadways and construction entrances/exits; tire washing or brushing at entrances/exits.
Non-stormwater management controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations (e.g., paving, grinding, concrete curing and finishing, etc.) in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; and concrete finishing.
Waste management and controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid and hazardous wastes.

Source: CASQA 2003.

After project completion, the project site would be developed with warehouse buildings, parking areas, driveways, and landscape improvements, and would contain minimal exposed soil. Properly designed drainage systems, irrigation controls, and landscaping would minimize the opportunity for soil erosion and the loss of topsoil. Adherence to the NPDES requirements, SWPPP and related BMPs, and City's stormwater and urban runoff pollution regulations would result in a less than significant impact. No mitigation measures are necessary.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. Hazards related to liquefaction and landslides are addressed in Sections 3.6.a.iii and 3.6.a.iv, respectively. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The risk of lateral spreading at the project site is negligible due to the relatively flat terrain. Compliance with recommendations in the geotechnical investigation for minimizing liquefaction hazards would also reduce hazards from lateral spreading.

The major cause of ground subsidence is withdrawal of groundwater. Groundwater levels in the Main San Gabriel Groundwater Basin, which underlies the project site, are managed by the Main San Gabriel Basin Watermaster to avoid groundwater withdrawals exceeding recharges. The project would not require direct groundwater withdrawal, nor would it involve or allow significant groundwater recharge.

Collapsible soils shrink upon being wetted, being subject to a load, or under both conditions. The project geotechnical investigation would include recommendations for grading and preparation of soil so that it is

suitable for construction, including soil classification, compaction density, and moisture content. Compliance with such recommendations would reduce hazards from collapsible soils. Based on the foregoing, impacts related to lateral spreading, subsidence, and collapsible soils would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils, with respect to engineering properties, are soils that upon wetting and drying will alternately expand and contract, causing problems for foundations of buildings and other structures. The proposed project would be subject to established engineering standards regarding soil compaction and would include testing of soil samples for expansion potential as part of the geotechnical evaluation. Any actions to minimize hazards from expansive soils would be implemented during construction. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Development of the proposed project would not require the installation of a septic tank or alternative wastewater disposal system. The new buildings would be connected to an existing sewer in the adjacent roadway via one or more service lines. Therefore, no impact would occur.

3.9 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydro fluorocarbons, per fluorocarbons, and chlorofluorocarbons.[6, 7]

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related GHG emissions. Information on manufacture of cement, steel, and other "life-cycle" emissions that would occur as a result of the project are not applicable and are not included in the

[6] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[7] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2014b). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

analysis.[8] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix B to this Initial Study.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

The proposed project would generate GHG emissions from vehicle trips generated by the project, energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating), area sources (e.g., equipment used on-site, truck idling, consumer products, coatings), water/wastewater generation, and waste disposal. Annual GHG emissions were calculated for construction and operation of the project. Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for GHG emissions from the construction phase of the project. Project-related GHG emissions are shown in Table 7, *Project-Related GHG Emissions*. As shown, the proposed project at buildout would generate 2,078 metric tons of carbon dioxide-equivalent ($MTCO_2e$) emissions per year and would not exceed the SCAQMD's bright-line threshold of 3,000 $MTCO_2e$.[9] Therefore, the proposed project's cumulative contribution to GHG emissions is considered less than significant and no mitigation measures are necessary.

[8] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

[9] This threshold is based on SCAQMD's 3,000 $MTCO_2e$ for all land use types combined threshold proposed by SCAQMD's Working Group, which is based on a survey of the GHG emissions inventory of CEQA projects. Approximately 90 percent of CEQA projects GHG emissions inventories exceed 3,000 $MTCO_2e$, which is based on a potential threshold approach cited in CAPCOA's White Paper, *CEQA and Climate Change*.

3. Environmental Analysis

Table 7 Project-Related GHG Emissions

Source	$MTCO_2e$/year	Percent of Project Total
Area	<1	<1%
Energy	654	21%
Transportation[1]	1,194	42%
Offroad[2]	113	33%
Waste	91	3%
Water	10	<1%
Amortized Construction Emissions[3]	17	1%
Total Emissions	2,078	100%
SCAQMD's Proposed Screening Threshold	3,000	NA
Exceeds Proposed Screening Threshold	No	NA

Source: CalEEMod, Version 2013.2.2. Totals may not add up to 100 percent due to rounding. Assumes implementation of the 2013 California Green Building Standards Code (CALGreen) and 2013 Building and Energy Efficiency Standards. The 2013 Building and Energy Efficiency Standards are 30 percent more energy efficient than the 2008 Standards for non-residential buildings.
$MTCO_2e$: metric tons of carbon dioxide-equivalent. Based on the Intergovernmental Panel on Climate Change's Second Assessment Report global warming potentials (GWPs).
Notes:
[1] Transportation emissions based on truck trip generation ITE Trip Generation Manual, 9th Generation, and based on the Fontana Truck Trip Generation Study. Fleet mix is adjusted to correct for a longer trip length for truck trips. Truck trip length and passenger vehicle trip length for the City of Industry is based on the average trip length provided by Iteris for the City's Climate Action Plan.
[2] Assumes 2 forklifts at the facility operating for 4 hours per shift and a total of 3 work-shifts per day.
[3] Total construction emissions are amortized over 30 years.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The California Air Resources Board's (CARB's) Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by Assembly Bill (AB) 32, which is to return to 1990 emission levels by year 2020. To estimate the reductions necessary, CARB projected statewide 2020 business-as-usual (BAU) GHG emissions and identified that the state as a whole would be required to reduce GHG emissions by 28.5 percent from year 2020 BAU to achieve the target of AB 32 (CARB 2008). Since release of the 2008 Scoping Plan, CARB has updated the 2020 BAU forecast to reflect GHG emissions in light of the economic downturn and measures not previously considered within the 2008 Scoping Plan baseline inventory. The revised 2020 BAU forecast shows that the state would have to reduce GHG emissions by 21.6 percent from BAU without Pavley[10] and the 33 percent Renewable Portfolio Standard (RPS) or 15.7 percent from the adjusted baseline (i.e., with Pavley and 33 percent RPS) (CARB 2012).[11]

[10] The CARB originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009. These regulations were authorized by the 2002 legislation Assembly Bill 1493 (Pavley). On September 24, 2009, the CARB adopted amendments to the "Pavley" regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. CARB's September amendments will cement California's enforcement of the Pavley rule starting in 2009, while providing vehicle manufacturers with new compliance flexibility.
[11] In May 2014, CARB completed a five year update to the 2008 Scoping Plan. CARB recalculated the 1990 GHG emission levels with the updated global warming potential (GWP) in the Intergovernmental Panel on Climate Change's Fourth Assessment Report, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher, at 431 $MMTCO_2e$ (CARB 2014c)

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy (CAFE) standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32. In addition, new buildings are required to comply with the 2013 Building and Energy Efficiency Standards (or future cycle update) and California Green Building Code (CALGreen). The project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 was adopted.

In addition to AB 32, the California legislature passed Senate Bill (SB) 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plans to achieve the per capita GHG reduction targets. For the Southern California Association of Governments (SCAG) region, the SCS was adopted in April 2012 (SCAG 2012). The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers. The proposed warehouse is a permitted use under the Industrial general plan designation and would be consistent with the underlying General Plan land use designation. Therefore, it would not interfere with SCAG's ability to implement the regional strategies outlined in the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). No impact would occur and no mitigation measures are required.

3.10 HAZARDS AND HAZARDOUS MATERIALS

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. The public and environment could be exposed to hazardous materials during the construction and operational phases of the project, as discussed in the following sections.

Construction Phase

Project-related construction activities would require the use of hazardous materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. On-site construction equipment might require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard or environmental threat. These activities would also be short term or one time in nature.

Additionally, the use, transport, and disposal of hazardous materials during the project construction phase (estimated seven months) would have to conform to the laws and regulations of several federal, state, and local agencies, including the United States Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), California Occupational Safety & Health Administration (Cal-OSHA), California Department of Transportation (Caltrans), and Los Angeles County Fire Department (LACFD). Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are handled in an appropriate manner, and

would minimize the potential for safety or environmental impacts to occur. For example, spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material cleaned up in a prescribed manner. Any contaminated waste encountered during construction is required to be remediated so that it does not pose a risk to construction workers or future occupants of the site.

Operational Phase

Although the tenant and activities of the new industrial warehouse/office buildings have not been identified, warehouse operations typically involve the use of small amounts of hazardous materials in building and landscape maintenance (e.g., solvents, cleaning agents, paints, pesticides). When used correctly, these materials would not result in a significant hazard to surrounding uses. Additionally, depending on the nature of the warehouse operations, significant quantities of hazardous materials could be moved into and out of the warehouse and stored for various periods of time. Such activities would be governed by local, state, and federal laws and regulations of several agencies, including EPA, DTSC, Cal-OSHA, Caltrans, and LACFD to ensure that any such hazardous materials are used and handled in an appropriate manner. Businesses that store hazardous materials above minimum amounts are required to file a Business Plan with the LACFD,[12] which includes a materials inventory and an emergency response plan. Additionally, strict adherence to all emergency response plan requirements set forth by the City of Industry would be required during project operation. Routine use, transport, or storage of hazardous materials during project construction and operation would not cause significant hazards to the public or the environment, and no mitigation measures are necessary.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. The use, storage, and disposal of hazardous materials by the project would comply with existing regulations of several agencies as described in the previous section. Project construction and operational workers would be trained on the proper use, storage, and disposal of hazardous materials. Construction projects and warehouse operations typically maintain supplies on-site for containing and cleaning small spills of hazardous materials. Project personnel would request assistance from the LACFD immediately in the event of a release of hazardous materials larger than on-site personnel were able to contain and clean up. Emergency response procedures would be outlined in the contingency plan of a Business Plan if hazardous materials above threshold quantities were stored in the buildings. With these safeguards in place, impacts would be less than significant and no mitigation measures are necessary.

[12] The Los Angeles County Fire Department is the Certified Unified Program Agency (CUPA) for the City of Industry; the Certified Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. A Health Risk Assessment (HRA) was prepared to determine if toxic air emissions associated with operational activities at the facility (i.e., diesel truck emissions) could pose a risk to nearby sensitive receptors, such as residents, schools, hospitals, etc. (see Appendix C). The nearest sensitive receptors include the El Encanto Healthcare and Habilitation Center approximately 600 feet west of the project site and the single family residential uses approximately 1,150 feet to the south. If operational emissions from the warehouse/office facility do not pose a risk to residents at the El Encanto nursing care facility, then there also would be no risk to sensitive receptors that are located at greater distances. The closest school is La Puente High School which is located 0.5 miles northeast of the project site. The HRA evaluated both carcinogenic and non-carcinogenic health risks.

Results of the health risk assessment (see Appendix C) indicate that the incremental cancer risk for the maximum exposed individual is 0.17 in a million (1.7×10^{-7}). In comparison to the significance threshold of 10 in a million (10×10^{-6}), carcinogenic risks are below the threshold value for residents at a nursing care facility that could be impacted by implementation of the project. Therefore, cancer risk impacts to off-site sensitive receptors including schools would be less than significant and no mitigation measures are necessary.

To quantify noncarcinogenic impacts, the hazard index approach was used. The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). Where the total hazard index equals or exceeds a value of 1.0, a health hazard is presumed to exist. The health risk assessment performed for the proposed project indicates that the hazard index identified for each toxicological endpoint totaled less than 1.0 (see Appendix C). Therefore, noncarcinogenic impacts to off-site sensitive receptors including schools would be less than significant and no mitigation measures are necessary.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact with Mitigation Incorporated. California Government Code Section 65962.5 specifies that the DTSC, California Department of Health Services, State Water Quality Control Board (SWRCB), and local enforcement agencies compile lists for various types of hazardous materials sites, including hazardous waste facilities subject to corrective action, designated border zone properties, hazardous waste discharges to public land, public drinking water wells containing detectable levels of organic contaminants, underground storage tanks with reported unauthorized releases, and solid waste disposal facilities from which hazardous waste has migrated. The project site is not included on a list of hazardous materials sites compiled pursuant to this legal requirement.

A Phase I Environmental Site Assessment (Phase I) was prepared for the site in August 2014 (Stantec, 2015). The Phase I concluded that a review of regulatory and historical records, a visual inspection of the site and surrounding area did not identify any recognized environmental conditions, historical recognized environmental conditions, or controlled recognized environmental conditions which are likely to impact the property. However, the project site was identified as overlying the San Gabriel Valley Area 4, National

Priorities List, groundwater plume site. The report indicated that based on the location of the plume and the shallow depth to groundwater (approximately 30 feet below ground surface) there is a potential that soil vapor may exist in the subsurface at levels of concern to commercial development. The report further indicated that a vapor encroachment analysis was recommended to determine if there is an impact to the site from volatile organic compounds at levels of concern.

Implementation of Mitigation Measure HHM-1, would ensure that any potential impacts due to the potential for exposure to groundwater plume contaminants would be less than significant.

Mitigation Measures

HHM-1 A soil vapor survey shall be conducted by a qualified environmental professional to evaluate the potential presence of volatile organic contaminants on the project site. Should volatile organic contaminants be detected, a human health risk screening analysis shall be performed, and the resultant cancer risk shall not exceed one excess case in one million. The soil vapor survey shall be conducted, and it shall be confirmed that the calculated cancer risk is not in exceedance of one excess case in one million prior to issuance of a building permit.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within an area covered by an airport land use plan or within 2 miles of a public airport or public-use airport. The nearest public airport is El Monte Airport, approximately 6 miles northwest of the site (Airnav 2015). Therefore, project development would not cause aviation-related hazards for people working in the project area and no impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The Los Angeles County Sheriff's Department (150 Hudson Avenue) and the City of Industry Civic Financial Center (101 Hudson Avenue) operate heliports approximately 0.4 miles northeast of the project site (Airnav 2015). The site is currently zoned for industrial use and project development would not augment or alter existing safety hazards associated with current operations at either of these heliports. Over congested areas, helicopters must maintain an altitude of at least 1,000 feet above the highest obstacle within 2,000 feet of the aircraft, except as needed for takeoff and landing (Code of Federal Regulations Title 14, Section 91.119). Helicopter takeoffs and landings at nearby heliports occur infrequently and are at a sufficient distance from the site that they would not pose a hazard to on-site workers. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The existing emergency response plan in the County of Los Angeles is the Operational Area Emergency Response Plan (ERP) approved by the County Board of Supervisors in 1998. The ERP identifies county agencies and other entities that would be involved in emergency responses; threat summaries and

assessments; and procedures for responding agencies as well as county agencies that would be involved in coordinating and managing responses. The ERP is focused on emergencies beyond the scope of the daily functions of public safety agencies, such as emergencies requiring multi-agency and/or multi-jurisdictional responses.

Further assessments of potential hazards and county resources available for responding to hazards are contained in the County of Los Angeles All-Hazard Mitigation Plan (AHMP) adopted by the County Board of Supervisors in June 2005. The AHMP includes a vulnerability analysis for many types of hazards including earthquakes, floods, fires, and manmade hazards including terrorism and civil unrest; goals and objectives for strategies for mitigating hazards; proposed strategies and actions for reducing vulnerability to identified hazards; and lists of facilities and equipment available for responding to disasters.

The proposed project would be required to provide the necessary on- and off-site access and circulation improvements for emergency vehicles and services during the construction and operational phases, subject to City of Industry and LACFD approval. The access and circulation features of the proposed development project would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles from Parriott Place. As shown on Figure 4, *Site Plan*, the warehouse/office buildings would be accessible via four driveways along Parriott Place which would provide fire truck access per LACFD standards.

The proposed project would be required to go through the City's Development Plan review and permitting process and would incorporate all applicable design and safety features set forth in City of Industry and LACFD regulations necessary to accommodate local emergency services (e.g., adequate access roads, emergency exits, fire hydrants, etc.). Furthermore, existing emergency access to surrounding properties would not be altered or disrupted under the proposed project and off-site roadway modifications would not be necessary. Finally, the proposed project would not require full road closures or otherwise impact the functionality of surrounding roads that are used as public safety access routes. Therefore, the project would not impair implementation of, or physically interfere with, the ERP and no impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The project site is in a highly urbanized and built-out area of the City of Industry. No fire hazard severity zones are mapped within or near the project site by the California Department of Forestry and Fire Prevention (CAL FIRE 2015). Therefore, no significant risk of loss, injury or death involving wildland fires would occur as a result of the proposed project.

3.11 HYDROLOGY AND WATER QUALITY

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Impacts to water quality could potentially occur during the construction and operational phases of the project, as discussed in the following sections.

3. Environmental Analysis

Construction Phase

As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. The NPDES program regulates industrial pollutant discharges, which include construction activities. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. In the Los Angeles metropolitan area, where the City of Industry is located, the SWRCB is the permitting authority, while the Los Angeles Regional Water Quality Control Board (RWQCB) provides local oversight and permit enforcement. The project applicant would also be required to adhere to applicable provisions outlined in Chapter 13.16 (Storm Water and Urban Runoff Pollution Control) of the City of Industry's Municipal Code. For example, Section 13.16.070 (Construction Activity Storm Water Measures) contains construction activity stormwater requirements to preserve water quality and prevent erosion in the City.

Requirements for waste discharges potentially affecting stormwater from construction sites of one acre or more are set forth in the SWRCB's Construction General Permit, Order No. 2012-0006-DWQ, issued in 2012. The site is about 6.4 acres and, therefore, project construction would be subject to requirements of the Construction General Permit. Projects obtain coverage under the Construction General Permit by filing a Notice of Intent with the SWRCB prior to grading activities, and preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Categories of BMPs typically used in SWPPPs are described in Table 6 in Section 3.6.b. Implementation and monitoring required under the SWPPP would control and reduce short-term intermittent impacts to water quality from construction activities to less than significant levels and no mitigation measures are necessary.

Operational Phase

The primary constituents of concern during the project operational phase would primarily be solids, oils and greases from parking areas, driveways, and truck loading bays that could be carried off-site. Project design features would address the anticipated and expected pollutants of concern during the project's operational phase. On-site landscaping, which comprises approximately 16.1 percent of the total project site, would assist in minimizing the amount of runoff from the site by providing permeable areas for water infiltration and decreasing runoff volume. Infiltration through landscaped areas would also serve a water treatment function. The project would include features such as curbs, gutters, and catch basins, including catch basins with sump pumps in each truck loading bay. The project would also include source control BMPs to properly manage stormwater flow and prevent stormwater pollution by reducing the potential for contamination at the source.

Requirements for waste discharges potentially affecting stormwater from project operations are set forth in the City of Industry's Ordinance No. 683, adopted on August 8, 2002, which implements the Los Angeles Countywide Standard Urban Stormwater Mitigation Plan (SUSMP) adopted by the Los Angeles Regional Water Quality Control Board (RWQCB) by Resolution No. R-00-02, as modified by the State Water Resources Control Board's (SWRCB's) Order WQ 2001-11 and RWQCB Order No. R4-01-182. Ordinance No. 683 is incorporated in its entirety as Chapter 13.17 (Standard Urban Stormwater Mitigation Plan

Implementation) of the City of Industry Municipal Code. SUSMP requirements include minimizing stormwater pollutants and limiting peak post-project stormwater runoff rates to no greater than pre-development rates where increased runoff could increase downstream erosion.

Municipal Code Chapter 13.17 applies to new development involving parking lots of 5,000 square feet or more or having 25 or more parking spaces and potentially exposed to storm water runoff. As such, the proposed project would be subject to the Code requirements. As part of the permitting process, such facilities are required to comply with stormwater BMPs listed in the SUSMP or the "BMP Guidebook" prepared or recommended by the City Engineer. BMPs designed to protect against impacts to water quality would be incorporated in a project-specific SUSMP that is submitted to the City of Industry staff for review and approval as part of the Development Plan review process. The approved BMPs would be incorporated in the project grading and site plans; detail drawings and notes would provide specifications regarding size, capacity, and materials of construction. Table 8 summarizes some of the source control BMPs that are potentially applicable to this project.

BMPs for similar City of Industry warehouse development projects have included the incorporation of continuous deflection separation (CDS) units to screen and separate debris, oil, and other pollutants from stormwater runoff prior to discharge to the storm drain. Following construction, the City of Industry typically assumes responsibility for the operation and maintenance of the CDS through an agreement with the property owner. This provides assurance that the units are properly maintained and continue to function as designed. Proper maintenance of stormwater control systems would also be governed by the City's Municipal Code. For example, Section 13.16.060(A) requires that persons who operate parking lots with more than 25 spaces exposed to stormwater "use BMPs to reduce the discharge of pollutions to the maximum extent practicable. Such measures may include regular sweeping or other measures, if effective."

Through the Development Plan site review process, the City of Industry would ensure that the project complies with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from pollution by contaminated storm water runoff. Compliance with City Municipal Code Chapter 13.17 and BMPs approved by the City Engineer would ensure that water quality impacts from project operations are less than significant.

3. Environmental Analysis

Table 8 Source Control Best Management Practices for Stormwater Runoff

Description	Comments/Basis
Catch basin inspection	Catch basins/CDS units would be inspected and accumulated debris and litter would be removed on a regular basis.
Landscape practices	Management of landscaped areas would include minimizing fertilizer and pesticide application, proper education and training for landscaping/maintenance workers, efficient irrigation design, and vegetation of slopes with native or drought tolerate species known to control erosion, in accordance with City code requirements (Section 13.17.070).
Roof runoff controls	Excess roof runoff would be directed to landscaped areas, as feasible.
Efficient irrigation	Irrigation to landscaped areas would be optimized so that excess runoff to the street and storm drain does not occur.
Storm drain signage	Newly constructed storm drains and catch basins would be stenciled in accordance with City code requirements (Section 13.17.080).
Trash storage areas and litter control	Trash storage areas would be isolated from contact with stormwater flows originating outside the storage area and surrounded with a barrier sufficient to prevent trash from being transported out of the storage area by stormwater flow in accordance with City code requirements (Section 13.17.100).
Loading docks	Loading docks would be provided with overhead covering that prevents the entry of stormwater or would divert stormwater away from the loading docks in accordance with City code requirements (Section 13.17.130).
Enclosed storage of hazardous materials	Hazardous materials, such as fertilizers and pesticides, would be stored indoors or under roof cover to prevent contact with rainwater. Materials that could leak or spill, such as oil, would be provided with secondary containment.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The project site is located above the Main San Gabriel Groundwater Basin. Groundwater levels in the Main San Gabriel Groundwater Basin are managed by the Main San Gabriel Basin Watermaster to avoid groundwater withdrawals exceeding recharges. Suburban Water Systems (SWS) would provide water to the project development through its San Jose Hills District. About 80 percent of SWS's water supply comes from groundwater that is pumped from local wells in the San Gabriel and Central Basins; the remaining 20 percent comes from surface water (SWS 2014). SWS projects that the San Jose Hills District service area would use 19,294 acre-feet of water per year from the San Gabriel Basin in 2015 (The Planning Center|DC&E 2014). Water demand for the proposed project is estimated to be 7,787 gallons per day (see Section 3.17.b), or about 0.03 percent of the projected groundwater demand in 2015. This incremental additional water demand would not significantly impact groundwater supplies or levels and no mitigation measures are necessary.

The project site is not used for intentional groundwater recharge and the construction and operation of the warehouse/office buildings would have little impact on local groundwater recharge. The project landscaped areas could provide opportunities for minor amounts of local groundwater recharge via percolation, and site pavement would impede percolation, however, such changes would not affect regional groundwater levels or supplies.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

No Impact. At project completion, the entire site would be developed with two buildings, parking areas, driveways, and landscaping. As such, there would be little opportunity for site drainage to result in substantial on-site or off-site erosion or siltation. During project construction, implementation of BMPs in accordance with the project SWPPP and compliance with City of Industry regulations for stormwater control would minimize the possibility for erosion from the site, as discussed in Section 3.9.a. The project would not result in the alteration of any watercourse nearest to the site. Therefore, no impact would occur.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. To ensure that the stormwater runoff anticipated from the site is properly controlled, the project applicant would be required to adhere to applicable provisions outlined in City of Industry Municipal Code Chapter 13.17, which implements the Los Angeles Countywide SUSMP, as explained in Section 3.9.a. As part of the permitting process, the project would be required to comply with stormwater BMPs listed in the SUSMP or the "BMP Guidebook" prepared or recommended by the City Engineer. BMPs designed to protect against flooding would be incorporated in a project-specific SUSMP that is submitted to the City of Industry staff for review and approval as part of the Development Plan review process. The project-specific SUSMP would contain supporting hydrologic calculations and infiltration studies to demonstrate that any increase in stormwater runoff from the site does not exceed the carrying capacity of the local storm drain system, consistent with City of Industry Municipal Code Section 13.17.120 (Design Standards for Best Management Practices). The approved BMPs would be incorporated in the project grading and site plans; detail drawings and notes would provide specifications regarding size, capacity, and materials of construction.

Compliance with City Municipal Code Chapter 13.17 and BMPs approved by the City Engineer during the Development Plan review process would ensure that impacts related to stormwater runoff volumes and potential flooding are less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Project impacts related to stormwater control and management are addressed in Section 3.9.d and would be less than significant. Project impacts related to the quality of stormwater runoff are addressed in Section 3.9.a and would be less than significant.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. Project impacts related to water quality are addressed in Section 3.9.a and would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project does not involve construction of any housing units. Furthermore, a flood hazard map prepared by the Federal Emergency Management Agency (FEMA 2015) indicates that the project site is in Flood Zone X, which does not include designated 100-year and 500-year flood zones. Therefore, no impact would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. As stated above, the project site is not within a 100-year or 500-year flood hazard area (FEMA 2015). Development of the proposed project would not impede or redirect flood flows, since there is no potential for flood flows to travel through or near the project site. Therefore, no impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. Four dams have been identified in the San Gabriel River Watershed upstream from the City of Industry -- Puddingstone Dam, Santa Fe Dam, Thompson Creek Dam, and Whittier Narrows Dam. The project site is not located in the flood inundation areas associated with the failure of any of these dams (The Planning Center|DC&E 2014). No impacts are associated with flooding as a result of the failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities, because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. Although there are no large water tanks in the area that could impact the project site, there are dams in the region that could create flooding impacts. As noted above, the project site is not located in an identified flood inundation area due to dam failure and no impact would occur.

Tsunamis are a type of earthquake-induced flooding that is produced by large-scale sudden disturbances of the sea floor. Tsunamis interact with the shallow sea floor topography upon approaching a landmass, resulting in an increase in wave height and a destructive wave surge into low-lying coastal areas. The project site is approximately 20 miles inland from the Pacific Ocean and lies at an approximate elevation of 320 feet above mean sea level (msl); thus impacts from tsunamis are considered negligible and no impact would occur.

Mudflows are landslide events in which a mass of saturated soil flows downhill as a very thick liquid. The project site and surroundings are relatively flat and contain no abrupt changes in elevation. As indicated in Section 3.6.a.iv, the site is not located in a mapped landslide hazard area. Additionally, there are no substantial slopes on or in the immediate vicinity of the site with the potential to result in mudflow impacts. In the absence of slopes, the potential for mudslides to affect the proposed project is considered negligible and no impact would occur.

3.12 LAND USE AND PLANNING

a) Physically divide an established community?

No Impact. The project site is located within an existing industrial area of the City of Industry. Established commercial and industrial businesses, including similar warehouse buildings, surround the site on two sides; Parriott Place and a parking lot separates the site from El Encanto Healthcare and Habilitation Center on the west (see Figure 3, *Aerial Photograph*). Construction of the proposed industrial warehouse/office buildings would infill the area with a compatible land use development and would not physically divide or encroach upon any established residential community. Therefore, no impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The existing zoning for the project site is Industrial (I) and the General Plan land use designation is Employment. The proposed development of the site with industrial warehouse/office buildings would be consistent with the General Plan and is allowed under the zoning designation. Project implementation would not change existing land uses or require a change of the existing land use designations or regulations. Due to the largely industrial character of the site's surroundings, the proposed project would not conflict, or be incompatible, with the existing character of the surrounding area. Because the project would not conflict with any applicable land use plan, policy, or regulation, no impact would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. As explained in Section 3.4.f, the project site is not within or near a Habitat Conservation Plan area (USFWS 2015b) or Natural Community Conservation Plan area (CDFW 2015). No impact would occur.

3.13 MINERAL RESOURCES

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. According to California Geologic Survey, there are no lands within the City of Industry designated by the State Mining and Geology Board as being of regional or statewide significance (City of Industry 2012). Project development would not cause a loss of availability of mineral resources of value to the region and residents of the state. No impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The project site is not designated as a mining site in the City of Industry General Plan (2012) and the project would not cause a loss of availability of a designated mining site. No impact would occur.

3. Environmental Analysis

3.14 NOISE

A background discussion regarding the fundamentals of noise and vibration, along with the regulatory setting for noise impacts used for this Initial Study is presented in Appendix D.

Regulatory Framework

The proposed project site is within the City of Industry, but is near the boundary of the unincorporated community of Hacienda Heights to the west. The City of Industry and Hacienda Heights are both located in Los Angeles County. Since Hacienda Heights is an unincorporated community, it uses Los Angeles County's regulations. The pertinent county and city regulations regarding noise and vibration are discussed below.

County of Los Angeles Code

The County of Los Angeles regulates noise through the County Code, Title 12, Chapter 12.08 (Noise Control). Pursuant to the County Code, the county restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time.

County Exterior Noise Standards

The county applies the Noise Control Ordinance standards summarized in Table 9 to non-transportation fans, blowers, pumps, turbines, saws, engines, and similar types of machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property, as measured at the property line of the noise receptor. The county's noise ordinance is designed to protect people from objectionable non-transportation noise sources such as music, construction activity, machinery, pumps, and air conditioners. The noise standards in Table 9, *County of Los Angeles Exterior Noise Standards*, apply to all property within a designated noise zone; unless otherwise indicated.

Table 9 County of Los Angeles Exterior Noise Standards

Noise Zone	Time Period	Maximum Permissible Noise Level (dBA)[1,2]				
		Standard 1 (L_{50})	Standard 2 (L_{25})	Standard 3 (L_8)	Standard 4 (L_2)	Standard 5 (L_{max})
Noise-Sensitive Area	Anytime	45	50	55	60	65
Residential Properties	10 PM to 7 AM	45	50	55	60	65
	7 AM to 10 PM	50	55	60	65	70
Commercial Properties	10 PM to 7 AM	55	60	65	70	75
	7 AM to 10 PM	60	65	70	75	80
Industrial Properties	Anytime	70	75	80	85	90

Source: County of Los Angeles Municipal Code, Section 12.08.390.
Notes:
1 According to Section 12.08.390, if the ambient noise levels exceed the exterior noise standards above, then the ambient noise level becomes the noise standard. If the source of noise emits a pure tone or impulsive noise, the exterior noise levels limits shall be reduced by five decibels.
2 If the measurement location is on a boundary property between two different zones, the noise limit shall be the arithmetic mean of the maximum permissible noise level limits of the subject zones; except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable L_{50} noise level shown above; or, if the ambient L_{50} exceeds the foregoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable L_{50} noise level shown above plus 5dB; or, if the ambient L_{25} exceeds the foregoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable L_{50} noise level shown above plus 10dB; or, if the ambient L_8 exceeds the foregoing level, then the ambient L_8 becomes exterior noise level for Standard No. 3.

- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable L_{50} noise level shown above plus 15dB; or, if the ambient L_2 exceeds the foregoing level, then the ambient L_2 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable L_{50} noise level shown above plus 20dB; or, if the ambient L_0 exceeds the foregoing level then the ambient L_{max} becomes the exterior noise level for Standard No. 5.

County Construction Noise Standards

The county prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7 PM and 7 AM, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance. The county also sets maximum noise levels not to exceed the following maximum noise levels from mobile equipment (non-scheduled, intermittent, short-term operations for less than 30 days) as summarized in Table 10, *County of Los Angeles Mobile Construction Equipment Noise Limits*.

Table 10 County of Los Angeles Mobile Construction Equipment Noise Limits

	Single-Family Residential	Multi-Family Residential	Semi-Residential/ Commercial
Daily, except Sundays and legal holidays, 7 AM to 8 PM	75 dBA	80 dBA	85 dBA
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

Source: County of Los Angeles Municipal Code, Section 12.08.440. For nonscheduled, intermittent, short-term operations for less than 30 days.

Maximum noise levels from stationary equipment (repetitively scheduled and relatively long-term operations of ten days or more) are summarized in Table 11, *County of Los Angeles Stationary Construction Equipment Noise Limits*.

Table 11 County of Los Angeles Stationary Construction Equipment Noise Limits

	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7 AM to 8 PM	60 dBA	65 dBA	70 dBA
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Source: County of Los Angeles Municipal Code, Section 12.08.440. For repetitively scheduled and relatively long-term operations of ten days or more.

County Vibration Standards

The County of Los Angeles Municipal Code, Section 12.08.560, prohibits the operation of any device that creates vibration that is above 0.01 in/sec at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This criterion will be utilized to evaluate vibration-annoyance impacts from industrial uses to nearby sensitive receptors.

City of Industry Standards

Industry Noise Standards

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the City of Industry addresses public nuisances under Chapter 1.30 (Public Nuisance) of the City's Municipal Code. The City of Industry has not adopted long-term noise and vibration criteria for land use compatibility consideration. The City of Industry uses the County of Los Angeles Noise Ordinance and Community Noise Guidelines for environmental noise assessments, and is included by reference in the City of Industry Municipal Code. For the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) are used as significance thresholds for noise.

Industry Vibration Standards

The City of Industry does not have regulatory standards for construction or operational vibration sources. To evaluate project impacts for CEQA analyses, the City relies on the Los Angeles County Municipal Code to address vibration impacts from the operation of equipment to adjacent uses.

Pertinent Federal Standards

Federal Vibration Standards

The United States Department of Transportation (DoT) through the Federal Transit Administration (FTA) provides criteria for acceptable levels of groundborne vibration for various types of special buildings that are sensitive to vibration. FTA provides criteria to evaluate potential structural damage associated with vibration, and these FTA criteria are used in this analysis. Structures amplify groundborne vibration and wood-frame buildings, such as typical residential structures, are more affected by ground vibration than heavier buildings. The level at which groundborne vibration is strong enough to cause architectural damage has not been

determined conclusively. The most conservative estimates to cause architectural damage at residential structures is a PPV of 0.2 in/sec.

Existing Noise Environment

The project site is located on the northern corner of the intersection of Parriott Place and Don Julian Road in the City of Industry, County of Los Angeles. The surrounding area contains primarily warehouses, manufacturing facilities, and various commercial/light industrial businesses.

The northern portion of the project site, where Building B will be constructed, is currently vacant, undeveloped land. The southern portion of the site, where Building A will be constructed, is currently paved as a parking lot with landscaped islands. Portions of the property boundary are lined with trees (see Figure 3, *Aerial Photograph*).

The nearest noise-sensitive receptor properties include residential land uses and a live-in healthcare facility. El Encanto Healthcare & Habilitation Center (on El Encanto Road in City of Industry) is exposed to noise from the surrounding industrial uses. Single-family residences to the south (in Hacienda Heights) are exposed to noise from traffic along Hacienda Boulevard and surrounding industrial uses. The healthcare center is approximately 600 feet north of the project site and the residences are approximately 1,150 feet south of the project site.

The major sources of noise in the vicinity of the project site are vehicular traffic on Don Julian Road, traffic on Hacienda Boulevard, traffic on Valley Boulevard (approximately 725 feet to the east), and rail traffic on the UPRR Los Angeles Subdivision Line (1,400 feet to the southwest)and the UPRR Alhambra Subdivision Line (1,750 feet to the northeast). The UPRR Los Angeles Subdivision Line is a major freight, double-track line that begins at the Los Angeles/Long Beach ports, traverses several cities (including the City of Industry), and continues to the City of Pomona. Likewise, the UPRR Alhambra Subdivision Line is a double-track line that begins in downtown Los Angeles (near Union Station), traverses several cities (including the City of Industry), and continues to the City of Colton (a total length of 55.7 miles). The Alhambra line is not as heavily traveled through the City of Industry as is the Los Angeles Line. Beside the numerous freight trains, the Southern California Regional Rail Authority (SCRRA) currently operates the Riverside Line, running 12 daily passenger diesel-locomotive commuter (Metrolink) trains per weekday along the UPRR Los Angeles Subdivision Line.

Noise Impact Assessment

The generation of noise associated with the proposed project would occur over the short-term for site construction activities. In addition, noise would result from the long-term operation of the project. Both short-term and long-term noise impacts associated with the project are examined in the following analyses that correspond to the CEQA Guidelines.

3. Environmental Analysis

Would the project result in

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. An impact could be significant if the project would site a sensitive land use in a location where noise levels would exceed the appropriate standards. Regarding land use compatibility, the City of Industry Noise Element sets as a goal a community noise equivalent level (CNEL) of up to 75 decibels on the A-weighted scale (dBA) as "normally acceptable" and up to 80 dBA CNEL as "conditionally acceptable" for industrial land uses, including the proposed project site. For both single-family and mobile home dwellings, the City sets a standard of 50 to 60 dBA CNEL as "normally acceptable" and 55 to 70 dBA CNEL as "conditionally acceptable." Hospitals are "normally acceptable" from 50 to 70 dBA CNEL and "conditionally acceptable" from 60 to 70 dBA CNEL.

Regarding noise intrusions, the County of Los Angeles Noise Ordinance (Section 12.08) establishes that the impact would be significant if project-related stationary noise exceeded any of the following:

The noise standard of 45 dBA between the hours of 10:00 PM and 7:00 AM and 50 dBA between the hours of 7:00 AM to 10:00 PM for a cumulative period of more than 30 minutes in any hour (i.e., the L_{50} noise level metric)

The noise standards plus 5 dBA for a cumulative period of more than 15 minutes in any hour (i.e., the L_{25} noise level metric)

The noise standards plus 10 dBA for a cumulative period of more than 5 minutes in any hour, (i.e., the L_{08} noise level metric)

The noise standards plus 15 dBA for a cumulative period of more than 1 minute in any hour (i.e., the L_{02} noise level metric)

The noise standards plus 20 dBA (i.e., the L_0 or L_{max} noise level metric) for any period of time (i.e., 65 dBA at night and 70 dBA during the day).

With respect to projected increases, noise impacts can be broken down into three categories. The first is "audible" impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in noise levels generally refer to a change of 3 dBA or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. The last category includes changes in noise level of less than 1 dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant.

Lastly, noise in the work place is regulated by the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA regulations found at CCR Title 8, Article 105, *Control of Noise Exposure,* sets limitations on worker exposure.

On-Site Impacts

Land Use Compatibility

According to the General Plan EIR (PlaceWorks, 2012), the existing CNEL at the project site due to transportation sources is 60 dBA CNEL. Thus, the project site has a noise environment that is less than the 75 dBA CNEL and the commercial/industrial land use is "normally acceptable" with the existing setting. Given this compatibility with the intended land use, the project siting would not be a significant impact.

On-Site Worker Noise Exposure

Workers involved with the proposed project would be subject to noise levels coming from material moving equipment and trucking operations. Per Cal/OSHA regulations, an employer must administer a continuing, effective hearing conservation program whenever employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) sound level of 85 dBA. This is known as the Action Level (AL). Furthermore, workers cannot be exposed to noise levels in excess of 90 dBA TWA over an 8-hour work shift. This is known as the Permissible Exposure Level (PEL). In calculating (or measuring) the 8-hour TWA exposure, higher noise levels carry shorter allowable duration periods and vice versa. In no case, though, may workers be exposed to peak noise levels in excess of 140 dBA. For any workers exposed to prolonged periods of excessive noise – i.e., above the Action Level – Cal/OSHA specifies a hearing conservation program, the use of hearing protectors, a training program, and record keeping requirements. By adhering to the requirements of the Cal/OSHA regulations, worker exposure to on-site noise levels would remain within compliance of the limits and this potential impact would be less than significant.

Off-Site Impacts

Stationary source impacts include noise generated from on-site mechanical equipment and, for the purposes of this analysis, trucking operations while within the confines of the project property. These sources have the potential to create noise impacts in the adjoining community.

Project Mechanical Equipment

On-site heating, ventilation, and air conditioning (HVAC) units and associated equipment attached to the warehouse structure would be acoustically engineered with appropriate procurement specifications, sound enclosures, and parapet walls to minimize noise – all in accordance with City of Industry noise emissions requirements – to ensure that such equipment does not exceed allowable noise limits. Thus, through compliance with pertinent local noise regulations, noise levels from project mechanical equipment would be less than significant.

Passing Trucks

The assumed 91 daily truck trips generated by the project would only minimally increase traffic flows on Parriott Place, which currently has an ADT of 1,542 (traffic counts by Counts Unlimited on Thursday, July 9, 2015). Trucks accessing the project site would leave Parriott Place at a reduced speed and would travel away from the closest sensitive receptor (El Encanto Healthcare and Habilitation Center). As the speed of these

on-site trucks would be reduced (in comparison to their flow rate on Parriott Place) and since the trucks would be increasing the distance from the receptor, on-site truck pass-by noise due to the project would be well below the levels these patients currently experience from traffic flows on Parriott Place. Thus, noise levels from project-generated passing trucks would be less than significant.

Loading Bay Operations

On-site truck operations would be considered a stationary noise source subject to the City's noise regulation limitations (see Table 1 above). Noise measurements taken for a variety of similar projects (e.g., Home Depot loading bays, Consolidated Volume Transport truck scales, Macy's truck transfer yard) have demonstrated that the noise produced by idling/maneuvering semi-trucks is typically on the order of 70 to 73 dBA L_{eq} as measured at a distance of 50 feet.

The complete project (Buildings A and B combined) is assumed to accept up to 91 trucks per day. By State law,[13] diesel trucks are prohibited from idling for more than five minutes at any one location (for air quality considerations). Additionally, it is assumed for this assessment that the maneuvering operation for any given truck would take no more than three to five minutes. Thus, the combination of maneuvering and parking and idling near or in the project's loading bay would take a maximum of ten minutes for any individual truck.

The loading bay areas are located on the north side of both buildings (see Figure 4 for the current site plan layout), over 750 feet from the healthcare center and 1,400 feet from residences in Hacienda Heights. At distances of over 300 feet, sound loss due to propagation spreading loss, as well as various physical attenuation considerations, can be approximated as 7.5 dB per doubling of distance (CalTrans, 2009). Therefore, the healthcare center would experience at least 29 dB of sound reduction due to these long-distance attenuation affects. The project includes screen walls with a height of 10 feet placed north of the loading bays. These walls will provide approximately 10 dB of additional attenuation between the loading bays and El Encanto. With 39 dB total attenuation, El Encanto would experience 34 dBA L_{eq} due to trucking operations. Since the surrounding noise environment includes other loading docks at other, adjacent industrial and commercial buildings that are closer to the healthcare center than the proposed project, these existing uses – combined with local truck traffic on nearby streets – would overshadow the noise contribution from the proposed project's loading bays. Thus, the proposed project's loading dock activities would not exceed ambient noise levels currently experienced at the healthcare center. Similarly, the residences in Hacienda Heights would experience 36 dB of sound reduction due to distance attenuation alone, and approximately an additional 10 dB of attenuation due to barrier effects provided by the project buildings and screen walls. These distance and screening attenuation effects would result in no more than 27 dBA L_{eq} noise levels due to trucking operations at the nearest Hacienda Heights residences. This project-specific contribution would be far below the ambient noise levels in the area.

Noise from truck maneuvering and loading may also be experienced at the surrounding commercial and industrial properties. It shall be noted, however, that these properties are not noise-sensitive and are already

[13] California Air Resources Board regulations, contained in CCR Title 13, Section 2485 and found at: http://www.arb.ca.gov/msprog/truck-idling/2485.pdf

exposed to these types and levels of noise. Noise from truck maneuvering and loading would not cause substantial noise increases and would not interfere with the operation of these nearby uses.

In summary, noise levels from trucking activities near or in the loading bays of the proposed project would not exceed the existing ambient noise level at noise-sensitive receptors, and would not disrupt operations at the adjacent commercial or industrial properties. Thus, noise impacts due to trucking activities are less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during (a) demolition and grading phases of construction and/or (b) the operation of large trucks over uneven surfaces during project operations.

The City of Industry does not set quantitative standards for vibration impacts. However, the County of Los Angeles Noise Ordinance, Section 12.08.560 (Vibration) prohibits operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way. The perception threshold is to be a motion velocity of 0.01 inch/second over the frequency range of 1 to 100 Hertz (Hz).

Construction Activities

Construction activities can generate ground vibration that varies depending on the construction procedures, equipment used, and proximity to vibration-sensitive uses. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance. Such vibrations may have two types of potential impacts: (a) architectural damage to nearby buildings and (b) annoyance to vibration-sensitive receptors.

The project would construct a warehouse/office building on a currently vacant lot. The project site is generally level, so relatively little heavy earthwork would be required. Thus, there would be limited use of vibration-inducing construction equipment such as bulldozers, graders, jackhammers, and loaders/backhoes. Construction equipment would primarily employ items that would not generate substantial levels of vibration, including forklifts, cranes, and haul trucks. The use of high-vibration equipment, such as pile drivers or vibratory rollers, is not anticipated. Construction activities would take approximately 12 months.

Table 12, *Typical Vibration Levels Produced by Common Construction Equipment Items*, shows the peak particle velocities of some common construction equipment and haul trucks (loaded trucks).

3. Environmental Analysis

Table 12 Vibration Levels Produced by Common Construction Equipment

Equipment	Peak Particle Velocity in inches per second		
	at 25 ft.	at 50 ft.	at 150 ft.
Vibratory Roller	0.210	0.074	0.014
Large Bulldozer	0.089	0.031	0.006
Loaded Trucks	0.076	0.027	0.005
Jackhammer	0.035	0.012	0.002
Small Bulldozer	0.003	0.001	0.000

Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment, 2006.

Vibration-induced Architectural Damage

The threshold at which there is a risk of architectural damage to typical wood-framed buildings is 0.2 in/sec (FTA 2006). Building damage is not normally a factor unless the project requires blasting and/or pile driving (FTA 2006). No blasting, pile driving, or hard rock ripping/crushing activities are anticipated for the proposed project. Small construction equipment generates vibration levels less than 0.1 PPV in/sec at 25 feet away.

The nearest structures to the warehouse construction are industrial buildings to the east and south of the project site. Both of these structures are at least 75 feet from the project boundary. Therefore, vibration levels at these structures would be well below thresholds.

Since no vibration-intensive activities will take place, the maximum construction-related vibration level would be below the 0.2 PPV in/sec criteria for vibration-induced architectural damage at the nearby structures. Thus, architectural-damage vibration impacts from construction would be less than significant.

Vibration Annoyance

Vibration is typically noticed nearby when objects in a building generate noise from rattling windows or picture frames. It is typically not perceptible outdoors, and therefore impacts are based on the distance to the nearest building (FTA 2006). The effect on buildings near a construction site depends on soil type, ground strata, and receptor building construction. Vibration can range from no perceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. The thresholds for vibration annoyance are 78 VdB for daytime residential, 84 VdB for office usages, and 90 VdB for workshops (FTA, 2006).

Since vibration dissipates quickly with distance and the vibration-sensitive receptors are at least 580 feet from the construction zone, vibration levels would be well below the most restrictive 78 VdB threshold for vibration-induced annoyance. Additionally, the closest commercial uses are at least 80 feet away from the project site construction zone. At this distance, the vibration from large bulldozers, hoe rams, jackhammers, and loaded trucks would fall below the 84 VdB threshold for office usages and well below the 90 VdB threshold for workshops. Also, construction would take place during the least sensitive hours of the day. Thus, vibration annoyance impacts from construction would be less than significant.

Operational Impacts

The project site would serve as a warehousing facility with on-site truck and trailer movements (primarily near the loading bays on the northern sides of the proposed buildings). Operation of the warehouse/office buildings would not involve any mechanical equipment that would induce notable levels of groundborne vibration. The project would, however, involve the movements of heavy tractors and trailers.

Vibration from vehicles is dependent on vehicle speed and weight, plus the presence of surface discontinuities. Due to site constraints and road geometry, these truck movements would occur at very low speeds (less than 15 miles per hour). Traffic flows, including heavy trucks traveling on a highway, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage; even with notable potholes or degraded railroad crossings (Caltrans, 2004). As vibration dissipates rapidly with distance and since trucks will be traveling at very low speeds and over freshly refurbished and smooth surfaces, vibration effects during project operation at El Encanto Healthcare and Habilitation Center, residences in Hacienda Heights, or nearby commercial facilities would not be perceptible or result in any undue effects. Thus, vibration impacts during project operations would be less than significant.

In summary, both construction and operations activities would not create substantial groundborne vibration or groundborne noise. This impact would be less than significant and no mitigation measures are needed.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact.

Road Noise

Long-term impacts could be significant if the project creates activity or generates a volume of traffic that would substantially raise the ambient noise levels. As discussed in Item (a) above, a substantial increase in ambient noise is defined as 3 dBA CNEL.

In accordance with the transportation analysis presented in Section 3.16, the proposed project is estimated to generate 463 daily vehicle trips in passenger car equivalents (PCE) with the worst-case hourly distributions being 39 PCE trips in the morning peak, and 13 PCE trips in the evening peak. Given that the ADT on Parriott Place is 1,542 vehicles, this additional increment represents a 30 percent increase over existing conditions. Note that a 30 percent increase in traffic flows coincides with a 1.1 dB increase in the associated traffic noise (assuming the same speeds, vehicle mixes, and levels-of-service; per the use of PCE methodologies). Thus, the project-related traffic increases would be well below the 3 dBA threshold of significance. Thus permanent noise increases due to project-related traffic would be less than significant.

Stationary Source Noise

As previously discussed in Item (a) above, on-site mechanical equipment would be acoustically engineered with appropriate procurement specifications, sound enclosures, and parapet walls to minimize noise and to adhere to allowable noise limits. Since these types of equipment items would be consistent with similar equipment at existing facilities in the area, no substantial noise level increases would occur due to the

contributions of the proposed project. Thus, noise levels from project mechanical equipment would be less than significant.

As previously discussed in Item (a) above, on-site truck pass-by noise would not substantially increase the levels currently experienced at El Encanto Healthcare and Habilitation Center and residences in Hacienda Heights due to existing noise from traffic and industrial uses. Thus, project-generated passing truck noise would not substantially increase area noise levels (by 3 dB or more) and this permanent noise source would be less than significant.

Given the similar warehousing and truck movement activities at existing facilities in the area, coupled with the relatively low operations rates[14], conducting maneuvering/idling activities in the project loading bay area would not substantially increase area noise levels (by 3 dB or more) and this permanent noise source would be less than significant.

In summary, both project-generated road noise and stationary source noise would not increase area noise levels above the 3 dBA threshold and the impact would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. Both the City of Industry and County of Los Angeles recognize that the control of construction noise is difficult at best and provide an exemption for this type of noise when the work is performed within the hours specified within the County of Los Angeles Noise Ordinance (i.e., 7:00 AM to 7:00 PM Monday through Saturday). The Noise Ordinance also lists the maximum acceptable noise levels at off-site receptor locations (i.e., 75 dBA during the above permitted hours of construction activity). Compliance with the Noise Ordinance is mandatory and, as such, does not constitute mitigation under CEQA.

Two types of noise impacts could occur during the project construction phase. First, the transport of workers and equipment to the construction site would incrementally increase noise levels along site access roadways. Per the air quality analyses, the worst-case projected number of construction-related trips is approximately 125 per day. This number of construction-related vehicle trips – approximately a 10 percent increase in total daily vehicle flows along Parriott Place – would result in a noise level increase of less than ½ dB (in the traffic-focused CNEL noise level metric) and would, therefore, have a less than significant impact on noise receptors along the truck routes. While individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (L_{max} at 50 feet from the centerline of any given truck), these occurrences will be no different than the other similar truck pass-bys that currently occur along Parriott Place. As such, construction vehicle noise will be less than significant.

The second type of potential impact is related to noise generated by on-site construction activities. As previously noted, the nearest noise-sensitive receptors are at the El Encanto facility, wherein patients and residents might be subject to elevated noise levels due to the operation of various types of construction equipment. Construction activities are typically carried out in discrete steps, each of which has a relatively

[14] Assumed 91 trucks per day for the combined project (Buildings A and B).

distinct mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase. Table 13, *Noise Levels Generated By Typical Construction Equipment*, lists typical construction equipment noise levels recommended for noise impact assessment at a distance of 50 feet.

Table 13 Noise Levels Generated By Typical Construction Equipment

Type of Equipment	Average Sound Levels Measured (dBA at 50 feet)
Pile Drivers	101
Rock Drills	98
Jack Hammers	88
Pneumatic Tools	85
Pumps	76
Dozers	80
Front-End Loaders	79
Hydraulic Backhoe	85
Hydraulic Excavators	82
Graders	85
Air Compressors	81
Trucks	91

Source: Bolt, Beranek and Newman, 1971.

Noise ranges have been found to be similar during all phases of construction, although the actual construction of the structures tends to be somewhat less than that from grading. The grading and site preparation phase tends to create the highest noise levels, because the noisiest construction equipment is found in the earth-moving equipment category. This category includes excavating machinery (e.g., back-fillers, bull-dozers, excavators, front loaders, etc.) and earth-moving and compacting equipment (e.g., compactors, scrapers, graders, etc.). Typical operating cycles may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Maximum noise levels at 50 feet from earth-moving equipment range from 73 to 96 dBA while energy-average (L_{eq}) noise levels range up to about 89 dBA. The construction of structures is somewhat reduced from this value, as the physical presence of the newly-erected structure may break up line-of-sight noise propagation.

Composite construction noise by phase has been characterized by Bolt, Beranek, and Newman (1971). In their study, construction noise for earthwork and finish-work related to industrial development is presented as 89 dBA L_{eq} when measured at a distance of 50 feet from the construction effort. This value takes into account both the number of pieces and spacing of the heavy equipment used in the construction effort. Noise levels are typically reduced from this value and the physical structures further break up line of sight noise. However, as a worst-case scenario, the 89 dBA L_{eq} value is used to assess the impact of construction.

The operation of such equipment would result in the generation of both steady and episodic noise significantly above the ambient levels currently experienced near the project site. The noise produced from construction decreases at a rate of approximately 6 dB per doubling of distance (conservatively ignoring

other attenuation effects from air absorption, ground effects, and/or shielding/scattering effects). Therefore, at 100 feet, the source noise level would be about 6 dB less or 83 dBA L_{eq}. Similarly, at 200 feet, the noise level would be about 12 dB less or 77 dBA L_{eq}.

The project is to be placed in an industrial area, but healthcare and residential uses are somewhat proximate to the project site. Construction would be performed more than 580 feet from existing sensitive receptors. El Encanto Healthcare and Habilitation Center is approximately 950 feet from the center of the construction site, and would experience a minimum of 21 dB reduction in noise levels due to distance attenuation. El Encanto would not be expected to experience noise levels above 68 dBA L_{eq}. Therefore, construction noise levels would not exceed the County's 75 dBA construction noise level limit at El Encanto or more distant sensitive receptors.

In summary, in consideration that the project construction would be temporary over 12 months and since construction noise would be infrequent and short-lived throughout the least noise-sensitive portions of the day and would not exceed the County's construction noise level limit, impacts due to construction noise would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within an area covered by an airport land use plan or within 2 miles of a public airport or public-use airport. The nearest public airport is El Monte Airport, approximately 6.2 miles northwest of the site (Airnav 2015; Google 2015). While light plane and other aircraft noise is occasionally noticeable in the project area, the project is well beyond any airport's 60 dBA CNEL zone. Therefore, the proposed project would not expose people to excessive aircraft noise levels and impacts would be less than significant

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The City of Industry Civic Financial Center Heliport is the nearest private use facility to the project site, approximately 2,000 feet to the northeast (Airnav 2015; Google 2015). Also nearby is Haddicks Heliport at approximately 0.6 miles northwest of the site. The project site is beyond either facility's 60-dBA CNEL noise contour. Further, helicopter take-offs and landings are infrequent and at sufficient distances from the project site that they would not expose workers employed in the industrial warehouse/office to excessive noise levels. Impacts would be less than significant.

3.15 POPULATION AND HOUSING

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed project involves the development of new warehouse/office buildings and does not include the construction of new homes or the extension of infrastructure such as roads or sewers. Therefore, it would not directly or indirectly induce population growth in the area. The project would generate temporary construction and operational employment. Projected employment densities for various land uses vary widely, depending on the location and actual business activities. In general, employment densities for warehouse use range from one employee per 1,000 to 7,500 square feet of building space, while office space job densities are more on the order of one employee per 150 to 500 square feet of building space. For Los Angeles County, estimates developed by the Southern California Association of Governments are approximately one employee for 1,500 square feet of warehouse space and one employee for 400 square feet of low-rise office space (The Natelson Company 2001). Using these values, a project warehouse space of 113,170 square feet and office space of 17,000 square feet yields an estimated 118 jobs for the developed project.[15]

The Southern California Association of Governments estimates that employment in the City of Industry will increase from 84,070 in 2008 to 88,404 in 2035, or 4,334 additional jobs (SCAG 2012a). The unemployment rate in Los Angeles County in December 2013 was estimated at 9.2 percent (EDD 2014). Thus, it is expected that the project would absorb workers from the regional labor force and would not attract new workers into the region. Impacts would be less than significant and no mitigation measures are necessary.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site consists of an undeveloped lot and a parking lot. There are no residences on the project site. Therefore, existing housing would not be involved and replacement housing would not be needed. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Implementation of the proposed project would not displace people, nor would it require the construction of replacement housing. No impact would occur.

3.16 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the

[15] (113,170/1,500 = 75 warehouse jobs) + (17,000/400 = 43 office jobs) = 118 total jobs

construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less Than Significant Impact. The City of Industry contracts with the Los Angeles County Fire Department (LACFD) for fire protection services. The City is served by Division 8, Battalion 12 of the LACFD, which mans and operates six fire stations (Fire Station's #26, 43, 87, 91, 118, and 145). Battalion 12 also provides fire protection services to Roland Heights, La Puente, La Mirada, and Hacienda Heights. The nearest fire station to the project site is Fire Station #43 at 921 S. Stimson Avenue in the City of Industry, about 0.6 miles southeast of the site.

The proposed project does not include housing or any new infrastructure that would substantially increase the area population or service area boundaries. Development of the project could result in a slight increase in calls for fire protection and emergency medical service. However, considering the existing firefighting resources available in and near the City of Industry, project impacts on fire protection are not expected to occur and the LACFD would continue to provide adequate service to the project area. Such small increases in demand would also not require the LACFD to build new or expanded stations, or to obtain additional staff or equipment.

The City involves the LACFD in the development review process in order to ensure that the necessary fire prevention and emergency response features are incorporated into development projects. As such, all site and building improvements proposed under the project would be subject to review and approval by LACFD prior to building permit and certificate of occupancy issuance. Furthermore, the City of Industry imposes standard conditions of approval during the Development Plan review process that require City Council review and approval. As a standard condition of approval, the following standard condition would be imposed on the project: "The applicant shall construct adequate fire protection facilities to the satisfaction of LACFD." Therefore, impacts on fire protection services would be less than significant and no mitigation measures are necessary.

b) Police protection?

Less Than Significant Impact. The City of Industry contracts with the Los Angeles County Sheriff's Department (LASD) for law enforcement and crime prevention services. The LASD has a patrol station in the City of Industry at 150 Hudson Avenue, approximately 0.4 miles northeast of the project site. This station is responsible for providing police services to the cities of Industry, La Puente, and La Habra Heights, and the unincorporated Los Angeles County communities of East and West Valinda, Bassett/North Whittier, and Hacienda Heights.

Development of the proposed project could result in a slight increase in calls for police protection service. However, no new public safety issues would result from implementation of the proposed project. Development of the project is not expected to cause a need for new or expanded police facilities or additional officers. The LASD would continue to provide adequate service to the project area. Therefore, no significant increases in police protection services would occur and no mitigation measures are necessary.

c) Schools?

No Impact. The project site is in the Hacienda La Puente Unified School District. Demand for public services such as schools is generally based on population. The proposed industrial warehouse/office project does not involve residential development and would not induce population growth. Therefore, the project would not increase the demand on local schools and no impact would occur.

d) Parks?

No Impact. The proposed project does not involve park development or displacement. Demand for parks is determined by the population of the parks' service areas. The project would not add residences or cause an increase in the population of the surrounding community. Therefore, the project would not increase the demand for parks and no impact would occur.

e) Other public facilities

No Impact. The proposed project would not directly or indirectly lead to an increase in population in the project area. Additionally, the proposed project would not require the use or maintenance of other public facilities, such as libraries. Therefore, no impact to other public facilities would occur.

3.17 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The demand for parks is determined by changes in housing and population. The proposed project would not involve the development of any housing and would not directly or indirectly induce population or increase demand on parks and recreational resources. Therefore, no impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. The proposed project would not develop recreational facilities and would not require the development of such facilities. No impact would occur.

3.18 TRANSPORTATION/TRAFFIC

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. An analysis was conducted to evaluate the impacts of the proposed project on the study area circulation system. The results of the analysis are summarized in the following sections.

3. Environmental Analysis

Construction Phase

Implementation of the project would require site preparation, building construction, and paving/landscaping of the completed site. Because the site is relatively flat, major grading that would require numerous truck trips for soil import or export would not be required. The anticipated level of construction would not result in a significant traffic impact because it would be temporary (i.e., 12 months) and relatively minor as the site is relatively flat and no substantial excavation or soil import/export would occur. The staging area for construction equipment would be accommodated on-site. Project construction would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

Operational Phase

Local access is provided via Parriott Lane and Don Julian Road. Parriott Lane is a four-lane road that provides local access to several industrial uses in the City of Industry and would provide access to the proposed sites. Parriott Lane carries an average daily traffic volume of 1,540, where vehicles were observed to travel at speeds of approximately 35 miles per hour in front of the project site. Don Julian Road is a four-lane divided road that provides east-west access in the City and connects Parriott Lane to Hacienda Boulevard (see Figure 2, *Local Vicinity*). Continuous sidewalks are present on both sides of Parriott Lane and Don Julian Road. No dedicated bike lanes are present on Parriott Lane and Don Julian Road.

Once operational, the proposed project would result in an increase in traffic volumes on the roadways in the vicinity of the project. The study area roadway that would be most directly affected by this traffic is Parriott Lane, which would provide direct access to the sites. To evaluate project impacts on local traffic, trip generation rates attributable to the project were determined for daily and peak hour traffic. Morning peak hour traffic occurs between the hours of 7:00 AM and 9:00 AM, while evening peak hour traffic occurs between the hours of 4:00 PM to 6:00 PM.

The proposed project's trip generation was based on trip generation rates established for the warehousing land use category in the Institute of Transportation Engineers' Trip Generation Manual (ITE 2012). Because the project is in an industrial use, passenger car equivalent (PCE) factors were applied. Truck volumes were converted to PCE volumes to reflect the fact that trucks take up more room on the road than automobiles and are typically slower during acceleration and deceleration. Based on San Bernardino County Congestion Management Program (CMP) guidelines,[16] the following PCE factors were applied:

- 2 axle trucks = 1.5
- 3 axle trucks = 2.0
- 4+ axle trucks = 3.0.

To apply the PCE factors, the proposed project's vehicle mix was estimated based on the City of Fontana Truck Trip Generation Study (City of Fontana 2005). The vehicle mix assumed for warehousing uses are:

[16] San Bernardino County CMP guidelines were used for PCE factors in the absence of relevant Los Angeles County or City of Industry guidelines. Such practice is standard for the preparation of traffic studies in Southern California, including those previously prepared for the City of Industry.

- Automobiles = 80.3 percent
- 2 axle trucks = 5.2 percent
- 3 axle trucks = 4.5 percent
- 4+ axle trucks = 10 percent.

As shown in Table 14, the total trip generation for the project (including both sites) is estimated to generate a total of 463 daily vehicle trips, of which 91 would be truck trips[17] and the remainder would be passenger car trips. This total number of vehicle trips converts to 463 PCE trips using the factors identified above. Of this total, 50 PCE trips would occur during the morning weekday peak hour and 54 PCE trips would occur during the evening weekday peak hour.

Table 14 Project Trip Generation

Category	Daily Traffic	AM Peak Hour Traffic			PM Peak Hour Traffic		
		Total Traffic	Trips In	Trips Out	Total Traffic	Trips In	Trips Out
TRIP GENERATION RATES[1]							
Warehousing (ITE Code 150)	3.56	0.30	0.24	0.06	0.32	0.08	0.24
GENERATED TRAFFIC VOLUMES							
Project Trips (vehicles)[2]	463	31	8	39	10	31	42
Project Trips (PCE)[3]	589	39	10	50	13	39	54

PCE = Passenger car equivalent
[1] Trip generation rates based on ITE Trip Generation Manual, 9th Edition (2012). Rate units are trips per 1,000 square feet of building space.
[2] Assumes a total project size of 130,170 square feet of warehouse uses. Vehicle trips are then calculated as trip generation rates x (130,170 ÷ 1,000).
[3] PCE trips calculated using the assumptions outlined above, with the light industrial warehousing mix as each site has a gross floor area of less than 100,000 square feet.

The Congestion Management Program for the County of Los Angeles states that the minimum project-added traffic that is needed before an intersection has to be studied is 50 two-way trips in either the morning or evening weekday peak hour. This is consistent with most local jurisdictions that require traffic impact studies for projects that generate more than 50 peak hour trips. Mainline freeway monitoring locations must also be analyzed for projects that would add 150 or more trips during either the morning or evening weekday peak hour. The project (Buildings A and B combined) generates a maximum of 54 trips during weekday peak hours (i.e., an average of 1 trip for approximately each minute during the peak hours) that would be distributed along the circulation system. As the project trips would split north south on Parriott Lane, reaching primarily Hacienda Boulevard, and Valley Road which provides regional connection to major roads and the 10, 60, and 605 Freeways. In addition, Valley Boulevard and Don Julian Road also provide east-west connectivity. Assuming that 50% of the project trips are routed to the south via Don Julian Road and Hacienda Boulevard and 50% routed to the north via Proctor Avenue and Valley Boulevard, the project would add less than 30 trips at each nearby intersection and would not meet the minimum 50 peak hour trip threshold. The project would result in small increases at nearby roads and intersections, and would not adversely affect traffic operations in the vicinity of the project. No significant impact would occur at study area roadways and intersections and no mitigation measures are necessary.

[17] Using the assumptions stated in the text, truck trips are assumed to comprise 19.7 percent of project vehicle trips, resulting in an estimated 91 truck trips per day (0.197 x 463 = 91).

Non-motorized Transportation and Transit

The project may generate a demand for non-motorized travel as the proposed warehouse may result in additional pedestrians and bicycles in the project area. With regard to public transit, the Los Angeles Metropolitan Transit Authority (Metro) operates Line 194 along Valley Boulevard and the nearest bus stop at Valley Boulevard is located approximately 800 feet from the project site. In addition, Foothill Transit operates line 185 and Metro route 270 along Hacienda Boulevard, the nearest bus stop on Hacienda Boulevard is located 600 feet from the project site. All streets in the project vicinity have sidewalks along at least one side of the street; on Parriott Place and Don Julian Road the sidewalks are continuous on both sides of the streets. The proposed project would not adversely affect the performance of these transit or non-motorized transportation facilities and would not conflict with any plans or policies relative to these transportation modes.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The Los Angeles County Congestion Management Program (CMP) was issued by Metro in December 2010 (Metro 2010). All freeways and selected arterial roadways are designated elements of the CMP Highway System. The CMP requires that individual development projects of potentially regional significance undergo a traffic impact analysis. Per the CMP Transportation Impact Analysis (TIA) guidelines, a significant impact may result and a traffic impact analysis is required under the conditions listed on the following page.

- At CMP arterial monitoring intersections where the proposed project would add 50 or more vehicle trips during either morning or evening weekday peak hours.
- At CMP mainline freeway monitoring locations where the proposed project would add 150 or more vehicle trips, in either direction, during either morning or evening weekday peak hours.

The nearest freeway to the project site is the Pomona Freeway (SR 60) approximately 0.8 miles to the south. The nearest CMP arterial roadway to the site is Hacienda Avenue approximately 500 feet to the east. As indicated above, the proposed project would result in an increase of 50 morning peak hour trips and 54 evening peak hour trips. As these total numbers of trips would be distributed among local roadways, they would not add 50 or more trips to a CMP intersection or 150 or more trips to a mainline freeway. Therefore, the proposed project does not meet the intersection/freeway criteria and the analysis of traffic impacts to CMP roadways is not required. Impacts are less than significant and no mitigation measures are necessary.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project involves construction and operation of industrial/warehouse buildings with a height of less than 50 feet, which would not result in a change in air traffic patterns or an increase in air traffic levels. There are no airports in the immediate project vicinity and the proposed project would not

create any structures that could interfere with air travel or air safety. The project would not increase or alter air traffic and no impact would occur.

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Less Than Significant Impact With Mitigation: Access to the site would be provided by several driveways on Parriott Lane. The following discusses the future access for Buildings A and B.

Building B

Building B would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 40-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site. A loading dock on the northern side of the building, would accommodate five dock-high truck loading bays. As discussed in response a) above, the project would generate up to 42 peak hour trips during the traffic peak hours. Given that there are four driveways, each driveway would generate less than 20 trips during the peak hour.

The northern driveway would be located at the edge of the segment where Parriott Place curves. In addition, Parriott Place changes in its southbound lanes from a one lane at the curve to two lanes south of the curve. Without mitigation, the proposed northern driveway for Building A may be problematic, as vehicles making a left turn out of the driveway would have to cross the northbound lanes on Parriott Lane, and find an appropriate gap to merge in on-coming southbound traffic with limited sight distance looking north. Factors used to evaluate access include traffic volume on the roadway and on the driveway, prevailing speed of traffic, available sight distance, the presence of a median refuge, and the type of vehicles that would be using the driveway.

Traffic counts were taken at Parriott Place to verify the existing traffic volumes on the roadway segment at the project site on Thursday July 9, 2015. The daily traffic volume is 1,542, with 90 vehicles during the AM peak hour, 95 during the PM peak hour, and 139 vehicles between 1 and 2 PM. In average, the highest traffic resulted in 1 vehicle on Parriott Lane for every 26 seconds. While there may be adequate gaps in the traffic stream to allow the left turn out movement, other factors such as speed and sight distance must be considered.

Speed is also an important measure for traffic operations as it relates to safety. A spot speed survey in miles per hour (mph) was conducted on Parriott Place in front of the project site on July 8, 2015 between 11 AM to 12PM. The survey was conducted using a radar speed gun under sunny weather and uncongested conditions, which reflects a typical operational condition. The average speed was 33 mph, where the 85% percentile (meaning that 85% of vehicles did not exceed a given speed) is 38 mph. The results of the traffic counts and the speed survey are included in Appendix E.

An existing 5'6"-foot high masonry wall is located along the eastern boundary of the site running all the way to Parriott Lane right of way. A trash enclosure (normally 5 to 6-foot in height) containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building. The line of sight from the proposed northern driveway looking east on Parriott Lane is affected by the existing masonry wall and the proposed trash enclosure. Figure 7 presents the site access location and the site and roadways features

that would interfere with the operation of the project driveways. Figure 8 presents site photos taken along the Parriott Place right of way edge to depict the line of sight looking north into the curve and to show how the existing masonry wall blocks the line of sight towards the east. A preliminary sight distance evaluation prepared for the proposed driveway was based on criteria and procedures from the Caltrans in the State's Highway Design Manual (HDM). Table 201.1 "Sight Distance Standards" of the HDM relates minimum sight distance values to a range of design speeds. For this analysis, a design speed of 45 mph has been utilized. Based on the design speed of 45 mph, the minimum sight distance from the access driveway on Parriott Place would be 330 feet. A preliminary sight distance diagram shown on Figure 9, *Preliminary Sight Distance Evaluation*, has been prepared for the northern project access to Parriott Place and shows that insufficient sight distance of approximately 230 feet would be provided, as Parriott Place curves and there would be obstructions from the trash bin and the existing masonry wall. Observations at the project site also indicate that the sight distance is limited at this location.

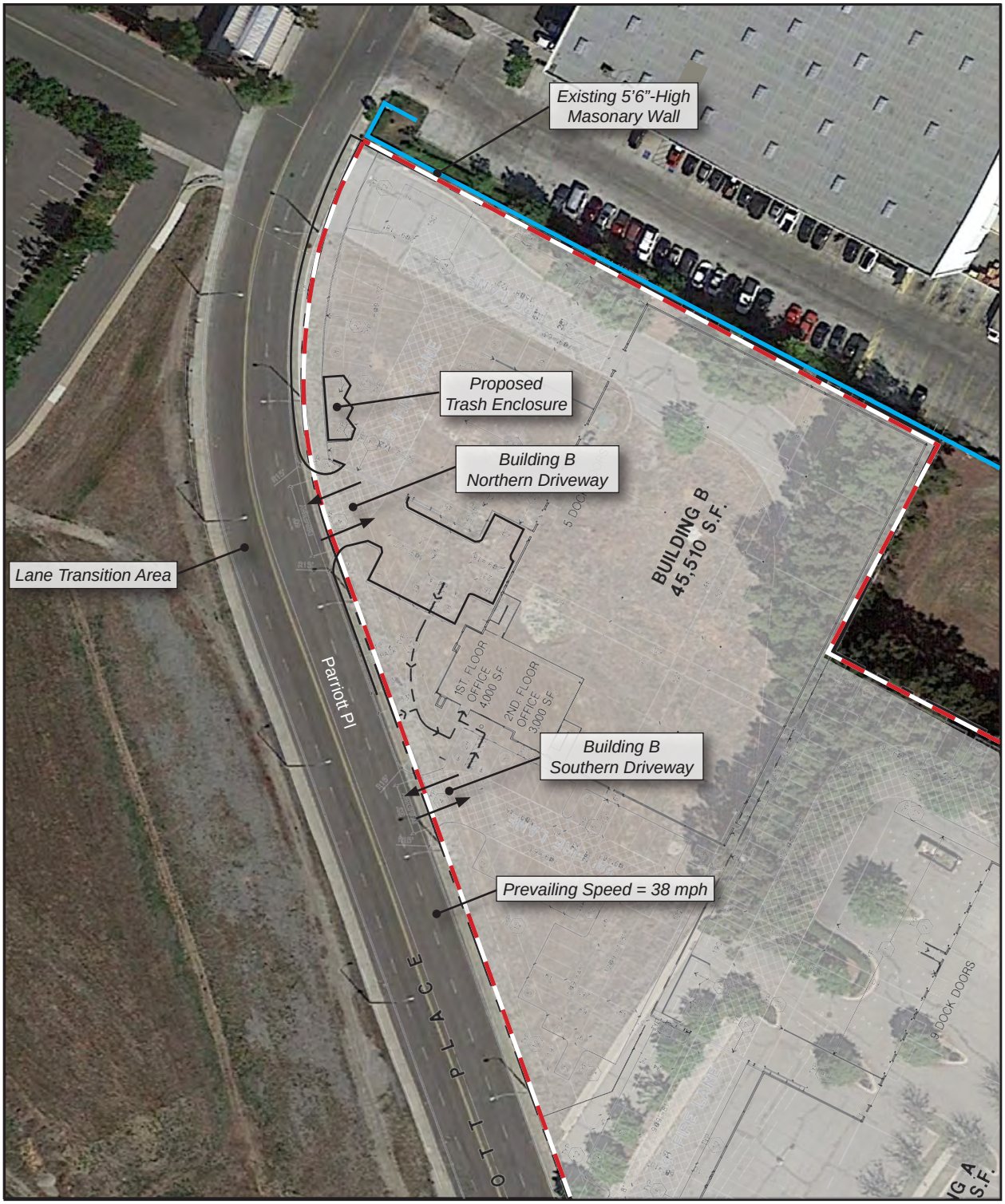
The driveway access is also located in a lane transition area where the lanes on Parriott Place transition from 1 to 2 lanes in the southbound direction. In addition, the southbound direction on Parriott Place is single lane with no median refuge. Therefore, the following reasons are considered to recommend for a right in/right out restriction at that access driveway:

- Proximity to a curve and a lane transition area on Parriott Place on the southbound directions
- Vehicular spot speeds of approximately 35 miles per hour
- Inadequate stopping sight distance
- Presence of heavy trucks that would utilize the driveway
- No median refuge area on Parriott Place

Mitigation measures TRANS-1 would then restrict the northern project driveway to right-in/right-out movements, or to request the applicant to provide an engineering study to implement design features (such as lane restriping to allow for a dual left turn lane, warning signage, sight distance improvement by relocation of the trash enclosure or masonry wall removal) and demonstrate that the northern driveway for Building B can safely accommodate full access without turn restrictions. Traffic control features at that driveway would be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices (Caltrans 2014). In addition, mitigation measure TRANS-2 would ensure that landscaping would not further restrict sight distance at the project driveways and along Parriott Place.

The southern access driveway for Building B would be located approximately 200 feet from where Parriott Lane curves. A review of the southern driveway for building B indicates that a stopping sight distance of over 400 feet would be provided, and that at that location Parriott Lane has 2 southbound lanes and three northbound lanes. Due to its location where sufficient sight distance is provided, and because multiple lanes are provided in both directions, no turn restrictions would be required at those access driveways.

Figure 7 - Site Access Locations



Subject Property

0 75
Scale (Feet)

Source: Google Earth Pro, 2015

3. Environmental Analysis

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Figure 8 - Photos of Northern Site Access Location

Photo from proposed Building B northern driveway looking north and existing masonry wall.

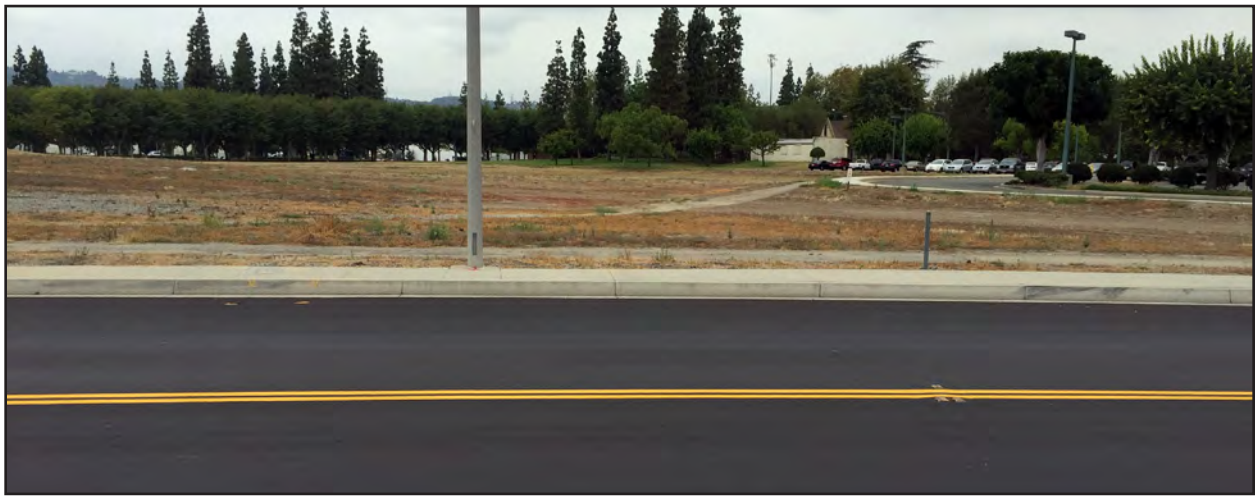

Photo from proposed Building B northern driveway looking west, straight from the driveway.

Photo from proposed Building A southern driveway looking north.

3. Environmental Analysis

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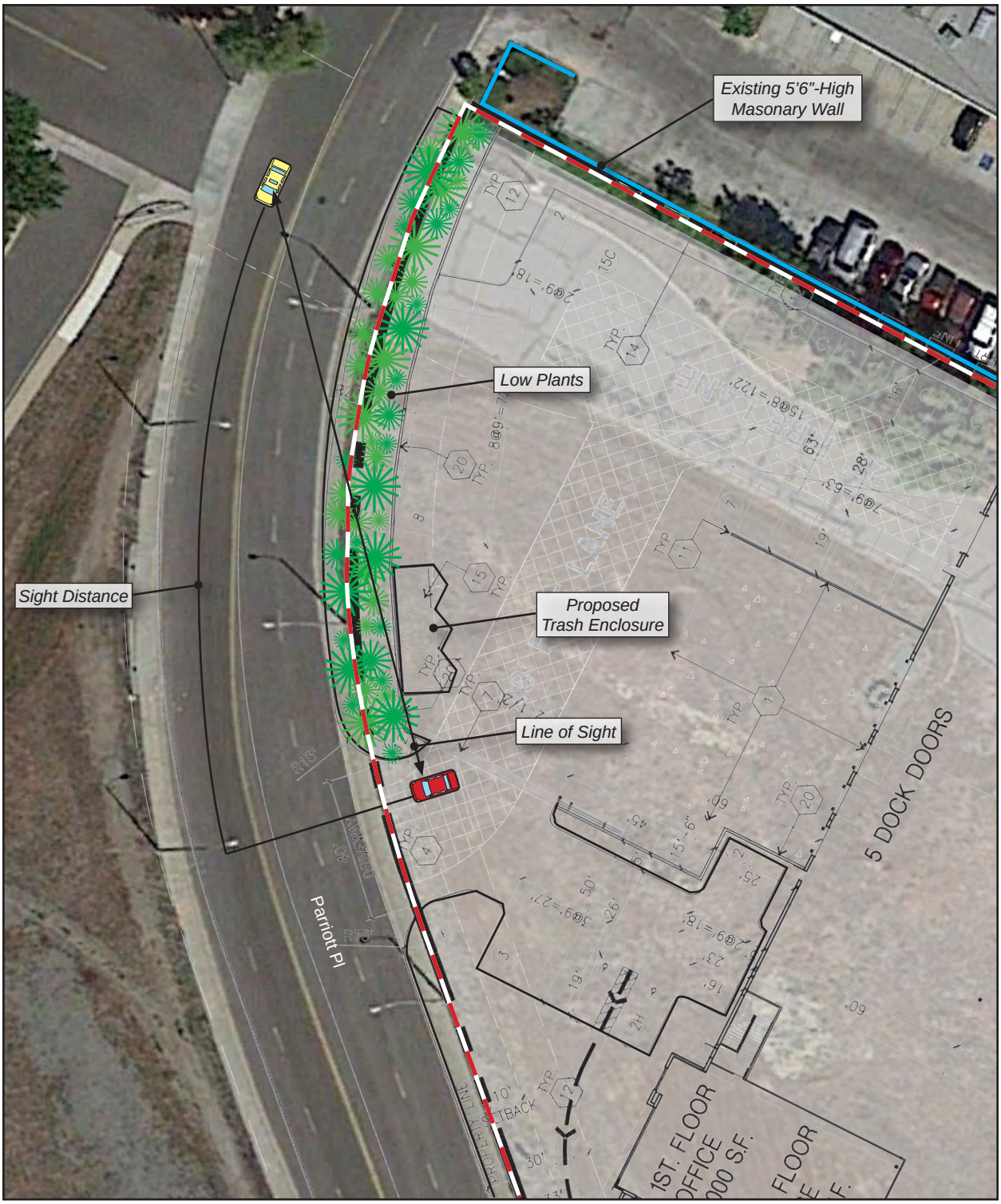
Figure 9 - Preliminary Stopping Site Distance Evaluation



Subject Property

0 40
Scale (Feet)

Source: Google Earth Pro, 2015

3. Environmental Analysis

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Building A

Building A would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 36-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site. A loading dock at the northeast corner of the building, would accommodate nine dock-high truck loading bays. Google street views and observations at the project site also indicate that the sight distance exceeds these standards at the existing driveway location. Since the site would be easily accessible from Parriott Place and the minimum peripheral visibility would be maintained per the Caltrans HDM, no mitigation measures would be necessary in regards to site access.

The increased levels of traffic, pedestrians, and vehicular turning movements at the site access driveways and nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. With mitigation measures TRANS-1 and TRASN-2, these impacts would not be significant as the roadways, site access driveways, and traffic control features would be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices (Caltrans 2014). The project, therefore, would not substantially increase hazards due to a design feature or incompatible uses.

Mitigation Measures

Mitigation measures TRANS-1 and TRANS-2 were developed to ensure that the project access driveways would not substantially increase hazards:

TRANS-1 Prior to obtaining building permits for the project, the project applicant/developer shall construct improvements to restrict access at the northern project driveway allowing only right-in/right-out movements. The restriction would be implemented by (1) the installation of regulatory signage at the driveway outbound leg to prohibit left turns out, or to indicate that only right turns are permitted, and by (2) painting pavement markings on Parriott Lane to designate a median island, which would prohibit crossings and left turns into the northern driveway. Alternatively, the project applicant shall prepare an engineering study to the satisfaction of the City Engineer to demonstrate that the driveway can safely accommodate full access and implement the necessary design features (such lane restriping to allow for a dual left turn lane, warning signage, sight distance improvement by relocation of the trash enclosure or masonry wall removal) to safely accommodate full access without turn restrictions. Traffic control features at that driveway and the pavement markings shall be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices (Caltrans 2014).

TRANS-2 Landscaping along the site's frontage facing Parriott Place from the parking lot to the road right of way shall be restricted to ground covers and low shrubs not exceeding 3 feet in height from the northern driveway to the project's northern boundary. Landscaping plans shall include this restriction and be submitted to the City of Industry Planning Director for review and approval prior to obtaining building permits.

e) Result in inadequate emergency access?

No Impact. The access and circulation features at the proposed development project would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. Emergency

vehicles would enter the project site using the four driveway entrances on Parriott Lane. As shown on Figure 4, *Site Plan*, building site A would be accessible via driveways entrances with a width of 28 feet that would loop around the building. Building site B would be accessible via a driveways entrance with a width of 28 feet and one with a width of 40 feet. These driveways would provide fire access striped per LACFD standards to all sides of the building. All emergency access features are subject to, and must satisfy, the City of Industry design requirements and be approved by the LACFD. No impacts would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed development project would be consistent with policies supporting public transit, bicycle, and pedestrian facilities. The sidewalks in front of the building along Parriott Place would remain accessible to pedestrians. Pedestrian sidewalks and crosswalks are available in the project vicinity to provide convenient and safe pedestrian access to nearby bus stops on Hacienda Avenue and Valley Boulevard. Bike racks with a capacity of 9 bicycles per rack would be installed at each building site for employee and visitor use. The proposed office would provide a bulletin board, display, or kiosk displaying:

- current maps, routes and schedules for public transit routes serving the site
- telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operators
- ridesharing promotional material supplied by commuter-oriented organizations
- bicycle route and facility information, including regional/local bicycle maps and bicycle safety information
- a listing of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.

In addition, the project would provide 9 van accessible spaces. The proposed project would not conflict with policies, plans, or programs regarding transit, bicycle, or pedestrian facilities, and the project would not decrease the performance or safety of such facilities. No impact would occur.

3.19 UTILITIES AND SERVICE SYSTEMS

a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The project would not develop a land use that requires on-site wastewater treatment separate from the treatment provided by the Los Angeles County Sanitation Districts (LACSD). Relatively small volumes of wastewater from restrooms, office kitchens, and cleaning activities would be sewered and directed to the nearest LACSD treatment plant for routine treatment prior to discharge. Wastewater treatment requirements for discharges to stormwater from project construction are discussed in Section 3.6.b. The

project would prepare and implement a SWPPP in compliance with the General Construction Permit. Wastewater treatment requirements for discharges to stormwater from project operations are discussed in Section 3.9.a. The project would comply with City of Industry Municipal Code requirements governing wastewater discharges and no impact would occur.

b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project site does not currently contain any buildings or facilities that generate wastewater or demand supplied water. As shown in Table 15, the proposed project would generate an estimated 6,229 gallons per day (gpd) of wastewater and demand an estimated 7,787 gpd of water. An analysis of the impacts of these demands on water and wastewater treatment facilities is presented in the discussions that follow the table.

Table 15 Forecast Project Wastewater Generation and Water Demand

Proposed Project Use	Area in Square Feet	Wastewater Generation, Gallons Per Day		Water Demand, Gallons Per Day	
		Per 1,000 Square Feet[1]	Total	Per 1,000 Square Feet[2]	Total
Warehouse	113,170	25	2,829	31.25	3,537
Office	17,000	200	3,400	250	4,250
Total	130,170	—	6,229	—	7,787

1 LACSD 2007.
2 Estimated as 125 percent of wastewater generation.

Water Demand

Suburban Water Systems (SWS) would provide water to the project development through its San Jose Hills District. About 80 percent of SWS's water supply comes from groundwater that is pumped from local wells in the San Gabriel and Central Basins; the remaining 20 percent comes from surface water (SWS 2014). SWS owns eleven water production wells in the San Gabriel Basin that serve the San Jose Hills District, some of which are out of service due to groundwater contamination (Kennedy/Jenks 2011). The Metropolitan Water District of Southern California is the largest provider of the surface water, which it obtains via aqueducts from Northern California and the Colorado River. Other sources of surface water include the Covina Irrigating Company and the California Domestic Water Company. In addition, SWS purchases water from several other water agencies that include the City of Covina, City of Glendora, Rowland Water District, Valencia Heights Water District, and Walnut Valley Water District (Kennedy/Jenks 2011).

As shown in Table 15, the proposed project is forecast to demand 7,787 gallons of potable water per day. The water demand would be associated with employee activities (i.e., bathroom and kitchen facilities), maintenance/cleaning activities, and landscape irrigation. The proposed project would be required to conform to Chapter 13.18 (Water Efficient Landscapes) of the City of Industry Municipal Code and with the City's Water Efficient Landscape Guidelines. For example, one of the City's water efficiency measures states that water usage should be minimized through the planting of native and low-water species and the utilization of water-efficient and drip irrigation systems.

By 2020, the SWS San Jose Hills District's total water supply from groundwater, imported water purchases, and recycled water is projected to be 37,136 acre-feet per year (about 12.1 billion gallons), compared to a projected water demand of 31,840 acre-feet per year (Kennedy/Jenks 2011). The project's water demand of 7,787 gpd[18] would constitute approximately 0.03 percent of this total demand. SWS expects to have adequate water supplies to meet demands in its service area for the next 20 years under average, single, and multiple dry years (Kennedy/Jenks 2011). The project applicant would be required to obtain a "will-serve" letter from SWS to ensure that sufficient water supply is available to serve the project. Given the relatively small project water demand, SWS would not be required to build new or expand existing water treatment facilities to meet the project's incremental increase in water demand and no impact would occur.

Wastewater Treatment Demand

Wastewater treatment for the City of Industry, including the project site, is provided though the Los Angeles County Sanitation Districts (LACSD), whose purpose is to construct, operate, and maintain facilities that collect, treat, recycle, and dispose of domestic and industrial wastewater. Individual districts operate and maintain their own portions of the collection system. There are 24 independent districts serving Los Angeles County; the City of Industry is located in portions of Districts 15, 18, and 21. Cities are responsible for collection of wastewater through local lines, which feed to major trunk lines that vary from 8 inches to 144 inches in diameter. The San Jose Creek Water Reclamation Plant (WRP), with a treatment capacity of 100 million gallons per day (mgd), serves the City of Industry (LACSD 2014a). It provides primary, secondary, and tertiary treatment that yields approximately 42 mgd of reclaimed water for use in groundwater recharge and irrigation; the remainder is discharged to the San Gabriel River.

As shown in Table 15, the proposed project is forecast to generate approximately 6,229 gpd of wastewater. Wastewater effluent generated by the project would be primarily associated with the sanitary needs (i.e., bathroom and lunchroom) of the on-site facility employees. With a wastewater treatment capacity of 100 mgd, the San Jose Creek WRP has sufficient capacity to manage this incremental volume. Additionally, the City of Industry imposes standard conditions of approval on Development Plans that require City Council review and approval. As a standard condition of approval, the following condition would be imposed on the proposed project: "The applicant shall supply sanitary sewer facilities to serve all buildings to the satisfaction of the City Engineer prior to the final approval of the development and hookup of utilities." Therefore, project implementation would not result in the need for the construction or expansion of new wastewater treatment facilities and impacts would be less than significant. No mitigation measures are necessary.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project would not require the construction or expansion of facilities to manage stormwater flow; the existing curb and gutter collection system and storm drains have sufficient capacity to manage current and projected runoff from the site (see Section 3.9.d). No impact would occur.

[18] 7,787 gallons/day x 365 days/year ÷ 325,760 gallons/acre-foot = 8.73 acre-feet/year.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. An estimate of the project water demand is provided in Section 3.17.b. The project applicant would be required to obtain a "will-serve" letter from the SWS to ensure that sufficient water is available to serve the project. Receipt of such a letter would confirm that water supplies are adequate and impacts would be less than significant. No mitigation measures are necessary.

e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. An estimate of the project wastewater treatment demand is provided in Section 3.17.b. The existing LACSD wastewater treatment facility has sufficient capacity to meet the incremental wastewater volume expected to be generated by the project. Impacts would be less than significant and no mitigation measures are necessary.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The LACSD provides solid waste disposal services to the City of Industry, including the project site. Solid waste generated by the proposed project would be processed by one or more facilities that currently serve the waste management needs of the community, including the Puente Hills Materials Recovery Facility, Downey Area Recycling and Transfer Facility, South Gate Transfer Station, and Commerce Refuse-to-Energy Facility. Despite the recent closure of the local Puente Hills Landfill in October 2013, the LACSD has indicated that the network of existing waste management facilities is adequate to meet the region's needs in the short-term. Long-term waste disposal needs would be met by exporting solid waste to the Mesquite Regional Landfill in Imperial County by rail via the Puente Hills Intermodal Facility, which is nearing completion in the City of Industry. The Puente Hills Intermodal Facility would be able to handle up to 8,000 tons per day of solid waste, while the Mesquite Regional Landfill, with a 100-year capacity, would be permitted to accept 20,000 tons per day (LACSD 2014b).

Solid waste would be generated during both the construction and operational phases of the proposed project. The volume of solid waste generated during construction would be relatively minor, since project development would not require the demolition of existing buildings or infrastructure. It is estimated that approximately 870 cubic yards (1,307 tons) of asphalt pavement and concrete debris would be generated in preparing the site for construction (see Appendix A). Once operational, the project would generate solid waste at a rate typical of warehouse/office operations, as summarized in Table 16.

Table 16 Forecast Project Solid Waste Generation

Proposed Project Use	Estimated Number of Employees[1]	Solid Waste Generation Pounds Per Day	
		Pounds Per Employee Per Day[2]	Total
Warehouse	75	13.82	1,037
Office	43	1.24	53
Total	118	—	1,090

1 See Section 3.13.a.
2 CalRecycle 2011.

As indicated in Table 16, the proposed project is forecast to generate approximately 1,090 pounds per day (lb/day) of solid waste. The project would be required to adhere to the City of Industry's waste reduction measures. For example, as outlined in Section 17.36.060.Z (Recycling Bin Enclosures) of the City of Industry Municipal Code, all industrial buildings are required to provide a recycling bin enclosed storage area. The project includes a trash enclosure and recycling area. The design of the trash enclosure would be subject to City review and approval as part of the Development Plan review process. Additionally, the proposed project would be required to comply with the provisions of the 2013 Green Building Standards Code (California Code of Regulations Title 24, Part 11), which outlines requirements for construction waste reduction, material selection, and natural resource conservation.

The LACSD's existing and proposed solid waste disposal capacity is adequate to accommodate the incremental volume of solid waste that would be generated by the proposed project and would not require the development of additional landfill capacity beyond that which is already planned. Therefore, project impacts would be less than significant and no mitigation measures are necessary.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The United States Environmental Protection Agency administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal. In the State of California, Assembly Bill (AB) 939 -- the Integrated Solid Waste Management Act of 1989, Public Resources Code 40050 et seq. -- required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. AB 939 also requires California counties to show 15 years disposal capacity for all jurisdictions within the county, or provide a plan to transform or divert its waste. AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991, requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects.

The proposed project would be required to comply with all applicable laws and regulations governing solid waste management and disposal, including those listed above. More specifically, the proposed project would not affect the City of Industry's ability to continue to meet the required AB 939 waste diversion requirements as it has in the past (CalRecycle 2012). For example, the proposed project would help the City achieve its source reduction, recycling, and waste stream diversion goals for solid waste through the provision and use of an on-site recycling bin, as noted in Section 3.17.f. Therefore, no impact would occur.

3.20 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporated. Project approval would allow the development of warehouse/office building to replace a parking lot and undeveloped land in a fully urbanized area of the City of Industry. The project site has been previously disturbed and no wildlife habitats are present on the site. Additionally, the surrounding area is built out with commercial, industrial, and residential uses and there are no undeveloped areas in the vicinity of the project site. Natural communities and populations of rare or threatened plant or animal species do not exist on or near the project site and would therefore not be impacted. Additionally, the site does not meet the criteria to be considered historically significant. However, based on communications from the Gabrieleño Band of Mission Indians – Kizh Nation, the project site is located within its traditional use territory. Therefore, mitigation measures were developed to reduce any potential impacts to tribal cultural resources to less than significant levels. The proposed project would not degrade any natural environment or cultural resources and a less than significant impact would occur.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact. Project approval would allow the development of warehouse/office buildings to replace a paved parking lot in a fully urbanized area of the City of Industry. The proposed project would be consistent with the long-term goals of developing the project site with industrial uses in accordance with the City's General Plan. Therefore, the project would not weigh short-term goals above the long-term environmental goals of the City. Additionally, the environmental issues relevant to the project are very localized and confined to the immediate project area. Project development would not result in impacts that are individually limited but cumulatively considerable, as defined above. Therefore, no significant cumulatively considerable impacts are anticipated to result from the proposed project and no mitigation measures are necessary.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact with Mitigation Incorporated. This Initial Study reviewed the proposed project's potential impacts to aesthetics, air quality, noise, traffic, public health and safety, and other environmental issues. Potential impacts to traffic, public health and safety, and air quality were indicated. Mitigation measures were developed for these potential impacts, and with implementation of the required

mitigation, impacts would be less than significant, and would not result in substantial adverse effects on human beings, either directly or indirectly.

4. Consultant Recommendation

Based on the information and environmental analysis contained in this Initial Study, we recommend that the City of Industry adopt a Mitigated Negative Declaration for this project. We find that with the project design features and mitigation measures, the project would not have a significant effect on the environment. We recommend that the first category be selected for the City's determination (See Section 5, *Lead Agency Determination*).

Date	Dwayne Mears, AICP, for PlaceWorks

4. Consultant Recommendation

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5. Lead Agency Determination

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	*Date*
Printed Name	*For*

5. Lead Agency Determination

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Appendix A Development Plan Application

Appendix

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RECEIVED 10/2009
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CITY OF INDUSTRY

Environmental Information Form

The Environmental Information Form is intended to provide the basic information necessary for the evaluation of your project to determine its potential environmental impacts. This review provides the basis for determining whether the project may have a significant impact on the environment, as required by state law, or more specifically, the California Environmental Quality Act (CEQA). After this information has been evaluated by the Planning Department, a determination will be made regarding the appropriate environmental documentation for your project, in accordance with the CEQA Guidelines.

If no significant environmental impacts are anticipated, or if impacts can be mitigated or avoided by a change or specific requirement in the project's design or operation, a Negative Declaration or Mitigated Negative Declaration will be prepared. If potential significant environmental impacts are identified, an Environmental Impact Report must be prepared, which focuses on the areas of concern identified by the Initial Study.

The City of Industry, as Lead Agency, is required to comply with CEQA. In order to assist us in completing this required environmental review, please provide us with the information outlined below. Please note that upon review of the submitted information, City staff may request additional supporting documentation to assist in the environmental analysis of your project to ensure compliance with CEQA.

This Environmental Information Form works in concert with the other applications. Both need to be completed in order for your application to be accepted as complete. If you need assistance in completing the Environmental Information Form, or have questions regarding the environmental review procedures, please contact the Planning Department at (626) 333-2211.

General Information

1. Name developer, agent, or project sponsor: CT Realty Investors - Dave Ball Phone Number: 949.330.5770

   Address: 65 Enterprise, Suite 150 (*Street*) Aliso Viejo (*City*) 92656 (*Zip*)

2. Project name: Parriott Industrial Buildings Assessor's Parcel Number: Portions of 8208-027-911 & 912

   Address: Vacant - NEC of Parriott Place and Don Julian Road (*Street*) (*Zip*)

Environmental Setting (Attach additional sheets and photos as necessary)

1. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects:

   The existing 6+ acre site consists of portions of two legal lots. Parcel 3 of PM176 (136/61-62) is vacant land with miscellaneous dry brush. Parcel 4 consists of a unoccupied parking lot with trees, grass, and brush lining the perimeter as well as in the planter islands. The site is relatively level from a topography standpoint. Records of soils reports on sites within the vicinity of this project indicate that soil conditions on the project site are likely to contain expansive soil (clay). At this time it is not known what animal species inhabit the site, birds are likely to be found given that there are numerous trees.

2. Provide photographs of the site and describe any existing structures onsite and the use of the structures:

   Parcel 4 is an unoccupied parking lot consisting of mainly paving, lot lights, and planter islands.

3. Describe the surrounding properties (north, east, south, and west of the project site), including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (industrial, commercial, etc.), intensity of land use (warehousing, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.).:

   North: Industrial use - Existing 203,424 sq. ft. industrial warehouse building

   East : Industrial use - Vacant land to the NE and an 39,680 sq. ft. commercial Auto service building to the SE

   South: Industrial use - Public ROW followed by a 35,713 sq. ft. industrial warehouse building

   West: Institutional use - Parking lot areas

4. Provide photographs of the surrounding uses and adjoining properties.

Project Description (attach additional sheets as necessary)

1. List and describe any other permits and approvals required for project implementation, including those required by local, regional, state, and/or federal agencies:

   Planning entitlements & miscellaneous construction permits from the City, County of Los Angeles Building & Safety for grading permits & fire protection services, Department of Fish & Game, La Puente Valley County Water District for domestic water services, and State NOI Permit (water quality).

2. List any other development proposals associated with the project and its relationship to a larger project or series of projects, if any:

   NA

3. Demolition proposed: No:____ Yes: x Square feet: Approx 4 acres of paving

4. Tentative development schedule including start and completion dates, and phasing if proposed:

   Estimated Demolition to start June 2015, estimated end of construction June 2016.

5. If commercial or office, indicate the type, whether neighborhood, city or regionally oriented, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, and location of loading facilities and anticipated hours of loading/delivery operations:

   NA

6. If industrial, manufacturing or warehouse, indicate the type and major function, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, and location of loading facilities and anticipated hours of loading/delivery operations:

   Building "A" is a 84,860 s.f. speculative warehouse Industrial building. Hours of operation, estimated number of employees are TBD later in the process. Truck dock doors to be located on the west side of the lot.

   Building "B" is a 45,510 s.f. speculative warehouse industrial building. Hours of operation, estimate number of employees are TBD later in the process. Truck dock doors to be located on the west side of the lot.

7. If institutional, indicate the type and major function, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, location of loading facilities and anticipated hours of loading/delivery operations, and community benefits to be derived from project:

   NA

8. If the project involves an exception, conditional use permit, or re-zoning application, state this and indicate clearly why the application is required:

   NA

Potential Environmental Impacts

If any of the following items are applicable to your project please discuss (use a separate sheet as necessary).

		Yes	No
1.	Change in existing features of any drainage ways or hills, or substantial alteration of any ground contours.		x
2.	Change in scenic views or vistas from existing residential areas or public lands or roads.		x
3.	Change in pattern, scale, or character of the general area of the project.		x
4.	Result in significant amounts of solid waste or debris.		x
5.	Change in or introduction of air emissions (e.g., dust, ash, smoke, fumes) or odors in the vicinity during grading and/or construction phases.		x
6.	Change in surface water (e.g., channel, stream) or ground water quality or quantity.		x
7.	Substantial alteration of existing drainage patterns that could lead to flooding on- or offsite.		x
8.	Substantial change in noise or vibration levels in the project vicinity during grading and/or construction phases.		x
9.	Substantial change in traffic patterns and circulation in the project vicinity.		x
10.	Substantial change in topography of project site and/or vicinity.		x
11.	Site located on filled land or on slopes of 10 percent or more.		x
12.	Use or disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives.		x
13.	Substantial change in demand for public services and utilities and service systems (police, fire, water, wastewater, solid waste, electricity, gas, etc.)		x
14.	Substantial increase in fossil fuel consumption (electricity, oil, natural gas, etc.)		x

What studies have been prepared for this site that might assist the City in reviewing the potential environmental impacts of the project? Some examples of such studies include environmental site assessment, soils and geology study, biological resources study, cultural resources study, hydrology study, etc. These studies may have been prepared for this project or some earlier development project. Supporting documentation or studies may answer questions and facilitate the processing of your application.

Certification

I am the legal owner of the property that is the subject of this application or have been authorized by the owner to act on his/her behalf regarding this application. I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. I further acknowledge that any false statements or information presented herein may result in the revocation of any approval or permit granted on the basis of this information.

Name of preparer: ~~Dave Ball~~ Sarah Bova Preparer's signature: SBova

Date: 6/5/15

Bldg A.

CITY OF INDUSTRY

APPLICATION FOR CONSTRUCTION/DEMOLITION WASTE & RECYCLING SERVICES

Applications will not be accepted without this form signed by Valley Vista Visa Services and attached to the application. City of Industry Municipal Code requires every business to arrange for appropriate solid waste collection service with the City approved collector. The requirement applies to any permanent or temporary businesses operating in the City of Industry.

Valley Vista Services - (800) 442-6454
17445 RAILROAD STREET
CITY OF INDUSTRY, CA 91745

BUSINESS INFORMATION (please type or print clearly)

Business Name/DBA: CT Realty - Paul Ball Phone:

Service Address: Don Julian Rd & Barnett Place Building A
Street

Billing Address: 65 Enterprise Ste 150 Aliso Viejo CA 92656
Zip

CONTRACTOR/PROJECT INFORMATION

Project Start Date: April 2016 Project Completion Date: Dec 2016 Contact Person: Rick Espinoza

Lead Contractor: KPRS Contact Phone Number: (714) 672-0800

Contractor Address (Billing):

Estimate Material Types for Collection: Asphalt, Concrete, Drywall, Wood Misc Waste

Payment of a deposit based on a waste flow projection is required before receiving a signature on this application. The waste flow projection will be based on the actual waste generation (volume) estimated during the course of the project. No Deposit shall be returned if self-hauling or unauthorized haulers are used on Project.

All delinquent charges and penalties imposed are deemed to be civil debts owed to the City by the customer and property owner, and may be collected by any available means, including the filing of a civil action.

Payment for service is the joint obligation of the customer and the property owner (if separate from the customer). In the case of non-payment by the customer, the owner of the property may be held responsible for payment and no new service may be established and no property related permit, approval or entitlement may be issued by the City until all delinquent amounts are paid.

BILLING DISPUTE PROCEDURES - Any customer who has been billed for service and desires to contest the extent, degree or reasonableness of the charges billed, must file a written statement of such protest with the collector and the City Manager's office within 30 days of the mailing of the disputed bill. The City Manager will review the accounts of customers who dispute collection charges within 30 days after receiving a written request for review. If an error is found after such review, the City or collector will promptly correct the error and, if required and at the City's sole discretion, the City or collector will either credit the customer's account or give the customer a refund.

OFFICE USE ONLY

Recycling and solid waste collection services have been reviewed and/or arranged for by the above business.

Project Description: Building New Commercial / Industrial Building 84,860 Sq FT

Scope of Services/Comments: Removing Existing Surface Area (Asphalt Paving) + New Construction See Building A Waste Flow

Approved by: Joel Jim Joel Simonian Date: 6/3/2015

Account#: Deposit Amount: $160,122.09

Bldg B

CITY OF INDUSTRY
APPLICATION FOR CONSTRUCTION/DEMOLITION WASTE & RECYCLING SERVICES

Applications will not be accepted without this form signed by Valley Vista Visa Services and attached to the application. City of Industry Municipal Code requires every business to arrange for appropriate solid waste collection service with the City approved collector. The requirement applies to any permanent or temporary businesses operating in the City of Industry.

Valley Vista Services - (800) 442-6454
17445 RAILROAD STREET
CITY OF INDUSTRY, CA 91745

BUSINESS INFORMATION (please type or print clearly)

Business Name/DBA: CJ Realty - David Bell Phone:

Service Address: Dan Julian Rd : Parriott Place Building B
Street

Bill Address: 65 Enterprise Zip Ste 150 Aliso Viejo CA 92656

CONTRACTOR/PROJECT INFORMATION

Project Start Date: April 2016 Project Completion Date: Dec 2016 Contact Person: Rick Espinosa

Lead Contractor: KTRS Contact Phone Number: (714) 672-0800

Contractor Address (Billing):

Estimate Material Types for Collection: Asphalt, Concrete, Drywall, Wood Misc. C&D Waste

Payment of a deposit based on a waste flow projection is required before receiving a signature on this application. The waste flow projection will be based on the actual waste generation (volume) estimated during the course of the project. No Deposit shall be returned if self-hauling or unauthorized haulers are used on Project.

All delinquent charges and penalties imposed are deemed to be civil debts owed to the City by the customer and property owner, and may be collected by any available means, including the filing of a civil action.

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OFFICE USE ONLY

Recycling and solid waste collection services have been reviewed and/or arranged for by the above business.

Project Description: Building New Commercial/Industrial Building 45,510 Sq Ft

Scope of Services/Comments: Remaining Existing Surface Area (Asphalt Parking) + New Construction See Building B Waste Plan

Approved by: Joel Jim Jack Simanian Date: 6/3/2015

Account#. Deposit Amount: 12,572.37

Appendix B Air Quality and Greenhouse Gas Background and Modeling Data

Appendix

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Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

The project site lies within the South Coast Air Basin (SoCAB), which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is a coastal plain with connecting broad valleys and low hills. It is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site is the Pomona Fairplex Station (ID No. 047050). The lowest average low is reported at 38.1°F in January while the highest average high is 91.1°F in August (WRCC 2015a).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 17.06 inches per year in the project area according to the data from the Walnut NI FC102C climatological station (ID No. 049431) located closest to the project site (WRCC 2015b).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (SCAQMD 2005).

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (SCAQMD). However, SCAQMD reports to the California Air Resources Board (CARB), and all criteria emissions are also governed by the California and National Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state

to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.075 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm[2]	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm[1]	
	24 hours	0.04 ppm	0.014 ppm[2]	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Major Pollutant Sources
Lead (Pb)	Monthly	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	*	1.5 µg/m^3	
	3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles[1]	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2013a.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 When relative humidity is less than 70 percent.
2 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
3 On December 14, 2012, EPA lowered the federal primary $PM_{2.5}$ annual standard from 15.0 µg/m^3 to 12.0 µg/m^3. EPA made no changes to the primary 24-hour $PM_{2.5}$ standard or to the secondary $PM_{2.5}$ standards.

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and

lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that AAQS have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. Description of the primary and secondary criteria air pollutants and their known health effects are presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2014a).

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O_3), SCAQMD has established a significance threshold for this pollutant (SCAQMD 2005).

Nitrogen Oxides (NO_x) are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_2 produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005; EPA 2015a). The SoCAB is designated an attainment area for NO_2 under the National AAQS and California AAQS (CARB 2014a).

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2 (SCAQMD 2005). When sulfur dioxide forms sulfates (SO_4) in the

atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS (CARB 2014a).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (SCAQMD 2005).

The US Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen. The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2014a).[1]

Ozone (O_3) is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Additionally, O_3 has been tied to crop damage, typically in the form of stunted growth and premature death. O_3 can also act as a corrosive, resulting in property damage such as the degradation of rubber products (SCAQMD 2005). The SoCAB is designated as extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2014a).

Lead (Pb) concentrations decades ago exceeded the state and federal AAQS by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982 (SCAQMD 2005). However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites

[1] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California's request to redesignate the PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

immediately downwind of lead sources[2] recorded every localized violations of the new state and federal standards. As a result of these localized violations, the Los Angeles County portion of the SoCAB was designated in 2010 as nonattainment under the National AAQS for lead (SCAQMD 2012a; CARB 2014a). The project is not characteristic of industrial-type projects that have the potential to emit lead. Therefore, lead is not a pollutant of concern for the project.

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code § 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

[2] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 identified that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012a).

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. SCAQMD recently released the fourth update to MATES (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the previous update released in 2008 (MATES◦III), monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period (SCAQMD 2015b).

The Office of Environmental Health Hazard Assessment (OEHHA) recently updated the methods for estimating cancer risks. The new method includes utilizing higher estimates of cancer potency during early life exposures. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (SCAQMD 2015b).

Air Quality Management Planning

SCAQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2012 AQMP

On December 7, 2012 SCAQMD adopted the 2012 AQMP, which employs the most up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources. The plan also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2012 AQMP builds upon the approach identified in the 2007 AQMP for attainment of federal PM and ozone standards, and highlights the significant amount of reductions needed and the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria air pollutant standards within the timeframes allowed under the Federal CAA. The plan demonstrates attainment of federal 24-hour $PM_{2.5}$ standard by 2014 and the federal 8-hour ozone

standard by 2023. It includes an update to the revised EPA 8-hour ozone control plan with new commitments for short-term NO_X and VOC reductions. In addition, it also identifies emerging issues of ultrafine ($PM_{1.0}$) particulate matter and near-roadway exposure, and an analysis of energy supply and demand.

LEAD STATE IMPLEMENTATION PLAN

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates. According to the 2007 AQMP, the SoCAB will have to meet the new federal 8-hour O_3 standard by 2024, $PM_{2.5}$ standards by 2015, and the recently revised 24-hour $PM_{2.5}$ standard by 2020. The SoCAB is designated nonattainment for lead (Los Angeles County only) under the National AAQS. Transportation conformity for nonattainment and maintenance areas is required under the Federal CAA to ensure federally supported highway and transit projects conform to the SIP. The EPA approved California's SIP revisions for attainment of the 1997 8-hour O_3 National AAQS for the SoCAB in March 2012. Findings for the new 8-hour O_3 emissions budgets for the SoCAB and for consistency with the adopted 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) were submitted to the EPA for approval.

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[1]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2014a.

[1] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are unclassified.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the SCAQMD. The project site is located within Source Receptor Area (SRA) 11 – South San Gabriel Valley. The air quality monitoring station closest to the project site is the Pomona Monitoring Station. This station monitors O_3, CO, and NO_2. Data for PM_{10} and $PM_{2.5}$ is supplemented by the Azusa Monitoring Station and data for SO_2 is supplemented by the Los Angeles – North Main Street Monitoring Station. The most current five years of data monitored at these monitoring stations are included in Table 3, *Ambient Air Quality Monitoring Summary*. The data show recurring violations of both the state and federal O_3 standards. The data also indicate that the area consistently exceeds the state PM_{10} standards and federal $PM_{2.5}$ standard. The CO, SO_2, and NO_2 standard have not been violated in the last five years at this station.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2010	2011	2012	2013	2014
Ozone (O_3)[1]					
State 1-Hour ≥ 0.09 ppm	9	15	21	12	22
State 8-hour ≥ 0.07 ppm	12	24	30	22	22
Federal 8-Hour > 0.075 ppm	4	16	15	15	15
Max. 1-Hour Conc. (ppm)	0.115	0.119	0.117	0.125	0.123
Max. 8-Hour Conc. (ppm)	0.082	0.096	0.093	0.100	0.100
Carbon Monoxide (CO)[1]					
State 8-Hour > 9.0 ppm	0	0	0	*	*
Federal 8-Hour ≥ 9.0 ppm	0	0	0	*	*
Max. 8-Hour Conc. (ppm)	1.80	1.72	1.47	*	*
Nitrogen Dioxide (NO_2)[1]					
State 1-Hour ≥ 0.18 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.097	0.0873	0.0816	0.0788	0.0889
Sulfur Dioxide (SO_2)[2]					
State 1-Hour ≥ 0.04 ppm	0	0	0	*	*
Max. 1-Hour Conc. (ppm)	0.004	0.002	0.002	*	*
Coarse Particulates (PM_{10})[3]					
State 24-Hour > 50 μg/m^3	5	8	6	6	21
Federal 24-Hour > 150 μg/m^3	0	0	0	0	0
Max. 24-Hour Conc. (μg/m^3)	68.0	63.0	77.0	74.0	96.0
Fine Particulates ($PM_{2.5}$)[3]					
Federal 24-Hour > 35 μg/m^3	1	2	1	0	0
Max. 24-Hour Conc. (μg/m^3)	44.4	94.6	39.6	29.6	32.4

Source: CARB 2015
Notes: ppm: parts per million; parts per billion, μg/m^3: micrograms per cubic meter
* Data not available.
[1] Data obtained from the Pomona Monitoring Station.
[2] Data obtained from the Los Angeles – North Main Street Monitoring Station
[3] Data obtained from the Azusa Monitoring Station.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution.

Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

Methodology

Projected-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, distributed by the California Air Pollutant Control Officers Association (CAPCOA). CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, onroad emissions, and offroad emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the SCAQMD's *CEQA Air Quality Analysis Guidance Handbook*.

Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website.[3] CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed though an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 4, *SCAQMD Significance Thresholds*, lists SCAQMD's regional significance thresholds.

Table 4 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: SCAQMD 2015a.

[3] SCAQMD's Air Quality Significance Thresholds are current as of March 2011 and can be found here: http://www.aqmd.gov/ceqa/hdbk.html.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQSs is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. Typically, for an intersection to exhibit a significant CO concentration, it would operate at level of service (LOS) E or worse without improvements (Caltrans 1997). However, at the time of the 1993 SCAQMD *Handbook*, the SoCAB was designated nonattainment under the California AAQS and National AAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SoCAB was designated in attainment for CO under both the California and National AAQS. The CO hotspot analysis conducted for the attainment by SCAQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards. [4] As identified in SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions, not congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2011).

LOCALIZED SIGNIFICANCE THRESHOLDS

SCAQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 5, *SCAQMD Localized Significance Thresholds*.

[4] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

Table 5 SCAQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (SCAQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (SCAQMD)[1]	2.5 µg/m^3
Annual Average PM_{10} Standard (SCAQMD)[1]	1.0 µg/m^3

Source: SCAQMD 2015a.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, SCAQMD developed screening-level LSTs to back-calculate the mass amount (pounds per day) of emissions generated onsite that would trigger the hourly levels shown in Table 5 for projects under 5-acres. These "screening-level" LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

For construction LSTs, in accordance with SCAQMD's LST methodology, construction LSTs are based on the acreage disturbed per day based on equipment use and the distance to receptors. The construction LSTs for the project site in SRA 11 are shown in Table 6, *SCAQMD Screening-Level Construction Localized Significance Thresholds*.

Table 6 SCAQMD Screening-Level Construction Localized Significance Thresholds

	Threshold (lbs/day)			
Acreage Disturbed	Nitrogen Oxides (NO_X)[1]	Carbon Monoxide (CO)[1]	Coarse Particulates (PM_{10})[2]	Fine Particulates ($PM_{2.5}$)[2]
1.00 Acre Disturbed Per Day	83	673	54	18
1.31 Acres Disturbed Per Day	95	785	57	19
2.50 Acres Disturbed Per Day	131	1,161	66	23
3.50 Acres Disturbed Per Day	152	1,422	74	26

Source: SCAQMD 2008c, Based on receptors in SRA 11.
[1] LSTs are based on non-sensitive receptors within 82 feet (25 meters) and acreage disturbed of one acre or less.
[2] LSTs are based on sensitive receptors within 595 feet (181 meters) and acreage disturbed of one acre or less.

The project is an industrial/warehousing project that has the potential to emit substantial sources of stationary emissions. Operational LSTs are also an air quality impact of concern associated with the project. The operational LSTs in SRA 11 are shown in Table 7, *SCAQMD Screening-Level Operational Localized Significance Thresholds*.

Table 7 SCAQMD Screening-Level Operational Localized Significance Thresholds

Air Pollutant	Threshold (lbs/day) Operational
Nitrogen Oxides (NO_X)[1]	183
Carbon Monoxide (CO)[1]	1,814
Coarse Particulates (PM_{10})[2]	21
Fine Particulates ($PM_{2.5}$)[2]	8

Source: SCAQMD 2008c, Based on receptors in SRA 11.
[1] LSTs are based on non-residential receptors within 82 feet (25 meters) for a project site size of 5 acres.
[2] LSTs are based on residential receptors within 595 feet (181 meters) for a project site size of 5 acres.

HEALTH RISK THRESHOLDS

A project would expose sensitive receptors to elevated pollutant concentrations if it would place the project in an area with pollutant concentrations above ambient concentrations in the SoCAB. Recent air pollution studies have shown an association between proximity to major air pollution sources and a variety of health effects, which are attributed to a high concentration of air pollutants. Guidance from the CARB and the CAPCOA recommends the evaluation of vehicle-generated emissions when freeways are within 500 feet of sensitive land uses (i.e., residences, schools, daycare centers, and hospitals).

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the SCAQMD. Table 8, *SCAQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the SCAQMD's TAC incremental risk thresholds for operation of a project. Residential, commercial, and office uses do not use substantial quantities of TACs, and these thresholds are typically applied for new industrial projects. Although not officially adopted by SCAQMD, these thresholds are also commonly used to determine air quality land use compatibility of a project with major sources of TACs within 1,000 feet of a proposed project. The proposed project is not a substantial generator of TACs that would require permitting by SCAQMD.

Table 8 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Cancer Burden (in areas ≥ 1 in 1 million)	> 0.5 excess cancer cases
Hazard Index (project increment)	≥ 1.0

Source: SCAQMD 2015.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor,[5] carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed in the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent are nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[6] The major GHGs are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. It also results from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - ***Chlorofluorocarbons (CFCs***) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-

[5] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop o rather than a primary cause of change.

[6] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2014b). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high GWP.

- ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

- ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.

- ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; EPA 2015b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 9, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Second Assessment Report GWP values for CH_4, a project that generates 10 metric tons (MT) of CH_4 would be equivalent to 210 MT of CO_2.[7]

[7] CO_2-equivalence is used to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The global warming potential of a GHG is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Table 9 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	50 to 200	1	1
Methane[2] (CH_4)	12 (±3)	21	25
Nitrous Oxide (N_2O)	120	310	298
Hydrofluorocarbons:			
HFC-23	264	11,700	14,800
HFC-32	5.6	650	675
HFC-125	32.6	2,800	3,500
HFC-134a	14.6	1,300	1,430
HFC-143a	48.3	3,800	4,470
HFC-152a	1.5	140	124
HFC-227ea	36.5	2,900	3,220
HFC-236fa	209	6,300	9,810
HFC-4310mee	17.1	1,300	1,030
Perfluoromethane: CF_4	50,000	6,500	7,390
Perfluoroethane: C_2F_6	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	23,900	22,800

Source: IPCC 200; IPCC 2007.

Notes: The IPCC has published updated global warming potential (GWP) values in its Fifth Assessment Report (2013) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2 (radiative forcing is the difference of energy from sunlight received by the earth and radiated back into space). However, GWP values identified in the Second Assessment Report are still used by SCAQMD to maintain consistency in GHG emissions modeling. In addition, the 2008 Scoping Plan was based on the GWP values in the Second Assessment Report.

1 Based on 100-year time horizon of the GWP of the air pollutant relative to CO_2 (IPCC 2001 and IPCC 2007).

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The U.S. Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements, but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (EPA 2009).

The EPA's endangerment finding covers emissions of six key GHGs—CO_2, CH_4, N_2O, hydro fluorocarbons, per fluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world (the first three are applicable to the proposed project).

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 metric tons (MT) or more of CO_2 per year are required to submit an annual report.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon [mpg] by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the CAA, the EPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to the President's 2013 Climate Action Plan, the EPA will be directed to also develop regulations for existing stationary sources.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, and Senate Bill 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the State and requires state agencies to implement measures to meet the interim 2030 goal of Executive Order B-30-15 as well as the long-term goal for 2050 in Executive Order S-03-5. It also requires the Natural Resources Agency to conduct triennial updates the

California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in State planning and investment decisions.

Assembly Bill 32

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Assembly Bill 32 (AB 32), the Global Warming Solutions Act. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. AB 32 directed CARB to adopt discrete early action measures to reduce GHG emissions and outline additional reduction measures to meet the 2020 target. In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MT of CO_2e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

The 2008 Scoping Plan identified that GHG emissions in California are anticipated to be approximately 596 $MMTCO_2e$ in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million tons) for the state. The 2020 target requires a total emissions reduction of 169 $MMTCO_2e$, 28.5 percent from the projected emissions of the business-as-usual (BAU) scenario for the year 2020 (i.e., 28.5 percent of 596 $MMTCO_2e$) (CARB 2008).[8]

Since release of the 2008 Scoping Plan, CARB has updated the statewide GHG emissions inventory to reflect GHG emissions in light of the economic downturn and of measures not previously considered in the 2008 Scoping Plan baseline inventory. The updated forecast predicts emissions to be 545 $MMTCO_2e$ by 2020. The revised BAU 2020 forecast shows that the state would have to reduce GHG emissions by 21.7 percent from BAU. The new inventory also identifies that if the updated 2020 forecast includes the reductions assumed from implementation of Pavley (26 $MMTCO_2e$ of reductions) and the 33 per cent RPS (12 $MMTCO_2e$ of reductions) the forecast would be 507 $MMTCO_2e$ in 2020, and then an estimated 80 $MMTCO_2e$ of additional reductions are necessary to achieve the statewide emissions reduction of AB 32 by 2020, or a 15.7 percent of the projected emissions compared to BAU in year 2020 (i.e., 15.7 percent of 507 $MMTCO_2e$) (CARB 2012).

Key elements of CARB's GHG reduction plan that may be applicable to the project include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards (adopted and cycle updates in progress).
- Achieving a mix of 33 percent for energy generation from renewable sources (anticipated by 2020).

[8] CARB defines BAU in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

- A California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system for large stationary sources (adopted 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets (several Sustainable Communities Strategies have been adopted).
- Adopting and implementing measures pursuant to state laws and policies, including California's clean car standards (amendments to the Pavley Standards adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (LCFS) (adopted 2009).
- Creating target fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation (in progress).

Table 10, *Scoping Plan Greenhouse Gas Reduction Measures and Reductions Toward 2020 Target,* shows the proposed reductions from regulations and programs outlined in the 2008 Scoping Plan. Although local government operations were not accounted for in achieving the 2020 emissions reduction, CARB estimates that land use changes implemented by local governments that integrate jobs, housing, and services result in a reduction of 5 $MMTCO_2e$, which is approximately 3 percent of the 2020 GHG emissions reduction goal. In recognition of the critical role that local governments play in the successful implementation of AB 32, CARB is recommending GHG reduction goals of 15 percent of today's levels by 2020 to ensure that municipal and community-wide emissions match the state's reduction target.[9] Measures that local governments take to support shifts in land use patterns are anticipated to emphasize compact, low-impact growth over development in greenfields, resulting in fewer VMT (CARB 2008).

[9] The Scoping Plan references a goal for local governments to reduce community GHG emissions by 15 percent from current (interpreted as 2008) levels by 2020, but it does not rely on local GHG reduction targets established by local governments to meet the state's GHG reduction target of AB 32.

Table 10 Scoping Plan Greenhouse Gas Reduction Measures and Reductions Toward 2020 Target

Recommended Reduction Measures	Reductions Counted toward 2020 Target of 169 MMT CO_{2e}	Percentage of Statewide 2020 Target
Cap and Trade Program and Associated Measures		
California Light-Duty Vehicle GHG Standards	31.7	19%
Energy Efficiency	26.3	16%
Renewable Portfolio Standard (33 percent by 2020)	21.3	13%
Low Carbon Fuel Standard	15	9%
Regional Transportation-Related GHG Targets[1]	5	3%
Vehicle Efficiency Measures	4.5	3%
Goods Movement	3.7	2%
Million Solar Roofs	2.1	1%
Medium/Heavy Duty Vehicles	1.4	1%
High Speed Rail	1.0	1%
Industrial Measures	0.3	0%
Additional Reduction Necessary to Achieve Cap	34.4	20%
Total Cap and Trade Program Reductions	146.7	87%
Uncapped Sources/Sectors Measures		
High Global Warming Potential Gas Measures	20.2	12%
Sustainable Forests	5	3%
Industrial Measures (for sources not covered under cap and trade program)	1.1	1%
Recycling and Waste (landfill methane capture)	1	1%
Total Uncapped Sources/Sectors Reductions	27.3	16%
Total Reductions Counted toward 2020 Target	174	100%
Other Recommended Measures – Not Counted toward 2020 Target		
State Government Operations	1.0 to 2.0	1%
Local Government Operations[2]	To Be Determined[2]	NA
Green Buildings	26	15%
Recycling and Waste	9	5%
Water Sector Measures	4.8	3%
Methane Capture at Large Dairies	1	1%
Total Other Recommended Measures – Not Counted toward 2020 Target	42.8	NA

Source: CARB 2008. Note: the percentages in the right-hand column add up to more than 100 percent because the emissions reduction goal is 169 $MMTCO_{2e}$ and the Scoping Plan identifies 174 $MMTCO_{2e}$ of emissions reductions strategies. Based on the IPCC's Second Assessment Report GWPs.

$MMTCO_{2e}$: million metric tons of CO_{2e}

[1] Reductions represent an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target. A discussion of the regional targets for the Southern California Region and local land use changes recommended within the Southern California Association of Government's (SCAG) Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS) are included later in this section.

[2] According to the Measure Documentation Supplement to the Scoping Plan, local government actions and targets are anticipated to reduce vehicle miles by approximately 2 percent through land use planning, resulting in a potential GHG reduction of 2 million metric tons of CO_{2e} (or approximately 1.2 percent of the GHG reduction target). However, these reductions were not included in the Scoping Plan reductions to achieve the 2020 target.

Scoping Plan Update

CARB recently completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The final Update to the Scoping Plan was released in May, and CARB adopted it at the May 22, 2014, board hearing. The Update to the Scoping Plan defines CARB's climate change priorities for the next five years and lays the

groundwork to reach post-2020 goals in Executive Orders S-3-05 and B-16-2012. The update includes the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants. The GHG target identified in the 2008 Scoping Plan is based on IPCC's GWPs identified in the Second and Third Assessment Reports (see Table 5.4-1). IPCC's Fourth and Fifth Assessment Reports identified more recent GWP values based on the latest available science. CARB recalculated the 1990 GHG emission levels with the updated GWPs in the Fourth Assessment Report, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher, at 431 $MMTCO_2e$ (CARB 2014b).

The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the Update to the Scoping Plan also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a mid-term target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with, or exceeds, the trajectory created by statewide goals (CARB 2014b).

According to the Update to the Scoping Plan, reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014b).

The new Executive Order B-30-15 requires CARB to prepare another update to the Scoping Plan to address the 2030 target for the State. It is anticipated the Scoping Plan will be updated within the next five years to address the new 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030.

SB 375 – Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)

In 2008, SB 375 was adopted and was intended to represent the implementation mechanism necessary to achieve the GHG emissions reductions targets established in the Scoping Plan for the transportation sector as it relates to local land use decisions that affect travel behavior. Implementation is intended to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations with local land use planning to reduce vehicle miles traveled and vehicle trips. Specifically, SB 375 requires CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by a metropolitan planning organization (MPO). Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG is the MPO for the southern California region, which includes the counties of Los Angeles, Orange, San Bernardino County, Riverside, Ventura, and Imperial. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035.

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's existing transportation network. Adherence to the targets would result in 3 $MMTCO_2e$ reductions by 2020 and 15 $MMTCO_2e$ reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

SCAG 2012 RTP/SCS

SB 375 requires the MPOs to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plan. For the SCAG region, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted April 2012 (SCAG 2012). The SCS sets forth a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-1-07

On January 18, 2007, the state set a new low carbon fuel standard (LCFS) for transportation fuels sold within the state. Executive Order S-1-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

Senate Bills 1078 and 107, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. CARB has now approved an even higher goal of 33 percent by 2020. In 2011, the state legislature adopted this higher standard in SBX1-2. Executive Order S-14-08 was signed in November 2008, which expands the state's Renewable Energy Standard to 33 percent renewable power by 2020. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

California Building Standards Code

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and most recently revised in 2013 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the CEC adopted the 2013 Building and Energy Efficiency Standards, which went into effect July 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, CCR). CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[10] The

[10] The green building standards became mandatory in the 2010 edition of the code.

mandatory provisions of the California Green Building Code Standards became effective January 1, 2011 and were updated most recently in 2013.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business-as-usual," they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[11]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD identified a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

[11] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD identified a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. This bright-line threshold is based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal; and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.
- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

SCAQMD has identified an efficiency target for projects that exceed the screening threshold of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general plans).[12] The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[13]

For the purpose of this project, SCAQMD's project-level thresholds are used. If projects exceed the bright-line and per capita efficiency targets, GHG emissions would be considered potentially significant in the absence of mitigation measures.

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[12] It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

[13] SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

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Regional Construction Emissions Worksheet - Unmitigated

Demolition		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					0.7031	0.1065
	Off-Road	4.5083	48.3629	36.0738	0.0399	2.4508	2.2858
	Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**3.1539**	**2.3922**
Offsite							
	Hauling	0.1614	2.4925	1.8813	0.00566	0.172	0.0728
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0771	0.1031	1.0807	0.00206	0.1693	0.046
	Total	**0.2809**	**3.0013**	**3.4956**	**0.00859**	**0.3729**	**0.1321**
TOTAL		***4.7892***	***51.3642***	***39.5694***	***0.0485***	***3.5268***	***2.5243***

Site Preparation		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					7.7233	4.2454
	Off-Road	5.2609	56.8897	42.6318	0.0391	3.0883	2.8412
	Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**10.8116**	**7.0866**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0925	0.1238	1.2968	0.00247	0.2032	0.0552
	Total	**0.1349**	**0.5295**	**1.8304**	**0.00334**	**0.2349**	**0.0685**
TOTAL		***5.3958***	***57.4192***	***44.4622***	***0.0424***	***11.0465***	***7.1551***

Grading		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					2.8011	1.4396
	Off-Road	3.8327	40.4161	26.6731	0.0298	2.3284	2.1421
	Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**5.1295**	**3.5817**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0771	0.1031	1.0807	0.00206	0.1693	0.046
	Total	**0.1195**	**0.5088**	**1.6143**	**0.00293**	**0.201**	**0.0593**
TOTAL		***3.9522***	***40.9249***	***28.2874***	***0.0327***	***5.3305***	***3.6410***

Building Construction								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2015**						
	Off-Road		3.6591	30.0299	18.7446	0.0268	2.1167	1.9904
	Total		**3.6591**	**30.0299**	**18.7446**	**0.0268**	**2.1167**	**1.9904**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.2861	2.7386	3.6019	0.0059	0.2136	0.0895
	Worker		0.3546	0.4744	4.9712	0.00947	0.779	0.2116
	Total		**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9926**	**0.3011**
TOTAL			***4.2999***	***33.2428***	***27.3177***	***0.0422***	***3.1093***	***2.2915***
Onsite		**2016**						
	Off-Road		3.4062	28.5063	18.5066	0.0268	1.9674	1.8485
	Total		**3.4062**	**28.5063**	**18.5066**	**0.0268**	**1.9674**	**1.8485**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.251	2.4221	3.3421	0.00589	0.2057	0.0822
	Worker		0.3197	0.4289	4.4945	0.00946	0.7786	0.2112
	Total		**0.5707**	**2.851**	**7.8366**	**0.0154**	**0.9843**	**0.2935**
TOTAL			***3.9769***	***31.3573***	***26.3432***	***0.0422***	***2.9517***	***2.1420***

Paving								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2016**						
	Off-Road		2.0898	22.3859	14.8176	0.0223	1.261	1.1601
	Paving		0.3113				0	0
	Total		**2.4011**	**22.3859**	**14.8176**	**0.0223**	**1.261**	**1.1601**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0695	0.0932	0.9771	0.00206	0.1693	0.0459
	Total		**0.0695**	**0.0932**	**0.9771**	**0.00206**	**0.1693**	**0.0459**
TOTAL			***2.4706***	***22.4791***	***15.7947***	***0.0244***	***1.4303***	***1.2060***

Architectural Coating							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2016**						
	Archit. Coating	71.5527				0	0
	Off-Road	0.3685	2.3722	1.8839	0.00297	0.1966	0.1966
	Total	**71.9211**	**2.3722**	**1.8839**	**0.00297**	**0.1966**	**0.1966**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0649	0.087	0.9119	0.00192	0.158	0.0429
	Total	**0.0649**	**0.087**	**0.9119**	**0.00192**	**0.158**	**0.0429**
TOTAL		***71.9860***	***2.4592***	***2.7958***	***0.0049***	***0.3546***	***0.2395***
2016 - BC + P + AC		***78.4335***	***56.2956***	***44.9337***	***0.0715***	***4.7366***	***3.5875***
MAX DAILY		**78.43**	**57.42**	**44.93**	**0.07**	**11.05**	**7.16**
Regional Thresholds		**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?		Yes	No	No	No	No	No

Regional Construction Emissions Worksheet - Mitigated

Demolition		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					0.7031	0.1065
	Off-Road	4.5083	48.3629	36.0738	0.0399	2.4508	2.2858
	Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**3.1539**	**2.3922**
Offsite							
	Hauling	0.1614	2.4925	1.8813	0.00566	0.172	0.0728
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0771	0.1031	1.0807	0.00206	0.1693	0.046
	Total	**0.2809**	**3.0013**	**3.4956**	**0.00859**	**0.3729**	**0.1321**
TOTAL		***4.7892***	***51.3642***	***39.5694***	***0.0485***	***3.5268***	***2.5243***

Site Preparation		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					7.7233	4.2454
	Off-Road	5.2609	56.8897	42.6318	0.0391	3.0883	2.8412
	Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**10.8116**	**7.0866**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0925	0.1238	1.2968	0.00247	0.2032	0.0552
	Total	**0.1349**	**0.5295**	**1.8304**	**0.00334**	**0.2349**	**0.0685**
TOTAL		***5.3958***	***57.4192***	***44.4622***	***0.0424***	***11.0465***	***7.1551***

Grading		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2015**						
	Fugitive Dust					2.8011	1.4396
	Off-Road	3.8327	40.4161	26.6731	0.0298	2.3284	2.1421
	Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**5.1295**	**3.5817**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0424	0.4057	0.5336	0.00087	0.0317	0.0133
	Worker	0.0771	0.1031	1.0807	0.00206	0.1693	0.046
	Total	**0.1195**	**0.5088**	**1.6143**	**0.00293**	**0.201**	**0.0593**
TOTAL		***3.9522***	***40.9249***	***28.2874***	***0.0327***	***5.3305***	***3.6410***

Building Construction								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2015**						
	Off-Road		3.6591	30.0299	18.7446	0.0268	2.1167	1.9904
	Total		**3.6591**	**30.0299**	**18.7446**	**0.0268**	**2.1167**	**1.9904**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.2861	2.7386	3.6019	0.0059	0.2136	0.0895
	Worker		0.3546	0.4744	4.9712	0.00947	0.779	0.2116
	Total		**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9926**	**0.3011**
TOTAL			***4.2999***	***33.2428***	***27.3177***	***0.0422***	***3.1093***	***2.2915***
Onsite		**2016**						
	Off-Road		3.4062	28.5063	18.5066	0.0268	1.9674	1.8485
	Total		**3.4062**	**28.5063**	**18.5066**	**0.0268**	**1.9674**	**1.8485**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.251	2.4221	3.3421	0.00589	0.2057	0.0822
	Worker		0.3197	0.4289	4.4945	0.00946	0.7786	0.2112
	Total		**0.5707**	**2.851**	**7.8366**	**0.0154**	**0.9843**	**0.2935**
TOTAL			***3.9769***	***31.3573***	***26.3432***	***0.0422***	***2.9517***	***2.1420***

Paving								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2016**						
	Off-Road		2.0898	22.3859	14.8176	0.0223	1.261	1.1601
	Paving		0.3113				0	0
	Total		**2.4011**	**22.3859**	**14.8176**	**0.0223**	**1.261**	**1.1601**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0695	0.0932	0.9771	0.00206	0.1693	0.0459
	Total		**0.0695**	**0.0932**	**0.9771**	**0.00206**	**0.1693**	**0.0459**
TOTAL			***2.4706***	***22.4791***	***15.7947***	***0.0244***	***1.4303***	***1.2060***

Architectural Coating							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2016**						
	Archit. Coating	64.3974				0	0
	Off-Road	0.3685	2.3722	1.8839	0.00297	0.1966	0.1966
	Total	**64.7659**	**2.3722**	**1.8839**	**0.00297**	**0.1966**	**0.1966**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0	0	0	0	0	0
	Worker	0.0649	0.087	0.9119	0.00192	0.158	0.0429
	Total	**0.0649**	**0.087**	**0.9119**	**0.00192**	**0.158**	**0.0429**
TOTAL		***64.8308***	***2.4592***	***2.7958***	***0.0049***	***0.3546***	***0.2395***
2016 - BC + P + AC		***71.2783***	***56.2956***	***44.9337***	***0.0715***	***4.7366***	***3.5875***
MAX DAILY		**71.28**	**57.42**	**44.93**	**0.07**	**11.05**	**7.16**
Regional Thresholds		**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?		No	No	No	No	No	No

Regional Operational Emissions Worksheet

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.604	0.000	0.014	0.000	0.000	0.000
Energy	0.003	0.027	0.023	0.000	0.002	0.002
Mobile	2.294	10.982	31.909	0.083	5.425	1.562
Offroad	1.362	11.720	7.578	0.009	0.980	0.902
Total	**7.263**	**22.730**	**39.524**	**0.093**	**6.407**	**2.466**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.604	0.000	0.014	0.000	0.000	0.000
Energy	0.003	0.027	0.023	0.000	0.002	0.002
Mobile	2.390	11.507	31.735	0.080	5.425	1.563
Offroad	1.362	11.720	7.578	0.009	0.980	0.902
Total	**7.359**	**23.255**	**39.350**	**0.089**	**6.407**	**2.467**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	3.604	0.000	0.014	0.000	0.000	0.000
Energy	0.003	0.027	0.023	0.000	0.002	0.002
Mobile	2.390	11.507	31.909	0.083	5.425	1.563
Offroad	1.362	11.720	7.578	0.009	0.980	0.902
Total	**7.359**	**23.255**	**39.524**	**0.093**	**6.407**	**2.467**
Regional Thresholds	**55**	**55**	**550**	**150**	**150**	**550**
Exceeds Thresholds?	No	No	No	No	No	No

Localized Construction Emissions Worksheet - Unmitigated

Demolition		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2015**				
Fugitive Dust				0.7031	0.1065
Off-Road		48.3629	36.0738	2.4508	2.2858
Total		**48.3629**	**36.0738**	**3.1539**	**2.3922**
1-acre LSTs		83	673	54.22	17.95
Exceed Thresholds?		No	No	No	No

Site Preparation		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2015**				
Fugitive Dust				7.7233	4.2454
Off-Road		56.8897	42.6318	3.0883	2.8412
Total		**56.8897**	**42.6318**	**10.8116**	**7.0866**
3.50-acre LSTs		152	1,422	73.63	26.48
Exceed Thresholds?		No	No	No	No

Grading		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2015**				
Fugitive Dust				2.8011	1.4396
Off-Road		40.4161	26.6731	2.3284	2.1421
Total		**40.4161**	**26.6731**	**5.1295**	**3.5817**
2.50-acre LSTs		131	1,161	66.02	23.34
Exceed Thresholds?		No	No	No	No

Building Construction					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2015**				
Off-Road		30.0299	18.7446	2.1167	1.9904
Total		**30.0299**	**18.7446**	**2.1167**	**1.9904**
1.31-acre LSTs		154	3,960	56.72	19.14
Exceed Thresholds?		No	No	No	No
Onsite	**2016**				
Off-Road		28.5063	18.5066	1.9674	1.8485
Total		**28.5063**	**18.5066**	**1.9674**	**1.8485**
1.31-acre LSTs		154	3,960	56.72	19.14
Exceed Thresholds?		No	No	No	No

Paving					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2016**				
Off-Road		22.3859	14.8176	1.261	1.1601
Paving				0	0
Total		**22.3859**	**14.8176**	**1.261**	**1.1601**

Architectural Coating					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2016**				
Archit. Coating				0	0
Off-Road		2.3722	1.8839	0.1966	0.1966
Total		**2.3722**	**1.8839**	**0.1966**	**0.1966**
BC + P + AC		***53.2644***	***35.2081***	***3.4250***	***3.2052***
1.31-acre LSTs		95	785	56.72	19.14
Exceed Thresholds?		No	No	No	No

Localized Operational Emissions Worksheet

Summer

	NOx	CO	PM10 Total	PM2.5 Total
Area	0.000	0.014	0.000	0.000
Offroad	11.720	7.578	0.980	0.902
Truck Idling	1.377	0.185	0.003	0.003
Total	13.097	7.777	0.983	0.905

Winter

	NOx	CO	PM10 Total	PM2.5 Total
Area	0.000	0.014	0.000	0.000
Offroad	11.720	7.578	0.980	0.902
Truck Idling	1.377	0.185	0.003	0.003
Total	13.097	7.777	0.983	0.905

Max Daily

	NOx	CO	PM10 Total	PM2.5 Total
Area	0.000	0.014	0.000	0.000
Offroad	11.720	7.578	0.980	0.902
Truck Idling	1.377	0.185	0.003	0.003
Total	13.097	7.777	0.983	0.905

Regional Thresholds	**183**	**1,814**	**20.69**	**8.25**
Exceeds Thresholds?	No	No	No	No

GHG Emissions Worksheet

Proposed Project Buildout

	MTons Total
Total Construction	512.6005

Source	Buildout MTons/Year	Percent of Project Total
Area	0.0035	<1%
Energy	654	31%
Mobile	1,194	57%
Offroad	113	5%
Waste	91	4%
Water	10	<1%
Amortized Construction Emissions*	17	1%
Total All Sectors	2,078	100%

*Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2010, September 28. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 15. http://www.aqmd.gov/ceqa/handbook/GHG/2010/sept28mtg/sept29.html.

Idling Emissions - Criteria Air Pollutants
Parriott Place Warehouse Building
489 and 499 Parriott Place
City of Industry, CA 91745

Operation: Shipping and Receiving, Truck Activities - Idling Emissions

Idling Duration (min) 15

		EMFAC2014 Emissions Factor		
MDV[1]	Trucks/Day 24	gms/hr	lbs/hr	lbs/day
2016 Carbon Monoxide (CO) Idling Emissions:		0.648	1.43E-03	8.58E-03
2016 Nitrogen Oxides (NOx) Idling Emissions:		0.033	7.38E-05	4.43E-04
2016 PM_{10} Idling Emissions:		0.007	1.52E-05	9.13E-05
2016 $PM_{2.5}$ Idling Emissions:		0.007	1.46E-05	8.74E-05
T6 Instate Heavy[2]	Trucks/Day 21	gms/hr	lbs/hr	lbs/day
2016 Carbon Monoxide (CO) Idling Emissions:		7.235	1.59E-02	8.37E-02
2016 Nitrogen Oxides (NOx) Idling Emissions:		66.596	1.47E-01	7.71E-01
2016 PM_{10} Idling Emissions:		0.199	4.40E-04	2.31E-03
2016 $PM_{2.5}$ Idling Emissions:		0.191	4.21E-04	2.21E-03
T7 Tractor[3]	Trucks/Day 46	gms/hr	lbs/hr	lbs/day
2016 Carbon Monoxide (CO) Idling Emissions:		7.326	1.62E-02	1.86E-01
2016 Nitrogen Oxides (NOx) Idling Emissions:		51.051	1.13E-01	1.29E+00
2016 PM_{10} Idling Emissions:		0.085	1.88E-04	2.16E-03
2016 $PM_{2.5}$ Idling Emissions:		0.082	1.80E-04	2.07E-03

Total Idling Emissions	lbs/day
2016 Carbon Monoxide (CO) Idling Emissions:	**0.278**
2016 Nitrogen Oxides (NOx) Idling Emissions:	**2.066**
2016 PM_{10} Idling Emissions:	**0.005**
2016 $PM_{2.5}$ Idling Emissions:	**0.004**

[1] Idling emission factor for MDV class were obtained from EMFAC2014 for 2016.

[2] Idling emission factor for T6 Instate Heavy class were obtained from EMFAC2014 for 2016.

[3] Idling emission factor for T7 Tractor class were obtained from EMFAC2014 for 2016.

EMFAC2014 Emission Rates
Region Type: County
Region: Los Angeles (SC)
Calendar Year: 2016
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Idling Emission Factors*

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed	CO_Idle (gms/hr)	NOX_Idle (gms/hr)	PM10_Idle (gms/hr)	PM2.5_Idle (gms/hr)
Los Angeles (SC)	2016	Annual	MDV	DSL	Aggregated	Idle	0.648	0.033	0.007	0.007
Los Angeles (SC)	2016	Annual	T6 Instate Heavy	DSL	Aggregated	Idle	7.235	66.596	0.199	0.191
Los Angeles (SC)	2016	Annual	T7 Tractor	DSL	Aggregated	Idle	7.326	51.051	0.085	0.082

**EMFAC2014, version 1.0.7*

CalEEMod Project Characteristics Inputs (Construction)

Name:	
Address:	
County/Air Basin:	Los Angeles- South Coast County
Climate Zone:	9
Land Use Setting:	Urban
Operational Year:	2016
Utility Company:	Southern California Edison
Air Basin:	South Coast Air Basin
Air District:	SCAQMD
SRA:	11

Total Project Site Area 6.4 acres

Land Uses

Building A		
Office:	10,000	building square feet (BSF)
Warehouse:	74,660	**BSF**
Building B		
Office:	7,000	
Warehouse:	38,510	
Total		
Office:	17,000	BSF
Warehouse:	113,170	BSF
Total	**130,170**	**BSF**

Surface Parking Lot

Types of Spaces	Total Spaces	Area Per Space (square feet)	Total Area (SF)
Standard (9' x 19')	166	171	28,386
Compact (9' x 16')	35	144	5,040
Accessible (9' x 19')	9	171	1,539
Total	**210**	**n/a**	**34,965**

Other Land Uses		
Landscaping:	44,167	SF
*Other Asphalt Surfaces:**	53,033	SF

**Measured from site plan using Google Earth Pro v7.1.2.2041*

CalEEMod Land Use Inputs

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Warehouse	Industrial	Manufacturing	130.170	1000 sqft	3.37	130,170
Parking Lot	Parking	Parking Lot	0.80	acres	0.80	34,965
Non-Parking Asphalt	Parking	Other Asphalt Surfaces	1.22	acres	1.22	0
Landscape	Parking	Other Non-Asphalt Surfaces	1.01	acres	1.01	0
					6.40	

Demolition

*Demolition Volume:**	1306.58	tons
Amount of building debris to be hauled offsite	1,306.58	tons
Total Haul Trips:	129	trip ends (CalEEMod Default)
1-way haul distance:	20	miles (CalEEMod Default)
Haul truck capacity:	20	tons (CalEEMod default)

**Based on measurement using Google Earth Pro v7.1.2.2041*

Soil Haul

For purposes of this analysis, the site is assumed to not result in soil import or export.

Architectural Coating

Modeling assumes a VOC of 100 g/L for interior paints used for non-residential buildings pursuant to SCAQMD Rule 1113

Construction - Unmitigated Run

SCAQMD Rule 403

Replace Ground Cover	PM10:	5	% Reduction
	PM25:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph

SCAQMD Rule 1186

Clean Paved Road	9	% PM Reduction

Trip Generation

	Weekday	Saturday	Sunday			
Daily Trips:	463	463	463			
	Weekday	**Saturday**	**Sunday**			
Trip rate	3.56	3.56	3.56			
	Trips	**Type**	**Average VMT/Trip[1]**	**Miles/day**	**Percent VMT**	**Percent ADT[2]**
Fleet Mix:	372	LDA	11.964	4,451	61.26%	80.30%
	24	MDT	15.009	360	4.96%	5.20%
	21	LHDT	36.637	769	10.59%	4.50%
Trucks	46	HDT	36.637	1,685	23.20%	10.00%
	463			7,266	100%	100%
			average trip length (all trips)	**15.70**		
	truck trips/day total	91	trucks/day	46		

Source:

[1] VMT Source: Truck trip length and passenger vehicle trip length provided by Iteris for the City of Industry Climate Action Plan.

[2] Percent ADT source: Fontana, City of and San Bernardino County. 2003, August. Fontana Truck Trip Generation Study. (Light Warehouse Mix)

Onsite Equipment

Forklifts	Shift	Hours/shift	Operational Hours
2	3	4	24

Approximately 4 forklift would be needed for the proposed storage of 113,170 square feet.

Sources:

[1] Pallets stored: Raymond Handling Solutions. Calculators and Tools, Maximizing Your Space. http://www.raymondhs.net/systems-integration/maximize-space.asp

[2] Forklifts needed: Raymond Handling Solutions. Calculators and Tools, Fleet Right Sizing. http://www.raymondhs.net/systems-integration/fleet-right-sizing.asp

Water Use

Wastewater Generation		
per 1000SF of Warehouse	25	gallons per day
per 1000SF of Office	200	gallons per day

Warehouse Wastewater	2,829	gallons per day
Office Wasterwater	3,400	gallons per day
Total Wastewater	6,229	gallons per day
	2,273,676	gallons per year

Total Water Use (125% of Wastewater)	7,787	gallons per day
	2,842,095	gallons per year

Total Indoor Water:	2,273,676	gallons per year (gpy)
Total Outdoor Water:	568,419	gpy
Total Water Demand:	**2,842,095**	gpy

* City of Los Angeles 2006; Chapter 3.17, Utilities and Service Systems, of this IS/MND.

Solid Waste

Land Use	Number of Employees	Generation Rate (pounds per employee)	Total Solid Waste Per day (pounds)	Total Solid Waste Per Year (pounds)	Annual Solid Waste (tons)
Warehouse	75	13.82	1,037	378,323	189
Office	43	1.24	53	19,462	10
				Total	**199**

* CalRecycle 2009; Chapter 3.17, Utilities and Service Systems, of this IS/MND.

Water Mitigation

Install Low Flow Bathroom Faucet	32	% Reduction in flow
Install Low Flow Kitchen Faucet	18	% Reduction in flow
Install Low Flow Toilet	20	% Reduction in flow
Install Low Flow Shower	20	% Reduction in flow
Use Water Efficiency Irrigation System	6.1	% Reduction in flow

Energy Mitigation

2013 Building and Energy Efficiency Standards

Exceed Title 24	30%	Improvement

Water and Wastewater

Septic Tank	0%
Aerobic	100%
Facultative Lagoons	0%

CalEEMod Construction Phase Inputs

5-Day Work Week

Normalized for a 12-month schedule**				264
Phase Name	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Total Days**
Demolition	Demolition	10/1/2015	10/23/2015	17
Site Preparation	Site Preparation	10/24/2015	11/4/2015	8
Grading	Grading	11/5/2015	11/27/2015	17
Building Construction	Construction	11/28/2015	9/30/2016	220
Paving*	Paving	9/8/2016	9/30/2016	17
Architectural Coating*	Architectural Coating	9/8/2016	9/30/2016	17
			Days Total	261
			Months	12

* Assumed to overlap with building construction

** Slightly adjusted dates in CalEEMod runs to ensure total duration in each phase.

CalEEMod Construction Off-Road Equipment Inputs*

Equipment Type	CalEEMod Equipment Type	Unit Amount	Hours/Day	HP	LF	CalEEMod Vendor Trips
Demolition						
Concrete/Industrial Saws	Concrete/Industrial Saws	1	8	81	0.73	
Excavators	Excavators	3	8	162	0.38	
Rubber Tired Dozers	Rubber Tired Dozers	2	8	255	0.40	
Water Truck**		1				4
Site Preparation						
Rubber Tired Dozers	Rubber Tired Dozers	3	8	255	0.4	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	4	8	97	0.37	
Water Truck**						4
Grading						
Excavators	Excavators	1	8	162	0.38	
Graders	Graders	1	8	174	0.41	
Rubber Tired Dozers	Rubber Tired Dozers	1	8	255	0.4	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	8	97	0.37	4
Water Truck**						
Building Construction						
Cranes	Cranes	1	7	226	0.29	
Forklifts	Forklifts	3	8	89	0.2	
Generator Sets	Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	7	97	0.37	
Welders	Welders	1	8	46	0.45	
Paving						
Pavers	Pavers	2	8	125	0.42	
Paving Equipment	Paving Equipment	2	8	130	0.36	
Rollers	Rollers	2	8	80	0.38	
Architectural Coating						
Air Compressors	Air Compressors	1	6	78	0.48	

* CalEEMod defaults.

** Emissions accounted for in the vendor trips assigned.

Pavement Volume to Weight Conversion

Location	Total SF of Area[1]	Assumed Thickness (foot)[2]	Pool Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf)[3]	AC Mass (lbs)	AC Mass (tons)
Asphalt	174,211	0.33	58,070	45	2,613,165	1306.58
					TOTAL	**1306.58**

[1] As measured on Google Earth based on the proposed project site plan.

[2] *Pavements and Surface Materials* . Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Conneticut Cooperative Extension System, 1999.

[3] http://www.reade.com/Particle_Briefings/spec_gra2.html

Changes to the CalEEMod Defaults - Fleet Mix 2016

Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix	0.533598	0.058434	0.178244	0.125508	0.038944	0.006283	0.016425	0.031066	0.002453	0.003157	0.003691	0.000543	0.001655	100%
Trips	247	27	83	58	18	3	8	14	1	1	2	0	1	463
Percent	0.773967			0.13	0.045227		0.055299							100%
Proportion	0.689432	0.075499	0.230299	1.000000	0.861079	0.138921	0.297022	0.561782	0.044359	0.057090	0.004769	0.009819	0.029928	
	100%			100%	100%		100%							
Proportion calibrated for zero buses	0.689432	0.075499	0.230299	1.000000	0.861079	0.138921	0.297022	0.561782	0	0	0.004769	0	0	
	100%			100%	100%		86%							
Adjusted Proportion	0.689432	0.075499	0.230299	1.000000	0.861079	0.138921	0.345855	0.654145	0	0	0.004769	0	0	
Assumed Mix	80.30%			5.20%	4.50%		10.00%							100%
Adjusted Fleet Mix w/Assumed	**0.553614**	**0.060626**	**0.184930**	**0.052000**	**0.038749**	**0.006251**	**0.034586**	**0.065414**	**0**	**0**	**0.003829**	**0**	**0**	**100%**
Trips	256	28	86	24	18	3	16	30	0	0	2	0	0	463
	372			24	21		46							

Parriott

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	130.17	1000sqft	3.37	130,170.00	0
Other Asphalt Surfaces	1.22	Acre	1.22	0.00	0
Other Non-Asphalt Surfaces	1.01	Acre	1.01	0.00	0
Parking Lot	0.80	Acre	0.80	34,965.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided on the site plan.

Construction Phase - Based on anticipated one year construction schedule commencing in October 2015.

Trips and VMT - Assumes water truck generates 4 vendor trips per day for the demolition, site preparation, and grading phases.

Demolition -

Grading -

Architectural Coating - SCAQMD Rule 1113, Architectural Coating.

Vehicle Trips - Truck trip length and passenger vehicle trip length for the City of Industry is based information provided by Iteris for the City's Climate Action Plan

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Area Coating - SCAQMD Rule 1113, Architectural Coatings

Water And Wastewater - Assumes no septic. Total indoor and outdoor water usage based on usage data provided in the Utilities and Service Systems chapter of the Initial Study

Solid Waste - Total solid waste generation based on usage data provided in the Utilities and Service Systems chapter of the Initial Study.

Construction Off-road Equipment Mitigation - SCAQMD Rules 403 and 1186

Area Mitigation - Per SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Operational Off-Road Equipment - Based on proposed size of the warehouses.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	100
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016

tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblLandUse	LandUseSquareFeet	53,143.20	0.00
tblLandUse	LandUseSquareFeet	43,995.60	0.00
tblLandUse	LandUseSquareFeet	34,848.00	34,965.00
tblLandUse	LotAcreage	2.99	3.37
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	24.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	122.36	199.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LHD1	0.04	0.04

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CC_TL	8.40	15.70

tblVehicleTrips	CNW_TL	6.90	15.70
tblVehicleTrips	CW_TL	16.60	15.70
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	30,101,812.50	2,273,676.00
tblWater	OutdoorWaterUseRate	0.00	568,419.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.1470	1.4145	1.0817	1.3700e-003	0.1582	0.0795	0.2377	0.0748	0.0739	0.1488	0.0000	125.5898	125.5898	0.0285	0.0000	126.1882
2016	1.0200	3.2909	2.7362	4.4000e-003	0.0930	0.2096	0.3026	0.0250	0.1967	0.2217	0.0000	384.9606	384.9606	0.0692	0.0000	386.4127
Total	**1.1669**	**4.7053**	**3.8179**	**5.7700e-003**	**0.2512**	**0.2891**	**0.5403**	**0.0999**	**0.2707**	**0.3705**	**0.0000**	**510.5504**	**510.5504**	**0.0976**	**0.0000**	**512.6009**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.1470	1.4145	1.0817	1.3700e-003	0.0769	0.0795	0.1565	0.0345	0.0739	0.1084	0.0000	125.5897	125.5897	0.0285	0.0000	126.1881
2016	1.0200	3.2909	2.7362	4.4000e-003	0.0930	0.2096	0.3026	0.0250	0.1967	0.2217	0.0000	384.9603	384.9603	0.0692	0.0000	386.4124
Total	**1.1669**	**4.7053**	**3.8179**	**5.7700e-003**	**0.1700**	**0.2891**	**0.4591**	**0.0595**	**0.2707**	**0.3302**	**0.0000**	**510.5500**	**510.5500**	**0.0976**	**0.0000**	**512.6005**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**32.34**	**0.00**	**15.04**	**40.39**	**0.00**	**10.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7261	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003
Energy	7.6000e-004	6.8900e-003	5.7900e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	659.2481	659.2481	0.0301	6.3400e-003	661.8444
Mobile	0.4185	2.1339	5.8050	0.0147	0.9372	0.0316	0.9688	0.2507	0.0291	0.2798	0.0000	1,192.8768	1,192.8768	0.0432	0.0000	1,193.7834
Offroad	0.1770	1.5236	0.9852	1.1900e-003		0.1274	0.1274		0.1172	0.1172	0.0000	112.3123	112.3123	0.0339	0.0000	113.0237
Waste						0.0000	0.0000		0.0000	0.0000	40.3952	0.0000	40.3952	2.3873	0.0000	90.5283
Water						0.0000	0.0000		0.0000	0.0000	0.8044	10.2793	11.0837	3.2400e-	1.8500e-	11.7244
Total	**1.3224**	**3.6643**	**6.7977**	**0.0159**	**0.9372**	**0.1595**	**1.0968**	**0.2507**	**0.1468**	**0.3975**	**41.1996**	**1,974.7199**	**2,015.9195**	**2.4977**	**8.1900e-003**	**2,070.9077**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6577	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003
Energy	5.5000e-004	5.0000e-003	4.2000e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	651.4858	651.4858	0.0298	6.2400e-003	654.0472
Mobile	0.4185	2.1339	5.8050	0.0147	0.9372	0.0316	0.9688	0.2507	0.0291	0.2798	0.0000	1,192.8768	1,192.8768	0.0432	0.0000	1,193.7834
Offroad	0.1770	1.5236	0.9852	1.1900e-003		0.1274	0.1274		0.1172	0.1172	0.0000	112.3123	112.3123	0.0339	0.0000	113.0237
Waste						0.0000	0.0000		0.0000	0.0000	40.3952	0.0000	40.3952	2.3873	0.0000	90.5283
Water						0.0000	0.0000		0.0000	0.0000	0.6435	8.4746	9.1182	2.5900e-	1.4800e-	9.6307
Total	**1.2537**	**3.6625**	**6.7961**	**0.0159**	**0.9372**	**0.1594**	**1.0966**	**0.2507**	**0.1467**	**0.3974**	**41.0387**	**1,965.1529**	**2,006.1916**	**2.4967**	**7.7200e-003**	**2,061.0168**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**18.58**	**41.63**	**14.52**	**7.54**	**0.00**	**79.95**	**11.63**	**0.00**	**79.94**	**29.52**	**0.39**	**6.17**	**6.05**	**1.39**	**5.74**	**5.94**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2015	10/23/2015	5	17	
2	Site Preparation	Site Preparation	10/24/2015	11/4/2015	5	8	
3	Grading	Grading	11/5/2015	11/27/2015	5	17	
4	Building Construction	Building Construction	11/28/2015	9/30/2016	5	220	
5	Paving	Paving	9/8/2016	9/30/2016	5	17	
6	Architectural Coating	Architectural Coating	9/8/2016	9/30/2016	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,828; Non-Residential Outdoor: 65,609 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	69.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0140	0.0000	0.0140	2.1200e-003	0.0000	2.1200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4111	0.3066	3.4000e-004		0.0208	0.0208		0.0194	0.0194	0.0000	31.8251	31.8251	8.6300e-003	0.0000	32.0063
Total	**0.0383**	**0.4111**	**0.3066**	**3.4000e-004**	**0.0140**	**0.0208**	**0.0348**	**2.1200e-003**	**0.0194**	**0.0216**	**0.0000**	**31.8251**	**31.8251**	**8.6300e-003**	**0.0000**	**32.0063**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3500e-003	0.0216	0.0156	5.0000e-005	1.1000e-003	3.4000e-004	1.4400e-003	3.0000e-004	3.1000e-004	6.1000e-004	0.0000	4.4490	4.4490	4.0000e-005	0.0000	4.4498
Vendor	3.5000e-004	3.5200e-003	4.3700e-003	1.0000e-005	2.1000e-004	6.0000e-005	2.7000e-004	6.0000e-005	5.0000e-005	1.1000e-004	0.0000	0.6843	0.6843	1.0000e-005	0.0000	0.6844
Worker	6.2000e-004	9.0000e-004	9.3700e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.4104	1.4104	8.0000e-005	0.0000	1.4122
Total	**2.3200e-003**	**0.0260**	**0.0293**	**8.0000e-005**	**2.7100e-003**	**4.1000e-004**	**3.1200e-003**	**7.3000e-004**	**3.7000e-004**	**1.1000e-003**	**0.0000**	**6.5437**	**6.5437**	**1.3000e-004**	**0.0000**	**6.5463**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9800e-003	0.0000	5.9800e-003	9.0000e-004	0.0000	9.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4111	0.3066	3.4000e-004		0.0208	0.0208		0.0194	0.0194	0.0000	31.8250	31.8250	8.6300e-003	0.0000	32.0062
Total	**0.0383**	**0.4111**	**0.3066**	**3.4000e-004**	**5.9800e-003**	**0.0208**	**0.0268**	**9.0000e-004**	**0.0194**	**0.0203**	**0.0000**	**31.8250**	**31.8250**	**8.6300e-003**	**0.0000**	**32.0062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3500e-003	0.0216	0.0156	5.0000e-005	1.1000e-003	3.4000e-004	1.4400e-003	3.0000e-004	3.1000e-004	6.1000e-004	0.0000	4.4490	4.4490	4.0000e-005	0.0000	4.4498
Vendor	3.5000e-004	3.5200e-003	4.3700e-003	1.0000e-005	2.1000e-004	6.0000e-005	2.7000e-004	6.0000e-005	5.0000e-005	1.1000e-004	0.0000	0.6843	0.6843	1.0000e-005	0.0000	0.6844
Worker	6.2000e-004	9.0000e-004	9.3700e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.4104	1.4104	8.0000e-005	0.0000	1.4122
Total	**2.3200e-003**	**0.0260**	**0.0293**	**8.0000e-005**	**2.7100e-003**	**4.1000e-004**	**3.1200e-003**	**7.3000e-004**	**3.7000e-004**	**1.1000e-003**	**0.0000**	**6.5437**	**6.5437**	**1.3000e-004**	**0.0000**	**6.5463**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0723	0.0000	0.0723	0.0397	0.0000	0.0397	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.2276	0.1705	1.6000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	14.9205	14.9205	4.4500e-003	0.0000	15.0140
Total	**0.0210**	**0.2276**	**0.1705**	**1.6000e-004**	**0.0723**	**0.0124**	**0.0846**	**0.0397**	**0.0114**	**0.0511**	**0.0000**	**14.9205**	**14.9205**	**4.4500e-003**	**0.0000**	**15.0140**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	1.6600e-003	2.0500e-003	0.0000	1.0000e-004	3.0000e-005	1.2000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.3220	0.3220	0.0000	0.0000	0.3221
Worker	3.5000e-004	5.1000e-004	5.2900e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7965	0.7965	5.0000e-005	0.0000	0.7975
Total	**5.1000e-004**	**2.1700e-003**	**7.3400e-003**	**1.0000e-005**	**8.9000e-004**	**4.0000e-005**	**9.2000e-004**	**2.4000e-004**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**1.1185**	**1.1185**	**5.0000e-005**	**0.0000**	**1.1195**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0309	0.0000	0.0309	0.0170	0.0000	0.0170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.2276	0.1705	1.6000e-004		0.0124	0.0124		0.0114	0.0114	0.0000	14.9204	14.9204	4.4500e-003	0.0000	15.0140
Total	**0.0210**	**0.2276**	**0.1705**	**1.6000e-004**	**0.0309**	**0.0124**	**0.0432**	**0.0170**	**0.0114**	**0.0283**	**0.0000**	**14.9204**	**14.9204**	**4.4500e-003**	**0.0000**	**15.0140**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	1.6600e-003	2.0500e-003	0.0000	1.0000e-004	3.0000e-005	1.2000e-004	3.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.3220	0.3220	0.0000	0.0000	0.3221
Worker	3.5000e-004	5.1000e-004	5.2900e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	0.7965	0.7965	5.0000e-005	0.0000	0.7975
Total	**5.1000e-004**	**2.1700e-003**	**7.3400e-003**	**1.0000e-005**	**8.9000e-004**	**4.0000e-005**	**9.2000e-004**	**2.4000e-004**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**1.1185**	**1.1185**	**5.0000e-005**	**0.0000**	**1.1195**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0557	0.0000	0.0557	0.0286	0.0000	0.0286	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0326	0.3435	0.2267	2.5000e-004		0.0198	0.0198		0.0182	0.0182	0.0000	24.1281	24.1281	7.2000e-003	0.0000	24.2793
Total	**0.0326**	**0.3435**	**0.2267**	**2.5000e-004**	**0.0557**	**0.0198**	**0.0755**	**0.0286**	**0.0182**	**0.0468**	**0.0000**	**24.1281**	**24.1281**	**7.2000e-003**	**0.0000**	**24.2793**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	3.5200e-003	4.3700e-003	1.0000e-005	2.1000e-004	6.0000e-005	2.7000e-004	6.0000e-005	5.0000e-005	1.1000e-004	0.0000	0.6843	0.6843	1.0000e-005	0.0000	0.6844
Worker	6.2000e-004	9.0000e-004	9.3700e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.4104	1.4104	8.0000e-005	0.0000	1.4122
Total	**9.7000e-004**	**4.4200e-003**	**0.0137**	**3.0000e-005**	**1.6100e-003**	**7.0000e-005**	**1.6800e-003**	**4.3000e-004**	**6.0000e-005**	**4.9000e-004**	**0.0000**	**2.0947**	**2.0947**	**9.0000e-005**	**0.0000**	**2.0966**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0238	0.0000	0.0238	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0326	0.3435	0.2267	2.5000e-004		0.0198	0.0198		0.0182	0.0182	0.0000	24.1280	24.1280	7.2000e-003	0.0000	24.2793
Total	**0.0326**	**0.3435**	**0.2267**	**2.5000e-004**	**0.0238**	**0.0198**	**0.0436**	**0.0122**	**0.0182**	**0.0305**	**0.0000**	**24.1280**	**24.1280**	**7.2000e-003**	**0.0000**	**24.2793**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	3.5200e-003	4.3700e-003	1.0000e-005	2.1000e-004	6.0000e-005	2.7000e-004	6.0000e-005	5.0000e-005	1.1000e-004	0.0000	0.6843	0.6843	1.0000e-005	0.0000	0.6844
Worker	6.2000e-004	9.0000e-004	9.3700e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.4104	1.4104	8.0000e-005	0.0000	1.4122
Total	**9.7000e-004**	**4.4200e-003**	**0.0137**	**3.0000e-005**	**1.6100e-003**	**7.0000e-005**	**1.6800e-003**	**4.3000e-004**	**6.0000e-005**	**4.9000e-004**	**0.0000**	**2.0947**	**2.0947**	**9.0000e-005**	**0.0000**	**2.0966**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0439	0.3604	0.2249	3.2000e-004		0.0254	0.0254		0.0239	0.0239	0.0000	29.2793	29.2793	7.3500e-003	0.0000	29.4336
Total	**0.0439**	**0.3604**	**0.2249**	**3.2000e-004**		**0.0254**	**0.0254**		**0.0239**	**0.0239**	**0.0000**	**29.2793**	**29.2793**	**7.3500e-003**	**0.0000**	**29.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.0335	0.0416	7.0000e-005	1.9900e-003	5.4000e-004	2.5300e-003	5.7000e-004	5.0000e-004	1.0600e-003	0.0000	6.5207	6.5207	5.0000e-005	0.0000	6.5218
Worker	4.0200e-003	5.8400e-003	0.0609	1.2000e-004	9.0700e-003	9.0000e-005	9.1700e-003	2.4100e-003	8.0000e-005	2.4900e-003	0.0000	9.1594	9.1594	5.5000e-004	0.0000	9.1708
Total	**7.3400e-003**	**0.0394**	**0.1025**	**1.9000e-004**	**0.0111**	**6.3000e-004**	**0.0117**	**2.9800e-003**	**5.8000e-004**	**3.5500e-003**	**0.0000**	**15.6801**	**15.6801**	**6.0000e-004**	**0.0000**	**15.6926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0439	0.3604	0.2249	3.2000e-004		0.0254	0.0254		0.0239	0.0239	0.0000	29.2793	29.2793	7.3500e-003	0.0000	29.4336
Total	**0.0439**	**0.3604**	**0.2249**	**3.2000e-004**		**0.0254**	**0.0254**		**0.0239**	**0.0239**	**0.0000**	**29.2793**	**29.2793**	**7.3500e-003**	**0.0000**	**29.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.0335	0.0416	7.0000e-005	1.9900e-003	5.4000e-004	2.5300e-003	5.7000e-004	5.0000e-004	1.0600e-003	0.0000	6.5207	6.5207	5.0000e-005	0.0000	6.5218
Worker	4.0200e-003	5.8400e-003	0.0609	1.2000e-004	9.0700e-003	9.0000e-005	9.1700e-003	2.4100e-003	8.0000e-005	2.4900e-003	0.0000	9.1594	9.1594	5.5000e-004	0.0000	9.1708
Total	**7.3400e-003**	**0.0394**	**0.1025**	**1.9000e-004**	**0.0111**	**6.3000e-004**	**0.0117**	**2.9800e-003**	**5.8000e-004**	**3.5500e-003**	**0.0000**	**15.6801**	**15.6801**	**6.0000e-004**	**0.0000**	**15.6926**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3338	2.7936	1.8137	2.6300e-003		0.1928	0.1928		0.1812	0.1812	0.0000	237.3105	237.3105	0.0589	0.0000	238.5465
Total	**0.3338**	**2.7936**	**1.8137**	**2.6300e-003**		**0.1928**	**0.1928**		**0.1812**	**0.1812**	**0.0000**	**237.3105**	**237.3105**	**0.0589**	**0.0000**	**238.5465**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0238	0.2421	0.3144	5.8000e-004	0.0162	3.6400e-003	0.0199	4.6300e-003	3.3400e-003	7.9700e-003	0.0000	52.6777	52.6777	3.9000e-004	0.0000	52.6859
Worker	0.0295	0.0432	0.4498	9.4000e-004	0.0741	7.1000e-004	0.0748	0.0197	6.6000e-004	0.0203	0.0000	72.3047	72.3047	4.1000e-003	0.0000	72.3909
Total	**0.0533**	**0.2852**	**0.7642**	**1.5200e-003**	**0.0903**	**4.3500e-003**	**0.0947**	**0.0243**	**4.0000e-003**	**0.0283**	**0.0000**	**124.9823**	**124.9823**	**4.4900e-003**	**0.0000**	**125.0768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3338	2.7936	1.8137	2.6300e-003		0.1928	0.1928		0.1812	0.1812	0.0000	237.3102	237.3102	0.0589	0.0000	238.5462
Total	**0.3338**	**2.7936**	**1.8137**	**2.6300e-003**		**0.1928**	**0.1928**		**0.1812**	**0.1812**	**0.0000**	**237.3102**	**237.3102**	**0.0589**	**0.0000**	**238.5462**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0238	0.2421	0.3144	5.8000e-004	0.0162	3.6400e-003	0.0199	4.6300e-003	3.3400e-003	7.9700e-003	0.0000	52.6777	52.6777	3.9000e-004	0.0000	52.6859
Worker	0.0295	0.0432	0.4498	9.4000e-004	0.0741	7.1000e-004	0.0748	0.0197	6.6000e-004	0.0203	0.0000	72.3047	72.3047	4.1000e-003	0.0000	72.3909
Total	**0.0533**	**0.2852**	**0.7642**	**1.5200e-003**	**0.0903**	**4.3500e-003**	**0.0947**	**0.0243**	**4.0000e-003**	**0.0283**	**0.0000**	**124.9823**	**124.9823**	**4.4900e-003**	**0.0000**	**125.0768**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0178	0.1903	0.1260	1.9000e-004		0.0107	0.0107		9.8600e-003	9.8600e-003	0.0000	17.8617	17.8617	5.3900e-003	0.0000	17.9749
Paving	2.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0204**	**0.1903**	**0.1260**	**1.9000e-004**		**0.0107**	**0.0107**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**17.8617**	**17.8617**	**5.3900e-003**	**0.0000**	**17.9749**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.1000e-004	8.4800e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3633	1.3633	8.0000e-005	0.0000	1.3650
Total	**5.6000e-004**	**8.1000e-004**	**8.4800e-003**	**2.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4100e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.3633**	**1.3633**	**8.0000e-005**	**0.0000**	**1.3650**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0178	0.1903	0.1260	1.9000e-004		0.0107	0.0107		9.8600e-003	9.8600e-003	0.0000	17.8617	17.8617	5.3900e-003	0.0000	17.9749
Paving	2.6500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0204**	**0.1903**	**0.1260**	**1.9000e-004**		**0.0107**	**0.0107**		**9.8600e-003**	**9.8600e-003**	**0.0000**	**17.8617**	**17.8617**	**5.3900e-003**	**0.0000**	**17.9749**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.1000e-004	8.4800e-003	2.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3633	1.3633	8.0000e-005	0.0000	1.3650
Total	**5.6000e-004**	**8.1000e-004**	**8.4800e-003**	**2.0000e-005**	**1.4000e-003**	**1.0000e-005**	**1.4100e-003**	**3.7000e-004**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**1.3633**	**1.3633**	**8.0000e-005**	**0.0000**	**1.3650**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1300e-003	0.0202	0.0160	3.0000e-005		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	2.1703	2.1703	2.6000e-004	0.0000	2.1756
Total	**0.6113**	**0.0202**	**0.0160**	**3.0000e-005**		**1.6700e-003**	**1.6700e-003**		**1.6700e-003**	**1.6700e-003**	**0.0000**	**2.1703**	**2.1703**	**2.6000e-004**	**0.0000**	**2.1756**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.6000e-004	7.9200e-003	2.0000e-005	1.3000e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2724	1.2724	7.0000e-005	0.0000	1.2740
Total	**5.2000e-004**	**7.6000e-004**	**7.9200e-003**	**2.0000e-005**	**1.3000e-003**	**1.0000e-005**	**1.3200e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.2724**	**1.2724**	**7.0000e-005**	**0.0000**	**1.2740**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6082					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1300e-003	0.0202	0.0160	3.0000e-005		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	2.1703	2.1703	2.6000e-004	0.0000	2.1756
Total	**0.6113**	**0.0202**	**0.0160**	**3.0000e-005**		**1.6700e-003**	**1.6700e-003**		**1.6700e-003**	**1.6700e-003**	**0.0000**	**2.1703**	**2.1703**	**2.6000e-004**	**0.0000**	**2.1756**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	7.6000e-004	7.9200e-003	2.0000e-005	1.3000e-003	1.0000e-005	1.3200e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.2724	1.2724	7.0000e-005	0.0000	1.2740
Total	**5.2000e-004**	**7.6000e-004**	**7.9200e-003**	**2.0000e-005**	**1.3000e-003**	**1.0000e-005**	**1.3200e-003**	**3.5000e-004**	**1.0000e-005**	**3.6000e-004**	**0.0000**	**1.2724**	**1.2724**	**7.0000e-005**	**0.0000**	**1.2740**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4185	2.1339	5.8050	0.0147	0.9372	0.0316	0.9688	0.2507	0.0291	0.2798	0.0000	1,192.8768	1,192.8768	0.0432	0.0000	1,193.7834
Unmitigated	0.4185	2.1339	5.8050	0.0147	0.9372	0.0316	0.9688	0.2507	0.0291	0.2798	0.0000	1,192.8768	1,192.8768	0.0432	0.0000	1,193.7834

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	463.41	463.41	463.41	2,470,016	2,470,016
Total	463.41	463.41	463.41	2,470,016	2,470,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.70	15.70	15.70	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.553614	0.060626	0.184930	0.052000	0.038749	0.006251	0.034586	0.065414	0.000000	0.000000	0.003829	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	646.0468	646.0468	0.0297	6.1400e-003	648.5751
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	651.7461	651.7461	0.0300	6.2000e-003	654.2967
NaturalGas Mitigated	5.5000e-004	5.0000e-003	4.2000e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4390	5.4390	1.0000e-004	1.0000e-004	5.4721
NaturalGas Unmitigated	7.6000e-004	6.8900e-003	5.7900e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.5021	7.5021	1.4000e-004	1.4000e-004	7.5477

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	140584	7.6000e-004	6.8900e-003	5.7900e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.5021	7.5021	1.4000e-004	1.4000e-004	7.5477
Total		**7.6000e-004**	**6.8900e-003**	**5.7900e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**7.5021**	**7.5021**	**1.4000e-004**	**1.4000e-004**	**7.5477**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	101923	5.5000e-004	5.0000e-003	4.2000e-003	3.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	5.4390	5.4390	1.0000e-004	1.0000e-004	5.4721
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**5.5000e-004**	**5.0000e-003**	**4.2000e-003**	**3.0000e-005**		**3.8000e-004**	**3.8000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**5.4390**	**5.4390**	**1.0000e-004**	**1.0000e-004**	**5.4721**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	30769.2	8.8051	4.0000e-004	8.0000e-005	8.8396
Refrigerated Warehouse-No Rail	2.24673e+006	642.9409	0.0296	6.1100e-003	645.4571
Total		**651.7461**	**0.0300**	**6.1900e-003**	**654.2967**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	30769.2	8.8051	4.0000e-004	8.0000e-005	8.8396
Refrigerated Warehouse-No Rail	2.22682e+006	637.2416	0.0293	6.0600e-003	639.7355
Total		**646.0468**	**0.0297**	**6.1400e-003**	**648.5751**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6577	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003
Unmitigated	0.7261	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1292					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003
Total	**0.7261**	**2.0000e-005**	**1.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3100e-003**	**3.3100e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0608					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.3100e-003	3.3100e-003	1.0000e-005	0.0000	3.5000e-003
Total	**0.6577**	**2.0000e-005**	**1.7400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.3100e-003**	**3.3100e-003**	**1.0000e-005**	**0.0000**	**3.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.1182	2.5900e-003	1.4800e-003	9.6307
Unmitigated	11.0837	3.2400e-003	1.8500e-003	11.7244

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	2.27368 / 0.568419	11.0837	3.2400e-003	1.8500e-003	11.7244
Total		**11.0837**	**3.2400e-003**	**1.8500e-003**	**11.7244**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1.81894 / 0.533745	9.1182	2.5900e-003	1.4800e-003	9.6307
Total		**9.1182**	**2.5900e-003**	**1.4800e-003**	**9.6307**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.3952	2.3873	0.0000	90.5283
Unmitigated	40.3952	2.3873	0.0000	90.5283

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	199	40.3952	2.3873	0.0000	90.5283
Total		**40.3952**	**2.3873**	**0.0000**	**90.5283**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	199	40.3952	2.3873	0.0000	90.5283
Total		**40.3952**	**2.3873**	**0.0000**	**90.5283**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	24.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.1770	1.5236	0.9852	1.1900e-003		0.1274	0.1274		0.1172	0.1172	0.0000	112.3123	112.3123	0.0339	0.0000	113.0237
Total	**0.1770**	**1.5236**	**0.9852**	**1.1900e-003**		**0.1274**	**0.1274**		**0.1172**	**0.1172**	**0.0000**	**112.3123**	**112.3123**	**0.0339**	**0.0000**	**113.0237**

10.0 Vegetation

Parriott

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	130.17	1000sqft	3.37	130,170.00	0
Other Asphalt Surfaces	1.22	Acre	1.22	0.00	0
Other Non-Asphalt Surfaces	1.01	Acre	1.01	0.00	0
Parking Lot	0.80	Acre	0.80	34,965.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided on the site plan.

Construction Phase - Based on anticipated one year construction schedule commencing in October 2015.

Trips and VMT - Assumes water truck generates 4 vendor trips per day for the demolition, site preparation, and grading phases.

Demolition -

Grading -

Architectural Coating - SCAQMD Rule 1113, Architectural Coating.

Vehicle Trips - Truck trip length and passenger vehicle trip length for the City of Industry is based information provided by Iteris for the City's Climate Action Plan

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Area Coating - SCAQMD Rule 1113, Architectural Coatings

Water And Wastewater - Assumes no septic. Total indoor and outdoor water usage based on usage data provided in the Utilities and Service Systems chapter of the Initial Study

Solid Waste - Total solid waste generation based on usage data provided in the Utilities and Service Systems chapter of the Initial Study.

Construction Off-road Equipment Mitigation - SCAQMD Rules 403 and 1186

Area Mitigation - Per SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Operational Off-Road Equipment - Based on proposed size of the warehouses.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	100
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016

tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblLandUse	LandUseSquareFeet	53,143.20	0.00
tblLandUse	LandUseSquareFeet	43,995.60	0.00
tblLandUse	LandUseSquareFeet	34,848.00	34,965.00
tblLandUse	LotAcreage	2.99	3.37
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	24.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	122.36	199.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LHD1	0.04	0.04

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CC_TL	8.40	15.70

tblVehicleTrips	CNW_TL	6.90	15.70
tblVehicleTrips	CW_TL	16.60	15.70
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	30,101,812.50	2,273,676.00
tblWater	OutdoorWaterUseRate	0.00	568,419.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3958	57.4191	44.4622	0.0485	18.2924	3.0970	21.3894	9.9911	2.8492	12.8404	0.0000	4,971.7032	4,971.7032	1.2413	0.0000	4,997.7709
2016	78.4335	56.2957	44.9338	0.0714	1.2638	3.4727	4.7364	0.3384	3.2490	3.5874	0.0000	6,993.6004	6,993.6004	1.4640	0.0000	7,024.3437
Total	**83.8293**	**113.7148**	**89.3960**	**0.1199**	**19.5562**	**6.5697**	**26.1258**	**10.3295**	**6.0982**	**16.4278**	**0.0000**	**11,965.3035**	**11,965.3035**	**2.7053**	**0.0000**	**12,022.1147**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3958	57.4191	44.4622	0.0485	7.9495	3.0970	11.0465	4.3058	2.8492	7.1551	0.0000	4,971.7032	4,971.7032	1.2413	0.0000	4,997.7709
2016	78.4335	56.2957	44.9338	0.0714	1.2638	3.4727	4.7364	0.3384	3.2490	3.5874	0.0000	6,993.6004	6,993.6004	1.4640	0.0000	7,024.3437
Total	**83.8293**	**113.7148**	**89.3960**	**0.1199**	**9.2133**	**6.5697**	**15.7829**	**4.6442**	**6.0982**	**10.7425**	**0.0000**	**11,965.3035**	**11,965.3035**	**2.7053**	**0.0000**	**12,022.1146**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.89**	**0.00**	**39.59**	**55.04**	**0.00**	**34.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9792	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Energy	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888
Mobile	2.3901	11.5073	31.7349	0.0799	5.2510	0.1742	5.4252	1.4026	0.1602	1.5628		7,154.6304	7,154.6304	0.2619		7,160.1308
Offroad	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**7.7351**	**23.2650**	**39.3587**	**0.0893**	**5.2510**	**1.1571**	**6.4082**	**1.4026**	**1.0647**	**2.4673**		**8,152.3042**	**8,152.3042**	**0.5501**	**8.3000e-004**	**8,164.1145**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6043	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Energy	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
Mobile	2.3901	11.5073	31.7349	0.0799	5.2510	0.1742	5.4252	1.4026	0.1602	1.5628		7,154.6304	7,154.6304	0.2619		7,160.1308
Offroad	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**7.3590**	**23.2546**	**39.3499**	**0.0892**	**5.2510**	**1.1563**	**6.4074**	**1.4026**	**1.0639**	**2.4665**		**8,139.8432**	**8,139.8432**	**0.5499**	**6.0000e-004**	**8,151.5776**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**22.46**	**50.42**	**19.28**	**10.33**	**0.00**	**84.76**	**15.31**	**0.00**	**84.76**	**36.57**	**0.00**	**11.83**	**11.83**	**52.26**	**27.71**	**11.89**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2015	10/23/2015	5	17	
2	Site Preparation	Site Preparation	10/24/2015	11/4/2015	5	8	
3	Grading	Grading	11/5/2015	11/27/2015	5	17	
4	Building Construction	Building Construction	11/28/2015	9/30/2016	5	220	
5	Paving	Paving	9/8/2016	9/30/2016	5	17	
6	Architectural Coating	Architectural Coating	9/8/2016	9/30/2016	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,828; Non-Residential Outdoor: 65,609 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41

Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	69.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6447	0.0000	1.6447	0.2490	0.0000	0.2490			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**1.6447**	**2.4508**	**4.0955**	**0.2490**	**2.2858**	**2.5348**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1614	2.4925	1.8813	5.6600e-003	0.1321	0.0398	0.1720	0.0362	0.0366	0.0728		576.1823	576.1823	4.7500e-003		576.2821
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.2809**	**3.0013**	**3.4956**	**8.5900e-003**	**0.3247**	**0.0482**	**0.3729**	**0.0877**	**0.0443**	**0.1321**		**844.5098**	**844.5098**	**0.0164**		**844.8535**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7031	0.0000	0.7031	0.1065	0.0000	0.1065			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.7031**	**2.4508**	**3.1539**	**0.1065**	**2.2858**	**2.3922**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1614	2.4925	1.8813	5.6600e-003	0.1321	0.0398	0.1720	0.0362	0.0366	0.0728		576.1823	576.1823	4.7500e-003		576.2821
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.2809**	**3.0013**	**3.4956**	**8.5900e-003**	**0.3247**	**0.0482**	**0.3729**	**0.0877**	**0.0443**	**0.1321**		**844.5098**	**844.5098**	**0.0164**		**844.8535**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.1349**	**0.5295**	**1.8304**	**3.3400e-003**	**0.2261**	**8.7200e-003**	**0.2349**	**0.0605**	**8.0100e-003**	**0.0685**		**304.3307**	**304.3307**	**0.0138**		**304.6204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**7.7233**	**3.0883**	**10.8116**	**4.2454**	**2.8412**	**7.0866**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.1349**	**0.5295**	**1.8304**	**3.3400e-003**	**0.2261**	**8.7200e-003**	**0.2349**	**0.0605**	**8.0100e-003**	**0.0685**		**304.3307**	**304.3307**	**0.0138**		**304.6204**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1195**	**0.5088**	**1.6143**	**2.9300e-003**	**0.1926**	**8.3900e-003**	**0.2010**	**0.0516**	**7.7000e-003**	**0.0593**		**268.3275**	**268.3275**	**0.0116**		**268.5715**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8011	0.0000	2.8011	1.4396	0.0000	1.4396			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**2.8011**	**2.3284**	**5.1295**	**1.4396**	**2.1421**	**3.5817**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1195**	**0.5088**	**1.6143**	**2.9300e-003**	**0.1926**	**8.3900e-003**	**0.2010**	**0.0516**	**7.7000e-003**	**0.0593**		**268.3275**	**268.3275**	**0.0116**		**268.5715**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2861	2.7386	3.6019	5.9000e-003	0.1683	0.0453	0.2136	0.0479	0.0417	0.0895		596.1017	596.1017	4.9600e-003		596.2058
Worker	0.3546	0.4744	4.9712	9.4700e-003	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		828.0742	828.0742	0.0501		829.1256
Total	**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9396**	**0.0530**	**0.9926**	**0.2524**	**0.0487**	**0.3011**		**1,424.1759**	**1,424.1759**	**0.0550**		**1,425.3314**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2861	2.7386	3.6019	5.9000e-003	0.1683	0.0453	0.2136	0.0479	0.0417	0.0895		596.1017	596.1017	4.9600e-003		596.2058
Worker	0.3546	0.4744	4.9712	9.4700e-003	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		828.0742	828.0742	0.0501		829.1256
Total	**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9396**	**0.0530**	**0.9926**	**0.2524**	**0.0487**	**0.3011**		**1,424.1759**	**1,424.1759**	**0.0550**		**1,425.3314**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2510	2.4221	3.3421	5.8900e-003	0.1684	0.0373	0.2057	0.0479	0.0343	0.0822		589.6587	589.6587	4.4900e-003		589.7530
Worker	0.3197	0.4289	4.4945	9.4600e-003	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		800.4215	800.4215	0.0462		801.3909
Total	**0.5707**	**2.8510**	**7.8366**	**0.0154**	**0.9396**	**0.0446**	**0.9843**	**0.2525**	**0.0410**	**0.2935**		**1,390.0802**	**1,390.0802**	**0.0507**		**1,391.1439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2510	2.4221	3.3421	5.8900e-003	0.1684	0.0373	0.2057	0.0479	0.0343	0.0822		589.6587	589.6587	4.4900e-003		589.7530
Worker	0.3197	0.4289	4.4945	9.4600e-003	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		800.4215	800.4215	0.0462		801.3909
Total	**0.5707**	**2.8510**	**7.8366**	**0.0154**	**0.9396**	**0.0446**	**0.9843**	**0.2525**	**0.0410**	**0.2935**		**1,390.0802**	**1,390.0802**	**0.0507**		**1,391.1439**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**71.9211**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**71.9211**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3901	11.5073	31.7349	0.0799	5.2510	0.1742	5.4252	1.4026	0.1602	1.5628		7,154.6304	7,154.6304	0.2619		7,160.1308
Unmitigated	2.3901	11.5073	31.7349	0.0799	5.2510	0.1742	5.4252	1.4026	0.1602	1.5628		7,154.6304	7,154.6304	0.2619		7,160.1308

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	463.41	463.41	463.41	2,470,016	2,470,016
Total	463.41	463.41	463.41	2,470,016	2,470,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.70	15.70	15.70	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.553614	0.060626	0.184930	0.052000	0.038749	0.006251	0.034586	0.065414	0.000000	0.000000	0.003829	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
NaturalGas Unmitigated	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	385.161	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1500e-003**	**0.0378**	**0.0317**	**2.3000e-004**		**2.8700e-003**	**2.8700e-003**		**2.8700e-003**	**2.8700e-003**		**45.3130**	**45.3130**	**8.7000e-004**	**8.3000e-004**	**45.5888**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0.279241	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.0100e-003**	**0.0274**	**0.0230**	**1.6000e-004**		**2.0800e-003**	**2.0800e-003**		**2.0800e-003**	**2.0800e-003**		**32.8519**	**32.8519**	**6.3000e-004**	**6.0000e-004**	**33.0519**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6043	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Unmitigated	3.9792	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7082					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3600e-003	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Total	**3.9792**	**1.3000e-004**	**0.0140**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0292**	**0.0292**	**8.0000e-005**		**0.0309**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3600e-003	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Total	**3.6043**	**1.3000e-004**	**0.0140**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0292**	**0.0292**	**8.0000e-005**		**0.0309**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	24.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**1.3616**	**11.7198**	**7.5780**	**9.1500e-003**		**0.9800**	**0.9800**		**0.9016**	**0.9016**		**952.3317**	**952.3317**	**0.2873**		**958.3641**

10.0 Vegetation

Parriott

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	130.17	1000sqft	3.37	130,170.00	0
Other Asphalt Surfaces	1.22	Acre	1.22	0.00	0
Other Non-Asphalt Surfaces	1.01	Acre	1.01	0.00	0
Parking Lot	0.80	Acre	0.80	34,965.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided on the site plan.

Construction Phase - Based on anticipated one year construction schedule commencing in October 2015.

Trips and VMT - Assumes water truck generates 4 vendor trips per day for the demolition, site preparation, and grading phases.

Demolition -

Grading -

Architectural Coating - SCAQMD Rule 1113, Architectural Coating.

Vehicle Trips - Truck trip length and passenger vehicle trip length for the City of Industry is based information provided by Iteris for the City's Climate Action Plan

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Area Coating - SCAQMD Rule 1113, Architectural Coatings

Water And Wastewater - Assumes no septic. Total indoor and outdoor water usage based on usage data provided in the Utilities and Service Systems chapter of the Initial Study

Solid Waste - Total solid waste generation based on usage data provided in the Utilities and Service Systems chapter of the Initial Study.

Construction Off-road Equipment Mitigation - SCAQMD Rules 403 and 1186

Area Mitigation - Per SCAQMD Rule 1113

Energy Mitigation -

Water Mitigation -

Operational Off-Road Equipment - Based on proposed size of the warehouses.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInterior Value	250	100
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016

tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblLandUse	LandUseSquareFeet	53,143.20	0.00
tblLandUse	LandUseSquareFeet	43,995.60	0.00
tblLandUse	LandUseSquareFeet	34,848.00	34,965.00
tblLandUse	LotAcreage	2.99	3.37
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	24.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	122.36	199.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LHD1	0.04	0.04

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CC_TL	8.40	15.70

tblVehicleTrips	CNW_TL	6.90	15.70
tblVehicleTrips	CW_TL	16.60	15.70
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	30,101,812.50	2,273,676.00
tblWater	OutdoorWaterUseRate	0.00	568,419.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3880	57.3968	44.4522	0.0486	18.2924	3.0969	21.3893	9.9911	2.8492	12.8403	0.0000	4,984.4884	4,984.4884	1.2413	0.0000	5,010.5558
2016	78.3924	56.1766	44.7514	0.0723	1.2638	3.4723	4.7361	0.3384	3.2487	3.5871	0.0000	7,066.1477	7,066.1477	1.4638	0.0000	7,096.8884
Total	**83.7804**	**113.5733**	**89.2036**	**0.1209**	**19.5562**	**6.5692**	**26.1254**	**10.3295**	**6.0978**	**16.4274**	**0.0000**	**12,050.6361**	**12,050.6361**	**2.7051**	**0.0000**	**12,107.4442**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3880	57.3968	44.4522	0.0486	7.9495	3.0969	11.0464	4.3058	2.8492	7.1550	0.0000	4,984.4884	4,984.4884	1.2413	0.0000	5,010.5558
2016	78.3924	56.1766	44.7514	0.0723	1.2638	3.4723	4.7361	0.3384	3.2487	3.5871	0.0000	7,066.1477	7,066.1477	1.4638	0.0000	7,096.8884
Total	**83.7804**	**113.5733**	**89.2036**	**0.1209**	**9.2133**	**6.5692**	**15.7824**	**4.6442**	**6.0978**	**10.7420**	**0.0000**	**12,050.6361**	**12,050.6361**	**2.7051**	**0.0000**	**12,107.4442**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.89**	**0.00**	**39.59**	**55.04**	**0.00**	**34.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.9792	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Energy	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888
Mobile	2.2936	10.9822	31.9092	0.0832	5.2510	0.1736	5.4246	1.4026	0.1596	1.5622		7,436.6258	7,436.6258	0.2617		7,442.1209
Offroad	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**7.6386**	**22.7399**	**39.5330**	**0.0926**	**5.2510**	**1.1565**	**6.4075**	**1.4026**	**1.0641**	**2.4667**		**8,434.2996**	**8,434.2996**	**0.5499**	**8.3000e-004**	**8,446.1046**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6043	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Energy	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
Mobile	2.2936	10.9822	31.9092	0.0832	5.2510	0.1736	5.4246	1.4026	0.1596	1.5622		7,436.6258	7,436.6258	0.2617		7,442.1209
Offroad	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**7.2625**	**22.7295**	**39.5242**	**0.0925**	**5.2510**	**1.1557**	**6.4068**	**1.4026**	**1.0634**	**2.4660**		**8,421.8385**	**8,421.8385**	**0.5496**	**6.0000e-004**	**8,433.5677**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**22.75**	**51.58**	**19.19**	**9.96**	**0.00**	**84.81**	**15.31**	**0.00**	**84.80**	**36.58**	**0.00**	**11.44**	**11.44**	**52.28**	**27.71**	**11.50**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2015	10/23/2015	5	17	
2	Site Preparation	Site Preparation	10/24/2015	11/4/2015	5	8	
3	Grading	Grading	11/5/2015	11/27/2015	5	17	
4	Building Construction	Building Construction	11/28/2015	9/30/2016	5	220	
5	Paving	Paving	9/8/2016	9/30/2016	5	17	
6	Architectural Coating	Architectural Coating	9/8/2016	9/30/2016	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,828; Non-Residential Outdoor: 65,609 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	69.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6447	0.0000	1.6447	0.2490	0.0000	0.2490			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**1.6447**	**2.4508**	**4.0955**	**0.2490**	**2.2858**	**2.5348**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1519	2.4077	1.6414	5.6700e-003	0.1321	0.0397	0.1718	0.0362	0.0365	0.0727		577.5343	577.5343	4.7000e-003		577.6329
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.2641**	**2.8962**	**3.2324**	**8.7300e-003**	**0.3247**	**0.0480**	**0.3727**	**0.0877**	**0.0441**	**0.1319**		**857.2950**	**857.2950**	**0.0163**		**857.6372**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7031	0.0000	0.7031	0.1065	0.0000	0.1065			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.7031**	**2.4508**	**3.1539**	**0.1065**	**2.2858**	**2.3922**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1519	2.4077	1.6414	5.6700e-003	0.1321	0.0397	0.1718	0.0362	0.0365	0.0727		577.5343	577.5343	4.7000e-003		577.6329
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.2641**	**2.8962**	**3.2324**	**8.7300e-003**	**0.3247**	**0.0480**	**0.3727**	**0.0877**	**0.0441**	**0.1319**		**857.2950**	**857.2950**	**0.0163**		**857.6372**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.1271**	**0.5071**	**1.8204**	**3.5000e-003**	**0.2261**	**8.6400e-003**	**0.2348**	**0.0605**	**7.9400e-003**	**0.0684**		**317.9034**	**317.9034**	**0.0138**		**318.1927**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**7.7233**	**3.0883**	**10.8116**	**4.2454**	**2.8412**	**7.0866**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0888	0.1116	1.3763	2.6200e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		228.8559	228.8559	0.0131		229.1301
Total	**0.1271**	**0.5071**	**1.8204**	**3.5000e-003**	**0.2261**	**8.6400e-003**	**0.2348**	**0.0605**	**7.9400e-003**	**0.0684**		**317.9034**	**317.9034**	**0.0138**		**318.1927**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.1123**	**0.4885**	**1.5910**	**3.0600e-003**	**0.1926**	**8.3100e-003**	**0.2009**	**0.0516**	**7.6300e-003**	**0.0592**		**279.7607**	**279.7607**	**0.0116**		**280.0043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8011	0.0000	2.8011	1.4396	0.0000	1.4396			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**2.8011**	**2.3284**	**5.1295**	**1.4396**	**2.1421**	**3.5817**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0383	0.3955	0.4441	8.8000e-004	0.0249	6.6300e-003	0.0316	7.0900e-003	6.1000e-003	0.0132		89.0475	89.0475	7.1000e-004		89.0625
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.1123**	**0.4885**	**1.5910**	**3.0600e-003**	**0.1926**	**8.3100e-003**	**0.2009**	**0.0516**	**7.6300e-003**	**0.0592**		**279.7607**	**279.7607**	**0.0116**		**280.0043**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2585	2.6698	2.9977	5.9400e-003	0.1683	0.0447	0.2131	0.0479	0.0411	0.0890		601.0706	601.0706	4.8300e-003		601.1720
Worker	0.3403	0.4278	5.2759	0.0100	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		877.2808	877.2808	0.0501		878.3322
Total	**0.5988**	**3.0975**	**8.2736**	**0.0160**	**0.9396**	**0.0525**	**0.9920**	**0.2524**	**0.0482**	**0.3006**		**1,478.3515**	**1,478.3515**	**0.0549**		**1,479.5042**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2585	2.6698	2.9977	5.9400e-003	0.1683	0.0447	0.2131	0.0479	0.0411	0.0890		601.0706	601.0706	4.8300e-003		601.1720
Worker	0.3403	0.4278	5.2759	0.0100	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		877.2808	877.2808	0.0501		878.3322
Total	**0.5988**	**3.0975**	**8.2736**	**0.0160**	**0.9396**	**0.0525**	**0.9920**	**0.2524**	**0.0482**	**0.3006**		**1,478.3515**	**1,478.3515**	**0.0549**		**1,479.5042**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2275	2.3627	2.7450	5.9300e-003	0.1684	0.0369	0.2053	0.0479	0.0340	0.0819		594.5957	594.5957	4.3600e-003		594.6873
Worker	0.3073	0.3868	4.7865	0.0100	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		848.0247	848.0247	0.0462		848.9941
Total	**0.5348**	**2.7495**	**7.5315**	**0.0160**	**0.9396**	**0.0442**	**0.9839**	**0.2525**	**0.0407**	**0.2931**		**1,442.6203**	**1,442.6203**	**0.0505**		**1,443.6814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2275	2.3627	2.7450	5.9300e-003	0.1684	0.0369	0.2053	0.0479	0.0340	0.0819		594.5957	594.5957	4.3600e-003		594.6873
Worker	0.3073	0.3868	4.7865	0.0100	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		848.0247	848.0247	0.0462		848.9941
Total	**0.5348**	**2.7495**	**7.5315**	**0.0160**	**0.9396**	**0.0442**	**0.9839**	**0.2525**	**0.0407**	**0.2931**		**1,442.6203**	**1,442.6203**	**0.0505**		**1,443.6814**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**71.9211**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0785	0.9712	2.0400e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		172.0630	172.0630	9.3700e-003		172.2597
Total	**0.0624**	**0.0785**	**0.9712**	**2.0400e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**172.0630**	**172.0630**	**9.3700e-003**		**172.2597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**71.9211**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0785	0.9712	2.0400e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		172.0630	172.0630	9.3700e-003		172.2597
Total	**0.0624**	**0.0785**	**0.9712**	**2.0400e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**172.0630**	**172.0630**	**9.3700e-003**		**172.2597**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2936	10.9822	31.9092	0.0832	5.2510	0.1736	5.4246	1.4026	0.1596	1.5622		7,436.6258	7,436.6258	0.2617		7,442.1209
Unmitigated	2.2936	10.9822	31.9092	0.0832	5.2510	0.1736	5.4246	1.4026	0.1596	1.5622		7,436.6258	7,436.6258	0.2617		7,442.1209

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	463.41	463.41	463.41	2,470,016	2,470,016
Total	463.41	463.41	463.41	2,470,016	2,470,016

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No Rail	15.70	15.70	15.70	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.553614	0.060626	0.184930	0.052000	0.038749	0.006251	0.034586	0.065414	0.000000	0.000000	0.003829	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
NaturalGas Unmitigated	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	385.161	4.1500e-003	0.0378	0.0317	2.3000e-004		2.8700e-003	2.8700e-003		2.8700e-003	2.8700e-003		45.3130	45.3130	8.7000e-004	8.3000e-004	45.5888
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1500e-003**	**0.0378**	**0.0317**	**2.3000e-004**		**2.8700e-003**	**2.8700e-003**		**2.8700e-003**	**2.8700e-003**		**45.3130**	**45.3130**	**8.7000e-004**	**8.3000e-004**	**45.5888**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0.279241	3.0100e-003	0.0274	0.0230	1.6000e-004		2.0800e-003	2.0800e-003		2.0800e-003	2.0800e-003		32.8519	32.8519	6.3000e-004	6.0000e-004	33.0519
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.0100e-003**	**0.0274**	**0.0230**	**1.6000e-004**		**2.0800e-003**	**2.0800e-003**		**2.0800e-003**	**2.0800e-003**		**32.8519**	**32.8519**	**6.3000e-004**	**6.0000e-004**	**33.0519**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6043	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Unmitigated	3.9792	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7082					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3600e-003	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Total	**3.9792**	**1.3000e-004**	**0.0140**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0292**	**0.0292**	**8.0000e-005**		**0.0309**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.2697					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3600e-003	1.3000e-004	0.0140	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0292	0.0292	8.0000e-005		0.0309
Total	**3.6043**	**1.3000e-004**	**0.0140**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0292**	**0.0292**	**8.0000e-005**		**0.0309**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	2	24.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	1.3616	11.7198	7.5780	9.1500e-003		0.9800	0.9800		0.9016	0.9016		952.3317	952.3317	0.2873		958.3641
Total	**1.3616**	**11.7198**	**7.5780**	**9.1500e-003**		**0.9800**	**0.9800**		**0.9016**	**0.9016**		**952.3317**	**952.3317**	**0.2873**		**958.3641**

10.0 Vegetation

Parriott

Los Angeles-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00

Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.13000E-003	2.01600E-002	1.60100E-002	3.00000E-005	1.67000E-003	1.67000E-003	0.00000E+000	2.17027E+000	2.17027E+000	2.60000E-004	0.00000E+000	2.17564E+000
Concrete/Industrial Saws	6.05000E-003	4.24500E-002	3.23300E-002	5.00000E-005	3.30000E-003	3.30000E-003	0.00000E+000	4.57009E+000	4.57009E+000	4.90000E-004	0.00000E+000	4.58039E+000
Cranes	6.95400E-002	8.24080E-001	2.88150E-001	5.40000E-004	3.74200E-002	3.44300E-002	0.00000E+000	5.12463E+001	5.12463E+001	1.54400E-002	0.00000E+000	5.15705E+001
Excavators	1.41600E-002	1.65400E-001	1.16930E-001	1.80000E-004	8.16000E-003	7.51000E-003	0.00000E+000	1.71357E+001	1.71357E+001	5.12000E-003	0.00000E+000	1.72431E+001
Forklifts	7.54000E-002	6.48870E-001	4.17250E-001	5.00000E-004	5.42900E-002	4.99400E-002	0.00000E+000	4.75705E+001	4.75705E+001	1.43300E-002	0.00000E+000	4.78715E+001
Generator Sets	7.12000E-002	5.36550E-001	4.18740E-001	7.20000E-004	3.77600E-002	3.77600E-002	0.00000E+000	6.21728E+001	6.21728E+001	5.76000E-003	0.00000E+000	6.22938E+001
Graders	9.03000E-003	9.23800E-002	4.23400E-002	5.00000E-005	5.19000E-003	4.78000E-003	0.00000E+000	5.06669E+000	5.06669E+000	1.51000E-003	0.00000E+000	5.09845E+000
Pavers	6.82000E-003	7.67200E-002	4.84900E-002	8.00000E-005	3.81000E-003	3.51000E-003	0.00000E+000	7.23339E+000	7.23339E+000	2.18000E-003	0.00000E+000	7.27921E+000
Paving Equipment	5.22000E-003	6.06400E-002	4.32300E-002	7.00000E-005	3.01000E-003	2.77000E-003	0.00000E+000	6.42616E+000	6.42616E+000	1.94000E-003	0.00000E+000	6.46686E+000
Rollers	5.73000E-003	5.29200E-002	3.42300E-002	4.00000E-005	3.90000E-003	3.58000E-003	0.00000E+000	4.20219E+000	4.20219E+000	1.27000E-003	0.00000E+000	4.22881E+000
Rubber Tired Dozers	4.77400E-002	5.39510E-001	4.11620E-001	3.30000E-004	2.51700E-002	2.31600E-002	0.00000E+000	3.17718E+001	3.17718E+001	9.49000E-003	0.00000E+000	3.19710E+001
Tractors/Loaders/Backhoes	1.13920E-001	1.08791E+000	7.97720E-001	1.03000E-003	8.40800E-002	7.73600E-002	0.00000E+000	9.72253E+001	9.72253E+001	2.92600E-002	0.00000E+000	9.78398E+001
Welders	6.26100E-002	1.99000E-001	2.17390E-001	2.80000E-004	1.58000E-002	1.58000E-002	0.00000E+000	2.07043E+001	2.07043E+001	5.09000E-003	0.00000E+000	2.08112E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	3.13000E-003	2.01600E-002	1.60100E-002	3.00000E-005	1.67000E-003	1.67000E-003	0.00000E+000	2.17026E+000	2.17026E+000	2.60000E-004	0.00000E+000	2.17564E+000
Concrete/Industrial Saws	6.05000E-003	4.24500E-002	3.23300E-002	5.00000E-005	3.30000E-003	3.30000E-003	0.00000E+000	4.57008E+000	4.57008E+000	4.90000E-004	0.00000E+000	4.58038E+000
Cranes	6.95400E-002	8.24080E-001	2.88150E-001	5.40000E-004	3.74200E-002	3.44300E-002	0.00000E+000	5.12462E+001	5.12462E+001	1.54400E-002	0.00000E+000	5.15705E+001
Excavators	1.41600E-002	1.65400E-001	1.16930E-001	1.80000E-004	8.16000E-003	7.51000E-003	0.00000E+000	1.71357E+001	1.71357E+001	5.12000E-003	0.00000E+000	1.72431E+001
Forklifts	7.54000E-002	6.48870E-001	4.17250E-001	5.00000E-004	5.42900E-002	4.99400E-002	0.00000E+000	4.75704E+001	4.75704E+001	1.43300E-002	0.00000E+000	4.78714E+001
Generator Sets	7.12000E-002	5.36540E-001	4.18740E-001	7.20000E-004	3.77600E-002	3.77600E-002	0.00000E+000	6.21728E+001	6.21728E+001	5.76000E-003	0.00000E+000	6.22937E+001
Graders	9.03000E-003	9.23800E-002	4.23400E-002	5.00000E-005	5.19000E-003	4.78000E-003	0.00000E+000	5.06668E+000	5.06668E+000	1.51000E-003	0.00000E+000	5.09844E+000
Pavers	6.82000E-003	7.67200E-002	4.84900E-002	8.00000E-005	3.81000E-003	3.51000E-003	0.00000E+000	7.23338E+000	7.23338E+000	2.18000E-003	0.00000E+000	7.27920E+000
Paving Equipment	5.22000E-003	6.06400E-002	4.32300E-002	7.00000E-005	3.01000E-003	2.77000E-003	0.00000E+000	6.42615E+000	6.42615E+000	1.94000E-003	0.00000E+000	6.46686E+000
Rollers	5.73000E-003	5.29200E-002	3.42300E-002	4.00000E-005	3.90000E-003	3.58000E-003	0.00000E+000	4.20219E+000	4.20219E+000	1.27000E-003	0.00000E+000	4.22881E+000
Rubber Tired Dozers	4.77400E-002	5.39510E-001	4.11620E-001	3.30000E-004	2.51700E-002	2.31600E-002	0.00000E+000	3.17718E+001	3.17718E+001	9.49000E-003	0.00000E+000	3.19710E+001
Tractors/Loaders/Backhoes	1.13920E-001	1.08791E+000	7.97720E-001	1.03000E-003	8.40800E-002	7.73600E-002	0.00000E+000	9.72252E+001	9.72252E+001	2.92600E-002	0.00000E+000	9.78397E+001
Welders	6.26100E-002	1.99000E-001	2.17390E-001	2.80000E-004	1.58000E-002	1.58000E-002	0.00000E+000	2.07043E+001	2.07043E+001	5.09000E-003	0.00000E+000	2.08112E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.60772E-006	4.60772E-006	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.18814E-006	2.18814E-006	0.00000E+000	0.00000E+000	2.18322E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17082E-006	1.17082E-006	0.00000E+000	0.00000E+000	1.16346E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16715E-006	1.16715E-006	0.00000E+000	0.00000E+000	1.15988E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26129E-006	1.26129E-006	0.00000E+000	0.00000E+000	1.25336E-006
Generator Sets	0.00000E+000	1.86376E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12589E-006	1.12589E-006	0.00000E+000	0.00000E+000	1.12371E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.97368E-006	1.97368E-006	0.00000E+000	0.00000E+000	1.96138E-006

Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38248E-006	1.38248E-006	0.00000E+000	0.00000E+000	1.37378E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.55614E-006	1.55614E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25898E-006	1.25898E-006	0.00000E+000	0.00000E+000	1.25113E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23425E-006	1.23425E-006	0.00000E+000	0.00000E+000	1.22649E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.65984E-007	9.65984E-007	0.00000E+000	0.00000E+000	1.44153E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	9.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.10	0.03	0.10	0.03	0.00	0.00
Demolition	Fugitive Dust	0.01	0.00	0.01	0.00	0.57	0.58
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Grading	Fugitive Dust	0.06	0.03	0.02	0.01	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.07	0.04	0.03	0.02	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	52.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.87	0.87	0.81	0.87
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	27.63	27.43	27.46	25.00	26.92	26.92	0.00	27.50	27.50	28.57	28.57	27.50
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	17.56	17.73	20.06	20.00	17.86
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation Selected	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.05	0.23		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			

No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	100.00
Yes	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Parriott - Mitigated

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	130.17	1000sqft	3.37	130,170.00	0
Other Asphalt Surfaces	1.22	Acre	1.22	0.00	0
Other Non-Asphalt Surfaces	1.01	Acre	1.01	0.00	0
Parking Lot	0.80	Acre	0.80	34,965.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on information provided on the site plan.

Construction Phase - Based on anticipated one year construction schedule commencing in October 2015.

Trips and VMT - Assumes water truck generates 4 vendor trips per day for the demolition, site preparation, and grading phases.

Demolition -

Grading -

Architectural Coating - Mitigation Measure AQ-1.

Vehicle Trips - Truck trip length and passenger vehicle trip length for the City of Industry is based information provided by Iteris for the City's Climate Action Plan

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Vechicle Emission Factors - Fleet Mix from the Fontana Truck Trip Study.

Area Coating - Mitigation Measure AQ-1

Water And Wastewater - Assumes no septic. Total indoor and outdoor water usage based on usage data provided in the Utilities and Service Systems chapter of the Initial Study.

Solid Waste - Total solid waste generation based on usage data provided in the Utilities and Service Systems chapter of the Initial Study.

Construction Off-road Equipment Mitigation - SCAQMD Rules 403 and 1186

Area Mitigation - Mitigation Measure AQ-1

Energy Mitigation -

Water Mitigation -

Operational Off-Road Equipment - Based on proposed size of the warehouses.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	90.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	90.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	90
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	90	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	90
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	10.00	8.00

tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016
tblConstructionPhase	PhaseEndDate	10/25/2016	9/30/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblConstructionPhase	PhaseStartDate	10/1/2016	9/8/2016
tblLandUse	LandUseSquareFeet	53,143.20	0.00
tblLandUse	LandUseSquareFeet	43,995.60	0.00
tblLandUse	LandUseSquareFeet	34,848.00	34,965.00
tblLandUse	LotAcreage	2.99	3.37
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	24.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	122.36	199.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	HHD	0.03	0.07
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDA	0.53	0.55
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT1	0.06	0.06
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18
tblVehicleEF	LDT2	0.18	0.18

tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	LHD2	6.2830e-003	6.2510e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MCY	3.6910e-003	3.8290e-003
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MDV	0.13	0.05
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00

tblVehicleTrips	CC_TL	8.40	15.70
tblVehicleTrips	CNW_TL	6.90	15.70
tblVehicleTrips	CW_TL	16.60	15.70
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	30,101,812.50	2,273,676.00
tblWater	OutdoorWaterUseRate	0.00	568,419.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3958	57.4191	44.4622	0.0485	18.2924	3.0970	21.3894	9.9911	2.8492	12.8404	0.0000	4,971.7032	4,971.7032	1.2413	0.0000	4,997.7709
2016	71.2782	56.2957	44.9338	0.0714	1.2638	3.4727	4.7364	0.3384	3.2490	3.5874	0.0000	6,993.6004	6,993.6004	1.4640	0.0000	7,024.3437
Total	**76.6741**	**113.7148**	**89.3960**	**0.1199**	**19.5562**	**6.5697**	**26.1258**	**10.3295**	**6.0982**	**16.4278**	**0.0000**	**11,965.3035**	**11,965.3035**	**2.7053**	**0.0000**	**12,022.1147**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	5.3958	57.4191	44.4622	0.0485	7.9495	3.0970	11.0465	4.3058	2.8492	7.1551	0.0000	4,971.7032	4,971.7032	1.2413	0.0000	4,997.7709
2016	71.2782	56.2957	44.9338	0.0714	1.2638	3.4727	4.7364	0.3384	3.2490	3.5874	0.0000	6,993.6004	6,993.6004	1.4640	0.0000	7,024.3437
Total	**76.6741**	**113.7148**	**89.3960**	**0.1199**	**9.2133**	**6.5697**	**15.7829**	**4.6442**	**6.0982**	**10.7425**	**0.0000**	**11,965.3035**	**11,965.3035**	**2.7053**	**0.0000**	**12,022.1146**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**52.89**	**0.00**	**39.59**	**55.04**	**0.00**	**34.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2015	10/23/2015	5	17	
2	Site Preparation	Site Preparation	10/24/2015	11/4/2015	5	8	
3	Grading	Grading	11/5/2015	11/27/2015	5	17	
4	Building Construction	Building Construction	11/28/2015	9/30/2016	5	220	
5	Paving	Paving	9/8/2016	9/30/2016	5	17	
6	Architectural Coating	Architectural Coating	9/8/2016	9/30/2016	5	17	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 196,828; Non-Residential Outdoor: 65,609 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	129.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	69.00	27.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6447	0.0000	1.6447	0.2490	0.0000	0.2490			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858		4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**1.6447**	**2.4508**	**4.0955**	**0.2490**	**2.2858**	**2.5348**		**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1614	2.4925	1.8813	5.6600e-003	0.1321	0.0398	0.1720	0.0362	0.0366	0.0728		576.1823	576.1823	4.7500e-003		576.2821
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.2809**	**3.0013**	**3.4956**	**8.5900e-003**	**0.3247**	**0.0482**	**0.3729**	**0.0877**	**0.0443**	**0.1321**		**844.5098**	**844.5098**	**0.0164**		**844.8535**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7031	0.0000	0.7031	0.1065	0.0000	0.1065			0.0000			0.0000
Off-Road	4.5083	48.3629	36.0738	0.0399		2.4508	2.4508		2.2858	2.2858	0.0000	4,127.1934	4,127.1934	1.1188		4,150.6886
Total	**4.5083**	**48.3629**	**36.0738**	**0.0399**	**0.7031**	**2.4508**	**3.1539**	**0.1065**	**2.2858**	**2.3922**	**0.0000**	**4,127.1934**	**4,127.1934**	**1.1188**		**4,150.6886**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1614	2.4925	1.8813	5.6600e-003	0.1321	0.0398	0.1720	0.0362	0.0366	0.0728		576.1823	576.1823	4.7500e-003		576.2821
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.2809**	**3.0013**	**3.4956**	**8.5900e-003**	**0.3247**	**0.0482**	**0.3729**	**0.0877**	**0.0443**	**0.1321**		**844.5098**	**844.5098**	**0.0164**		**844.8535**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.1349**	**0.5295**	**1.8304**	**3.3400e-003**	**0.2261**	**8.7200e-003**	**0.2349**	**0.0605**	**8.0100e-003**	**0.0685**		**304.3307**	**304.3307**	**0.0138**		**304.6204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.7444	4,111.7444	1.2275		4,137.5224
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**7.7233**	**3.0883**	**10.8116**	**4.2454**	**2.8412**	**7.0866**	**0.0000**	**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5224**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0925	0.1238	1.2968	2.4700e-003	0.2012	2.0100e-003	0.2032	0.0534	1.8400e-003	0.0552		216.0194	216.0194	0.0131		216.2936
Total	**0.1349**	**0.5295**	**1.8304**	**3.3400e-003**	**0.2261**	**8.7200e-003**	**0.2349**	**0.0605**	**8.0100e-003**	**0.0685**		**304.3307**	**304.3307**	**0.0138**		**304.6204**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1195**	**0.5088**	**1.6143**	**2.9300e-003**	**0.1926**	**8.3900e-003**	**0.2010**	**0.0516**	**7.7000e-003**	**0.0593**		**268.3275**	**268.3275**	**0.0116**		**268.5715**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8011	0.0000	2.8011	1.4396	0.0000	1.4396			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**2.8011**	**2.3284**	**5.1295**	**1.4396**	**2.1421**	**3.5817**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0424	0.4057	0.5336	8.7000e-004	0.0249	6.7100e-003	0.0317	7.0900e-003	6.1700e-003	0.0133		88.3114	88.3114	7.3000e-004		88.3268
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.1195**	**0.5088**	**1.6143**	**2.9300e-003**	**0.1926**	**8.3900e-003**	**0.2010**	**0.0516**	**7.7000e-003**	**0.0593**		**268.3275**	**268.3275**	**0.0116**		**268.5715**

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2861	2.7386	3.6019	5.9000e-003	0.1683	0.0453	0.2136	0.0479	0.0417	0.0895		596.1017	596.1017	4.9600e-003		596.2058
Worker	0.3546	0.4744	4.9712	9.4700e-003	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		828.0742	828.0742	0.0501		829.1256
Total	**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9396**	**0.0530**	**0.9926**	**0.2524**	**0.0487**	**0.3011**		**1,424.1759**	**1,424.1759**	**0.0550**		**1,425.3314**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2861	2.7386	3.6019	5.9000e-003	0.1683	0.0453	0.2136	0.0479	0.0417	0.0895		596.1017	596.1017	4.9600e-003		596.2058
Worker	0.3546	0.4744	4.9712	9.4700e-003	0.7713	7.7100e-003	0.7790	0.2045	7.0600e-003	0.2116		828.0742	828.0742	0.0501		829.1256
Total	**0.6408**	**3.2129**	**8.5731**	**0.0154**	**0.9396**	**0.0530**	**0.9926**	**0.2524**	**0.0487**	**0.3011**		**1,424.1759**	**1,424.1759**	**0.0550**		**1,425.3314**

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2510	2.4221	3.3421	5.8900e-003	0.1684	0.0373	0.2057	0.0479	0.0343	0.0822		589.6587	589.6587	4.4900e-003		589.7530
Worker	0.3197	0.4289	4.4945	9.4600e-003	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		800.4215	800.4215	0.0462		801.3909
Total	**0.5707**	**2.8510**	**7.8366**	**0.0154**	**0.9396**	**0.0446**	**0.9843**	**0.2525**	**0.0410**	**0.2935**		**1,390.0802**	**1,390.0802**	**0.0507**		**1,391.1439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2510	2.4221	3.3421	5.8900e-003	0.1684	0.0373	0.2057	0.0479	0.0343	0.0822		589.6587	589.6587	4.4900e-003		589.7530
Worker	0.3197	0.4289	4.4945	9.4600e-003	0.7713	7.2900e-003	0.7786	0.2045	6.7000e-003	0.2112		800.4215	800.4215	0.0462		801.3909
Total	**0.5707**	**2.8510**	**7.8366**	**0.0154**	**0.9396**	**0.0446**	**0.9843**	**0.2525**	**0.0410**	**0.2935**		**1,390.0802**	**1,390.0802**	**0.0507**		**1,391.1439**

3.6 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4011**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.7 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.3974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**64.7659**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.3974					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**64.7659**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0870	0.9119	1.9200e-003	0.1565	1.4800e-003	0.1580	0.0415	1.3600e-003	0.0429		162.4044	162.4044	9.3700e-003		162.6011
Total	**0.0649**	**0.0870**	**0.9119**	**1.9200e-003**	**0.1565**	**1.4800e-003**	**0.1580**	**0.0415**	**1.3600e-003**	**0.0429**		**162.4044**	**162.4044**	**9.3700e-003**		**162.6011**

Parriott - Mitigated

Los Angeles-South Coast County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.13000E-003	2.01600E-002	1.60100E-002	3.00000E-005	1.67000E-003	1.67000E-003	0.00000E+000	2.17027E+000	2.17027E+000	2.60000E-004	0.00000E+000	2.17564E+000
Concrete/Industrial Saws	6.05000E-003	4.24500E-002	3.23300E-002	5.00000E-005	3.30000E-003	3.30000E-003	0.00000E+000	4.57009E+000	4.57009E+000	4.90000E-004	0.00000E+000	4.58039E+000
Cranes	6.95400E-002	8.24080E-001	2.88150E-001	5.40000E-004	3.74200E-002	3.44300E-002	0.00000E+000	5.12463E+001	5.12463E+001	1.54400E-002	0.00000E+000	5.15705E+001
Excavators	1.41600E-002	1.65400E-001	1.16930E-001	1.80000E-004	8.16000E-003	7.51000E-003	0.00000E+000	1.71357E+001	1.71357E+001	5.12000E-003	0.00000E+000	1.72431E+001
Forklifts	7.54000E-002	6.48870E-001	4.17250E-001	5.00000E-004	5.42900E-002	4.99400E-002	0.00000E+000	4.75705E+001	4.75705E+001	1.43300E-002	0.00000E+000	4.78715E+001
Generator Sets	7.12000E-002	5.36550E-001	4.18740E-001	7.20000E-004	3.77600E-002	3.77600E-002	0.00000E+000	6.21728E+001	6.21728E+001	5.76000E-003	0.00000E+000	6.22938E+001
Graders	9.03000E-003	9.23800E-002	4.23400E-002	5.00000E-005	5.19000E-003	4.78000E-003	0.00000E+000	5.06669E+000	5.06669E+000	1.51000E-003	0.00000E+000	5.09845E+000
Pavers	6.82000E-003	7.67200E-002	4.84900E-002	8.00000E-005	3.81000E-003	3.51000E-003	0.00000E+000	7.23339E+000	7.23339E+000	2.18000E-003	0.00000E+000	7.27921E+000
Paving Equipment	5.22000E-003	6.06400E-002	4.32300E-002	7.00000E-005	3.01000E-003	2.77000E-003	0.00000E+000	6.42616E+000	6.42616E+000	1.94000E-003	0.00000E+000	6.46686E+000
Rollers	5.73000E-003	5.29200E-002	3.42300E-002	4.00000E-005	3.90000E-003	3.58000E-003	0.00000E+000	4.20219E+000	4.20219E+000	1.27000E-003	0.00000E+000	4.22881E+000
Rubber Tired Dozers	4.77400E-002	5.39510E-001	4.11620E-001	3.30000E-004	2.51700E-002	2.31600E-002	0.00000E+000	3.17718E+001	3.17718E+001	9.49000E-003	0.00000E+000	3.19710E+001
Tractors/Loaders/Backhoes	1.13920E-001	1.08791E+000	7.97720E-001	1.03000E-003	8.40800E-002	7.73600E-002	0.00000E+000	9.72253E+001	9.72253E+001	2.92600E-002	0.00000E+000	9.78398E+001
Welders	6.26100E-002	1.99000E-001	2.17390E-001	2.80000E-004	1.58000E-002	1.58000E-002	0.00000E+000	2.07043E+001	2.07043E+001	5.09000E-003	0.00000E+000	2.08112E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	3.13000E-003	2.01600E-002	1.60100E-002	3.00000E-005	1.67000E-003	1.67000E-003	0.00000E+000	2.17026E+000	2.17026E+000	2.60000E-004	0.00000E+000	2.17564E+000
Concrete/Industrial Saws	6.05000E-003	4.24500E-002	3.23300E-002	5.00000E-005	3.30000E-003	3.30000E-003	0.00000E+000	4.57008E+000	4.57008E+000	4.90000E-004	0.00000E+000	4.58038E+000
Cranes	6.95400E-002	8.24080E-001	2.88150E-001	5.40000E-004	3.74200E-002	3.44300E-002	0.00000E+000	5.12462E+001	5.12462E+001	1.54400E-002	0.00000E+000	5.15705E+001
Excavators	1.41600E-002	1.65400E-001	1.16930E-001	1.80000E-004	8.16000E-003	7.51000E-003	0.00000E+000	1.71357E+001	1.71357E+001	5.12000E-003	0.00000E+000	1.72431E+001
Forklifts	7.54000E-002	6.48870E-001	4.17250E-001	5.00000E-004	5.42900E-002	4.99400E-002	0.00000E+000	4.75704E+001	4.75704E+001	1.43300E-002	0.00000E+000	4.78714E+001
Generator Sets	7.12000E-002	5.36540E-001	4.18740E-001	7.20000E-004	3.77600E-002	3.77600E-002	0.00000E+000	6.21728E+001	6.21728E+001	5.76000E-003	0.00000E+000	6.22937E+001
Graders	9.03000E-003	9.23800E-002	4.23400E-002	5.00000E-005	5.19000E-003	4.78000E-003	0.00000E+000	5.06668E+000	5.06668E+000	1.51000E-003	0.00000E+000	5.09844E+000
Pavers	6.82000E-003	7.67200E-002	4.84900E-002	8.00000E-005	3.81000E-003	3.51000E-003	0.00000E+000	7.23338E+000	7.23338E+000	2.18000E-003	0.00000E+000	7.27920E+000
Paving Equipment	5.22000E-003	6.06400E-002	4.32300E-002	7.00000E-005	3.01000E-003	2.77000E-003	0.00000E+000	6.42615E+000	6.42615E+000	1.94000E-003	0.00000E+000	6.46686E+000
Rollers	5.73000E-003	5.29200E-002	3.42300E-002	4.00000E-005	3.90000E-003	3.58000E-003	0.00000E+000	4.20219E+000	4.20219E+000	1.27000E-003	0.00000E+000	4.22881E+000
Rubber Tired Dozers	4.77400E-002	5.39510E-001	4.11620E-001	3.30000E-004	2.51700E-002	2.31600E-002	0.00000E+000	3.17718E+001	3.17718E+001	9.49000E-003	0.00000E+000	3.19710E+001
Tractors/Loaders/Backhoes	1.13920E-001	1.08791E+000	7.97720E-001	1.03000E-003	8.40800E-002	7.73600E-002	0.00000E+000	9.72252E+001	9.72252E+001	2.92600E-002	0.00000E+000	9.78397E+001
Welders	6.26100E-002	1.99000E-001	2.17390E-001	2.80000E-004	1.58000E-002	1.58000E-002	0.00000E+000	2.07043E+001	2.07043E+001	5.09000E-003	0.00000E+000	2.08112E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.60772E-006	4.60772E-006	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.18814E-006	2.18814E-006	0.00000E+000	0.00000E+000	2.18322E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17082E-006	1.17082E-006	0.00000E+000	0.00000E+000	1.16346E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16715E-006	1.16715E-006	0.00000E+000	0.00000E+000	1.15988E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26129E-006	1.26129E-006	0.00000E+000	0.00000E+000	1.25336E-006
Generator Sets	0.00000E+000	1.86376E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12589E-006	1.12589E-006	0.00000E+000	0.00000E+000	1.12371E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.97368E-006	1.97368E-006	0.00000E+000	0.00000E+000	1.96138E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.38248E-006	1.38248E-006	0.00000E+000	0.00000E+000	1.37378E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.55614E-006	1.55614E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25898E-006	1.25898E-006	0.00000E+000	0.00000E+000	1.25113E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23425E-006	1.23425E-006	0.00000E+000	0.00000E+000	1.22649E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.65984E-007	9.65984E-007	0.00000E+000	0.00000E+000	1.44153E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	9.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.10	0.03	0.10	0.03	0.00	0.00
Demolition	Fugitive Dust	0.01	0.00	0.01	0.00	0.57	0.58
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.06	0.03	0.02	0.01	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.07	0.04	0.03	0.02	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Construction Localized Significance Thresholds: Demolition - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.00	25	82

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	0	0	0
NOx	**83**	Graders	0.5	0.0625	0	0	0
CO	**673**	Dozers	0.5	0.0625	8	2	1
		Scrapers	1	0.125	0	0	0
						Acres	1.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83

South San Gabriel Valley

1.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	83	84	96	123	193
CO	673	760	1113	2110	6884
PM10	5	13	29	60	153
PM2.5	4	5	9	20	83

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.00	181	595

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	181	Tractors	0.5	0.0625	0	0	0
		Graders	0.5	0.0625	0	0	0
		Dozers	0.5	0.0625	8	2	1
PM10	**54.22**	Scrapers	1	0.125	0	0	0
PM2.5	**17.95**					**Acres**	1.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83

South San Gabriel Valley

1.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	83	84	96	123	193
CO	673	760	1113	2110	6884
PM10	5	13	29	60	153
PM2.5	4	5	9	20	83

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	3.50	25	82

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	8	4	2
NOx	**152**	Graders	0.5	0.0625	0	0	0
CO	**1,422**	Dozers	0.5	0.0625	8	3	1.5
		Scrapers	1	0.125	0	0	0
						Acres	3.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	3	142	137	145	165	219
	4	162	157	165	184	232
		152	147	155	175	226
CO	3	1292	1423	1886	3115	8134
	4	1553	1704	2217	3569	8738
		1423	1564	2052	3342	8436
PM10	3	9	29	44	76	170
	4	12	36	52	83	178
		11	33	48	80	174
PM2.5	3	6	9	14	27	94
	4	8	11	17	31	99
		7	10	16	29	97

South San Gabriel Valley

3.50 Acres

	25	**50**	**100**	**200**	**500**
NOx	152	147	155	175	226
CO	1423	1564	2052	3342	8436
PM10	11	33	48	80	174
PM2.5	7	10	16	29	97

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	3	11	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	3.50	181	595

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	181	Tractors	0.5	0.0625	8	4	2
		Graders	0.5	0.0625	0	0	0
		Dozers	0.5	0.0625	8	3	1.5
PM10	**73.63**	Scrapers	1	0.125	0	0	0
PM2.5	**26.48**					**Acres**	3.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	3	142	137	145	165	219
	4	162	157	165	184	232
		152	147	155	175	226
CO	3	1292	1423	1886	3115	8134
	4	1553	1704	2217	3569	8738
		1423	1564	2052	3342	8436
PM10	3	9	29	44	76	170
	4	12	36	52	83	178
		11	33	48	80	174
PM2.5	3	6	9	14	27	94
	4	8	11	17	31	99
		7	10	16	29	97

South San Gabriel Valley

3.50 Acres

	25	**50**	**100**	**200**	**500**
NOx	152	147	155	175	226
CO	1423	1564	2052	3342	8436
PM10	11	33	48	80	174
PM2.5	7	10	16	29	97

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	3	11	4
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	2.50	25	82

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	8	3	1.5
NOx	**131**	Graders	0.5	0.0625	8	1	0.5
CO	**1,161**	Dozers	0.5	0.0625	8	1	0.5
		Scrapers	1	0.125	0	0	0
						Acres	2.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	2	121	118	126	147	206
	3	142	137	145	165	219
		131	128	136	156	213
CO	2	1031	1143	1554	2660	7530
	3	1292	1423	1886	3115	8134
		1162	1283	1720	2887	7832
PM10	2	7	22	37	68	162
	3	9	29	44	76	170
		8	26	41	72	166
PM2.5	2	5	8	12	24	89
	3	6	9	14	27	94
		6	9	13	26	92

South San Gabriel Valley

2.50 Acres

	25	**50**	**100**	**200**	**500**
NOx	131	128	136	156	213
CO	1162	1283	1720	2887	7832
PM10	8	26	41	72	166
PM2.5	6	9	13	26	92

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	2	11	3
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	2.50	181	595

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	181	Tractors	0.5	0.0625	8	3	1.5
		Graders	0.5	0.0625	8	1	0.5
		Dozers	0.5	0.0625	8	1	0.5
PM10	**66.02**	Scrapers	1	0.125	0	0	0
PM2.5	**23.34**					**Acres**	2.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	2	121	118	126	147	206
	3	142	137	145	165	219
		131	128	136	156	213
CO	2	1031	1143	1554	2660	7530
	3	1292	1423	1886	3115	8134
		1162	1283	1720	2887	7832
PM10	2	7	22	37	68	162
	3	9	29	44	76	170
		8	26	41	72	166
PM2.5	2	5	8	12	24	89
	3	6	9	14	27	94
		6	9	13	26	92

South San Gabriel Valley

2.50 Acres

	25	**50**	**100**	**200**	**500**
NOx	131	128	136	156	213
CO	1162	1283	1720	2887	7832
PM10	8	26	41	72	166
PM2.5	6	9	13	26	92

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	2	11	3
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.31	25	82

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**95**	Graders	0.5	0.0625	0	0	0
CO	**785**	Dozers	0.5	0.0625	0	0	0
		Scrapers	1	0.125	0	0	0
						Acres	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	2	121	118	126	147	206
		95	95	105	131	197
CO	1	673	760	1113	2110	6884
	2	1031	1143	1554	2660	7530
		785	880	1251	2282	7086
PM10	1	5	13	29	60	153
	2	7	22	37	68	162
		6	16	32	63	156
PM2.5	1	4	5	9	20	83
	2	5	8	12	24	89
		4	6	10	21	85

South San Gabriel Valley

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	95	95	105	131	197
CO	785	880	1251	2282	7086
PM10	6	16	32	63	156
PM2.5	4	6	10	21	85

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.31	181	595

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	181	Tractors	0.5	0.0625	7	3	1.3125
		Graders	0.5	0.0625	0	0	0
		Dozers	0.5	0.0625	0	0	0
PM10	**56.72**	Scrapers	1	0.125	0	0	0
PM2.5	**19.14**					**Acres**	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	2	121	118	126	147	206
		95	95	105	131	197
CO	1	673	760	1113	2110	6884
	2	1031	1143	1554	2660	7530
		785	880	1251	2282	7086
PM10	1	5	13	29	60	153
	2	7	22	37	68	162
		6	16	32	63	156
PM2.5	1	4	5	9	20	83
	2	5	8	12	24	89
		4	6	10	21	85

South San Gabriel Valley

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	95	95	105	131	197
CO	785	880	1251	2282	7086
PM10	6	16	32	63	156
PM2.5	4	6	10	21	85

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	2
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction + Paving + Architectural Coating - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.31	25	82

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**95**	Graders	0.5	0.0625	0	0	0
CO	**785**	Dozers	0.5	0.0625	0	0	0
		Scrapers	1	0.125	0	0	0
						Acres	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	2	121	118	126	147	206
		95	95	105	131	197
CO	1	673	760	1113	2110	6884
	2	1031	1143	1554	2660	7530
		785	880	1251	2282	7086
PM10	1	5	13	29	60	153
	2	7	22	37	68	162
		6	16	32	63	156
PM2.5	1	4	5	9	20	83
	2	5	8	12	24	89
		4	6	10	21	85

South San Gabriel Valley

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	95	95	105	131	197
CO	785	880	1251	2282	7086
PM10	6	16	32	63	156
PM2.5	4	6	10	21	85

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction + Paving + Architectural Coating - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	1.31	181	595

Source Receptor	South San Gabriel Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	181	Tractors	0.5	0.0625	7	3	1.3125
		Graders	0.5	0.0625	0	0	0
		Dozers	0.5	0.0625	0	0	0
PM10	**56.72**	Scrapers	1	0.125	0	0	0
PM2.5	**19.14**					**Acres**	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	83	84	96	123	193
	2	121	118	126	147	206
		95	95	105	131	197
CO	1	673	760	1113	2110	6884
	2	1031	1143	1554	2660	7530
		785	880	1251	2282	7086
PM10	1	5	13	29	60	153
	2	7	22	37	68	162
		6	16	32	63	156
PM2.5	1	4	5	9	20	83
	2	5	8	12	24	89
		4	6	10	21	85

South San Gabriel Valley

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	95	95	105	131	197
CO	785	880	1251	2282	7086
PM10	6	16	32	63	156
PM2.5	4	6	10	21	85

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	1	11	2
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Operation Localized Significance Thresholds - Non-Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	5.00	25	82

Source Receptor	**South San Gabriel Valley**	
Distance (meters)	25	
NOx	**183**	
CO	**1,814**	

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	5	183	176	184	202	245
	5	183	176	184	202	245
		183	176	184	202	245
CO	5	1814	1984	2549	4024	9342
	5	1814	1984	2549	4024	9342
		1814	1984	2549	4024	9342
PM10	5	4	11	15	22	45
	5	4	11	15	22	45
		4	11	15	22	45
PM2.5	5	2	3	5	9	25
	5	2	3	5	9	25
		2	3	5	9	25

South San Gabriel Valley

5.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	183	176	184	202	245
CO	1814	1984	2549	4024	9342
PM10	4	11	15	22	45
PM2.5	2	3	5	9	25

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	5	11	5
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2010 - Table C-1. 2006 – 2008

Operation Localized Significance Thresholds - Residential

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
11	5.00	181	595

Source Receptor **South San Gabriel Valley**
Distance (meters) 181

PM10	**20.69**
PM2.5	**8.25**

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	5	183	176	184	202	245
	5	183	176	184	202	245
		183	176	184	202	245
CO	5	1814	1984	2549	4024	9342
	5	1814	1984	2549	4024	9342
		1814	1984	2549	4024	9342
PM10	5	4	11	15	22	45
	5	4	11	15	22	45
		4	11	15	22	45
PM2.5	5	2	3	5	9	25
	5	2	3	5	9	25
		2	3	5	9	25

South San Gabriel Valley
5.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	183	176	184	202	245
CO	1814	1984	2549	4024	9342
PM10	4	11	15	22	45
PM2.5	2	3	5	9	25

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
11	5	11	5
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2010 - Table C-1. 2006 – 2008

Appendix C Health Risk Assessment

Appendix

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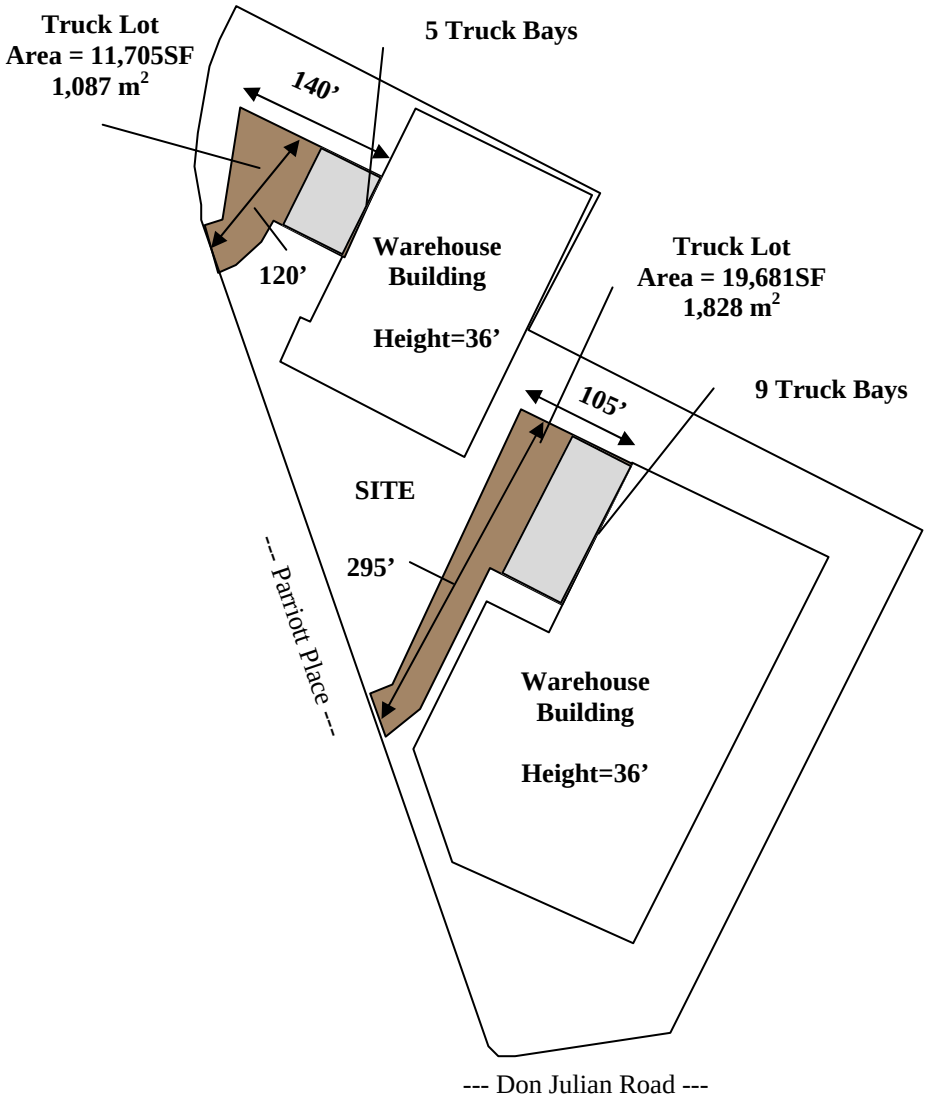
Source
Parriott Place Industrial Warehouse/Office Development
489 and 499 Parriott Place
Industry, CA 91745
Sunday - Saturday: 12:00 AM - 11:59 PM

N

Chemical and Use Rate
Heavy-Duty Diesel Trucks: 67 truck trip ends per day (idling duration of 15 minutes)
Medium-Duty Diesel Trucks: 24 truck trip ends per day (idling duration of 15 minutes)

Diesel Particulate Matter (DPM) emissions



- Lot area is based upon Google Earth Pro, Version 7.1.2.2041.
- Release height of 4.15 m and initial vertical dimension (δy) of 1.93 m is based upon California Air Resources Board's "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" (2000).

Table D1
MER Concentration Worksheet
Toxic Air Contaminants

Toxic Air Contaminants				
Source	Pollutant	Model Output[1]	Emission Rates [2]	Maximum Exposed Receptor (MER) Concentration
		(μg/m^3)	(g/s)	(μg/m^3)
(a)	(b)	(c)	(d)	(e)
		Annual Average	30-Year	
HDT Truck Running	DPM	42.47	3.36E-06	**1.43E-04**
MDT Truck Running	DPM	42.47	1.85E-06	**7.87E-05**
HDT Truck Idling	DPM	127.01	3.20E-06	**4.07E-04**
MDT Truck Idling	DPM	127.01	5.45E-06	**6.92E-04**

[1] AERMOD Output based on unit emission rates (1 g/s).

[2] Emission Rates from Source Emissions Inventories.

Table D2
Quantification of Carcinogenic Risks
30-Year Exposure Scenario

Source Number	Source	MER Conc. ($\mu g/m^3$)	Weight Fraction	Contaminant	URF $(\mu g/m^3)^{-1}$	CPF $(mg/kg/day)^{-1}$	Dose 16 < 70 years (mg/kg-day)	Cancer Risk 16 < 70 years per million
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	HDT Truck Running	1.43E-04	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	4.1E-08	1.9E-02
2	MDT Truck Running	7.87E-05	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	2.3E-08	1.0E-02
3	HDT Truck Idling	4.07E-04	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	1.2E-07	5.3E-02
4	MDT Truck Idling	6.92E-04	1.00E+00	Diesel Particulate	3.0E-04	1.1E+00	2.0E-07	9.0E-02
							total	**0.17**

		16 < 70 years
Dose Exposure Factors:	exposure frequency (days/year)	365
	inhalation rate (L/kg-day) [1]	290
	inhalation absorption factor	1
Risk Calculation Factors:	age sensitivity factor	1
	exposure duration (years)	30
	averaging time (years)	70
	fraction of time at home	1

[1] Inhalation rate taken as the 95th percentile residential breathing rate (Office of Environmental Health Hazard Assessment. 2015, February. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).

Table D3
Quantification of Non-Carcinogenic Risks
Chronic Hazards

Source No.	Source	MER Conc. ($\mu g/m^3$)	Weight Fraction	Pollutant	REL ($\mu g/m^3$)	Toxicological Endpoints*											
						CV	CNS	IMMUN	KIDNEY	GILV	REPRO	RESP	SKIN	EYE	BONE	ENDO	BLOOD
(a)	(b)	(c)	(d)	(c)		(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)				
Chronic Hazards																	
1	HDT Truck Running	1.43E-04	1.0E+00	Diesel Particulate Exhaust	5.0E+00							2.9E-05					
2	MDT Truck Running	7.87E-05	1.0E+00	Diesel Particulate Exhaust	5.0E+00							1.6E-05					
3	HDT Truck Idling	4.07E-04	1.0E+00	Diesel Particulate Exhaust	5.0E+00							8.1E-05					
4	MDT Truck Idling	6.92E-04	1.0E+00	Diesel Particulate Exhaust	5.0E+00							1.4E-04					
TOTAL						0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.6E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
						Maximum Chronic Hazard		**2.6E-04**	RESP								

* Key to Toxicological Endpoints

CV	Cardiovascular System
CNS	Central Nervous System
IMMUN	Immune System
KIDN	Kidneys
GILV	Gastrointestinal Tract and Liver/Alimentary Tract
REPRO	Reproductive System
RESP	Respiratory System
SKIN	Skin irritation and/or other effects
EYE	Eye irritation and/or other effects
BONE	Bones and Teeth
ENDO	Endocrine System
BLOOD	Hematological System

Weighting Emission Factors

Adjusting the EMFAC2014 emission factors to account for reductions in factors over the exposure duration.

Risk Year	Modeling Year	Period	WF	Weighting Factor		Running Emission Factors (g/m		Idling Emission Factors (g/hr)	
						PM10 Diesel Fueled - 5 mph		PM10 Diesel Fueled	
				Period	Factor	Heavy Duty	Medium Duty	Heavy Duty	Medium Duty
1	2016	1	0.033	2016-2019	0.133	0.1793	0.3492	0.0688	0.4093
2	2017	1	0.033						
3	2018	1	0.033						
4	2019	1	0.033						
5	2020	1	0.033	2020-2024	0.167	0.0430	0.0594	0.0224	0.1325
6	2021	1	0.033						
7	2022	1	0.033						
8	2023	1	0.033						
9	2024	1	0.033						
10	2025	1	0.033	2025-2029	0.167	0.0133	0.0064	0.0103	0.0044
11	2026	1	0.033						
12	2027	1	0.033						
13	2028	1	0.033						
14	2029	1	0.033						
15	2030	1	0.033	2030-2034	0.167	0.0122	0.0062	0.0055	0.0025
16	2031	1	0.033						
17	2032	1	0.033						
18	2033	1	0.033						
19	2034	1	0.033						
20	2035	1	0.033	2035-2039	0.167	0.0114	0.0060	0.0031	0.0018
21	2036	1	0.033						
22	2037	1	0.033						
23	2038	1	0.033						
24	2039	1	0.033						
25	2040	1	0.033	2040-2044	0.167	0.0111	0.0058	0.0023	0.0015
26	2041	1	0.033						
27	2042	1	0.033						
28	2043	1	0.033						
29	2044	1	0.033						
30	2045	1	0.033	2045	0.033	0.0110	0.0058	0.0018	0.0014
30-year average[1]		30	1.0		1.0	**0.0394**	**0.0607**	**0.0165**	**0.0784**

[1] Represent the 30-year weighted average emission factors for each TAC and vehicle speed.

WF - period weighting factor Heavy Duty trucks modeled using HHDT emission factors (EMFAC 2014 v1.0.7)
Medium Duty trucks modeled using MHDT emission factors (EMFAC 2014, v1.0.7)

Running Emissions
Parriott Place Industrial Warehouse/Office Development
489 and 499 Parriott Place
Industry, CA 91745

Operation: Shipping and Receiving, Truck Activities - DPM Running Emissions

	hours	days	weeks
Temporal Profile:	24	5	52
	24	2	52

Truck Activity:

Trucks/Day	67
Miles Traveled/Trip (Ingress/Egress)	0.11
Lot Area (SF)	31,881
Lot Area (m2)	2,962

Running Emissions:

30-yr PM10/DPM Emission Factor (g/mi) (1)	0.039
30-yr PM10/DPM Emission Factor (g/sec)	3.36E-06
30-yr PM10/DPM Emission Factor (g/sec/m^2)	1.13E-09

(1) For the adult lifetime scenario, 30-year weighted average of PM10 running emission factors for HHDT class were obtained from CARB (EMFAC2014, v1.0.7) for analysis years 2016-2045. Based upon an average lot travel speed of 5
DPM emission factor assumed to be equal to PM10 emission factor.

Running Emissions
Parriott Place Industrial Warehouse/Office Development
489 and 499 Parriott Place
Industry, CA 91745

Operation: Shipping and Receiving, Truck Activities - DPM Running Emissions

	hours	days	weeks
Temporal Profile:	24	5	52
	24	2	52

Truck Activity:

Trucks/Day	24
Miles Traveled/Trip (Ingress/Egress)	0.11
Lot Area (SF)	31,881
Lot Area (m2)	2,962

Running Emissions:

30-yr PM10/DPM Emission Factor (g/mi) (1)	0.061
30-yr PM10/DPM Emission Factor (g/sec)	1.85E-06
30-yr PM10/DPM Emission Factor (g/sec/m^2)	6.25E-10

(1) For the adult lifetime scenario, 30-year weighted average of PM10 running emission factors for MHDT class were obtained from CARB (EMFAC2014, v1.0.7) for analysis years 2016-2045. Based upon an average lot travel speed of 5
DPM emission factor assumed to be equal to PM10 emission factor.

Idling Emissions
Parriott Place Industrial Warehouse/Office Development
489 and 499 Parriott Place
Industry, CA 91745

Operation: Shipping and Receiving, Truck Activities - DPM Idling Emissions

	hours	days	weeks
Temporal Profile:	24	5	52
	24	2	52

Truck Activity:

Trucks/Day	67
Idling Duration (min)	15

Idling Emissions:

30-yr PM10/DPM Emission Factor (g/hr) (1)	0.017
30-yr PM10/DPM Idling Emissions (g/sec)	3.20E-06

Point Source Specifications (verticle release): (2)

Stack Velocity	51.71	m/s
Stack Temperature	366	K
Stack Diameter	0.33	ft
Stack Release Height (3)	4.15	m

(1) For the adult lifetime scenario, 30-year weighted average of PM10 idling emission factors for HHDT class were obtained from CARB (EMFAC2014 v1.0.7) for analysis years 2016-2045.
DPM emission factor is assumed to be the same as the PM10 emission factor.
(2) Diesel exhaust stack parameters from San Joaquin Valley APCD Health Risk Assessment Workshop for "Vertical Exhaust Stac Heavy Duty trucks modeled using HHDT emission factors (EMFAC 201
(3) Stack release height fro Medium Duty trucks modeled using MHDT emission factors (EMFAC 2(
Engines and Vehicles (2000).

Idling Emissions
Parriott Place Industrial Warehouse/Office Development
489 and 499 Parriott Place
Industry, CA 91745

Operation: Shipping and Receiving, Truck Activities - DPM Idling Emissions

	hours	days	weeks
Temporal Profile:	24	5	52
	24	2	52

Truck Activity:

Trucks/Day	24
Idling Duration (min)	15

Idling Emissions:

30-yr PM10/DPM Emission Factor (g/hr) (1)	0.078
30-yr PM10/DPM Idling Emissions (g/sec)	5.45E-06

Point Source Specifications (verticle release): (2)

Stack Velocity	51.71	m/s
Stack Temperature	366	K
Stack Diameter	0.33	ft
Stack Release Height (3)	4.15	m

(1) For the adult lifetime scenario, 30-year weighted average of PM10 idling emission factors for MHDT class were obtained from CARB (EMFAC2014 v1.0.7) for analysis years 2016-2045.
DPM emission factor is assumed to be the same as the PM10 emission factor.
(2) Diesel exhaust stack parameters from San Joaquin Valley APCD Health Risk Assessment Workshop for "Vertical Exhaust Stac Heavy Duty trucks modeled using HHDT emission factors (EMFAC 201
(3) Stack release height fro Medium Duty trucks modeled using MHDT emission factors (EMFAC 2(
Engines and Vehicles (2000).

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 8.8.1
** Lakes Environmental Software Inc.
** Date: 7/17/2015
** File: C:\Users\nvermilion\Desktop\HRA\IND-07.143\Parriott\Parriott.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Users\nvermilion\Desktop\HRA\IND-07.143\Parriott\Parriott.isc
   MODELOPT CONC FLAT
   AVERTIME ANNUAL
   URBANOPT 463
   POLLUTID OTHER
   RUNORNOT RUN
   ERRORFIL Parriott.err
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PAREA1       AREAPOLY   411133.157  3764802.874          0.0
** DESCRSRC Building B Loading Area
   LOCATION STCK1        POINT      411170.300  3764782.370          0.0
** DESCRSRC B2 Docking Bay #1
   LOCATION STCK2        POINT      411168.283  3764778.435          0.0
** DESCRSRC B2 Docking Bay #2
   LOCATION STCK3        POINT      411166.541  3764774.577          0.0
** DESCRSRC B2 Docking Bay #3
   LOCATION STCK4        POINT      411165.047  3764771.093          0.0
** DESCRSRC B2 Docking Bay #4
   LOCATION STCK5        POINT      411162.932  3764766.986          0.0
** DESCRSRC B2 Docking Bay #5
   LOCATION PAREA2       AREAPOLY   411168.963  3764649.236          0.0
** DESCRSRC Building A Loading Area
   LOCATION STCK6        POINT      411236.937  3764707.580          0.0
** DESCRSRC Bldg A Docking Bay #1
   LOCATION STCK7        POINT      411235.099  3764703.626          0.0
** DESCRSRC Bldg A Docking Bay #2
   LOCATION STCK8        POINT      411233.393  3764700.176          0.0
** DESCRSRC Bldg A Docking Bay #3
   LOCATION STCK9        POINT      411231.964  3764697.317          0.0
** DESCRSRC Bldg A Docking Bay #4
   LOCATION STCK10       POINT      411228.195  3764688.480          0.0
** DESCRSRC Bldg A Docking Bay #5
   LOCATION STCK11       POINT      411226.765  3764685.361          0.0
** DESCRSRC Bldg A Docking Bay #6
   LOCATION STCK12       POINT      411225.076  3764681.723          0.0
** DESCRSRC Bldg A Docking Bay #7
   LOCATION STCK13       POINT      411223.711  3764678.279          0.0
** DESCRSRC Bldg A Docking Bay #8
   LOCATION STCK14       POINT      411222.087  3764674.120          0.0
** DESCRSRC Bldg A Docking Bay #9
** Source Parameters **
   SRCPARAM PAREA1       0.0009848336     4.150          9     1.930
   AREAVERT PAREA1       411133.157 3764802.874 411129.307 3764773.695
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   AREAVERT PAREA1       411126.065 3764772.682 411129.510 3764761.942
   AREAVERT PAREA1       411132.752 3764763.158 411140.249 3764769.034
   AREAVERT PAREA1       411142.276 3764774.303 411161.323 3764764.982
   AREAVERT PAREA1       411170.644 3764786.258
   SRCPARAM STCK1              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK2              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK3              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK4              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK5              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM PAREA2       0.000513769     4.150         8     1.930
   AREAVERT PAREA2       411168.963 3764649.236 411173.780 3764652.376
   AREAVERT PAREA2       411208.198 3764726.858 411236.928 3764709.387
   AREAVERT PAREA2       411220.234 3764672.116 411200.667 3764683.426
   AREAVERT PAREA2       411182.620 3764644.966 411173.036 3764638.867
   SRCPARAM STCK6              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK7              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK8              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK9              1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK10             1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK11             1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK12             1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK13             1.0     4.150   366.000  51.71000     0.101
   SRCPARAM STCK14             1.0     4.150   366.000  51.71000     0.101

** Building Downwash **
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK1           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK2           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK3           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK4           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK5           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK6           10.97    10.97    10.97    10.97    10.97    10.97

   BUILDHGT STCK7           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK7           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK7           10.97    10.97    10.97    10.97    10.97    10.97
   BUILDHGT STCK7           10.97    10.97    10.97    10.97    10.97    10.97
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BUILDHGT STCK7	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK7	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK8	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK9	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK10	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK11	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK12	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK13	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDHGT STCK14	10.97	10.97	10.97	10.97	10.97	10.97
BUILDWID STCK1	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK1	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK1	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK1	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK1	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK1	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK2	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK2	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK2	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK2	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK2	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK2	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK3	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK3	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK3	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK3	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK3	91.33	93.47	92.77	89.25	83.02	78.61

BUILDWID STCK3	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK4	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK4	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK4	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK4	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK4	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK4	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK5	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK5	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK5	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK5	73.26	62.25	56.92	68.95	78.88	86.42
BUILDWID STCK5	91.33	93.47	92.77	89.25	83.02	78.61
BUILDWID STCK5	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK6	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK6	118.60	124.29	92.77	89.25	83.02	78.61
BUILDWID STCK6	85.99	90.75	92.75	91.94	88.33	110.54
BUILDWID STCK6	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK6	118.60	124.29	92.77	124.29	118.60	117.51
BUILDWID STCK6	124.02	126.75	125.64	91.94	88.33	110.54
BUILDWID STCK7	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK7	118.60	124.29	126.21	89.25	83.02	78.61
BUILDWID STCK7	85.99	90.75	92.75	91.94	88.33	110.54
BUILDWID STCK7	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK7	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK7	124.02	126.75	125.64	121.14	88.33	110.54
BUILDWID STCK8	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK8	118.60	124.29	126.21	89.25	83.02	78.61
BUILDWID STCK8	85.99	90.75	92.75	91.94	88.33	110.54
BUILDWID STCK8	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK8	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK8	124.02	126.75	125.64	121.14	88.33	110.54
BUILDWID STCK9	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK9	118.60	124.29	126.21	124.29	83.02	78.61
BUILDWID STCK9	85.99	90.75	92.75	91.94	88.33	110.54
BUILDWID STCK9	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK9	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK9	124.02	126.75	125.64	121.14	88.33	110.54
BUILDWID STCK10	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK10	118.60	124.29	126.21	124.29	118.60	78.61
BUILDWID STCK10	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK10	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK10	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK10	124.02	126.75	125.64	121.14	117.63	110.54
BUILDWID STCK11	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK11	118.60	124.29	126.21	124.29	118.60	78.61
BUILDWID STCK11	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK11	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK11	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK11	124.02	126.75	125.64	121.14	117.63	110.54
BUILDWID STCK12	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK12	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK12	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK12	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK12	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK12	124.02	126.75	125.64	121.14	117.63	110.54
BUILDWID STCK13	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK13	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK13	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK13	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK13	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK13	124.02	126.75	125.64	121.14	117.63	110.54

BUILDWID STCK14	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK14	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK14	85.99	90.75	92.75	91.94	88.33	82.04
BUILDWID STCK14	100.09	86.61	79.74	89.21	96.68	109.30
BUILDWID STCK14	118.60	124.29	126.21	124.29	118.60	117.51
BUILDWID STCK14	124.02	126.75	125.64	121.14	117.63	110.54
BUILDLEN STCK1	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK1	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK1	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK1	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK1	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK1	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK2	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK2	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK2	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK2	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK2	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK2	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK3	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK3	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK3	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK3	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK3	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK3	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK4	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK4	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK4	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK4	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK4	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK4	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK5	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK5	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK5	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK5	89.25	83.02	78.61	85.99	90.75	92.75
BUILDLEN STCK5	91.94	88.33	82.04	73.26	62.25	56.92
BUILDLEN STCK5	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN STCK6	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK6	121.14	117.63	82.04	73.26	62.25	56.92
BUILDLEN STCK6	68.95	78.88	86.42	91.33	93.47	126.21
BUILDLEN STCK6	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK6	121.14	117.63	82.04	100.09	86.61	79.74
BUILDLEN STCK6	89.21	96.68	109.30	91.33	93.47	126.21
BUILDLEN STCK7	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK7	121.14	117.63	110.54	73.26	62.25	56.92
BUILDLEN STCK7	68.95	78.88	86.42	91.33	93.47	126.21
BUILDLEN STCK7	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK7	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN STCK7	89.21	96.68	109.30	118.60	93.47	126.21
BUILDLEN STCK8	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK8	121.14	117.63	110.54	73.26	62.25	56.92
BUILDLEN STCK8	68.95	78.88	86.42	91.33	93.47	126.21
BUILDLEN STCK8	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK8	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN STCK8	89.21	96.68	109.30	118.60	93.47	126.21
BUILDLEN STCK9	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK9	121.14	117.63	110.54	100.09	62.25	56.92
BUILDLEN STCK9	68.95	78.88	86.42	91.33	93.47	126.21
BUILDLEN STCK9	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN STCK9	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN STCK9	89.21	96.68	109.30	118.60	93.47	126.21

BUILDLEN	STCK10	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK10	121.14	117.63	110.54	100.09	86.61	56.92
BUILDLEN	STCK10	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN	STCK10	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK10	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK10	89.21	96.68	109.30	118.60	124.29	126.21
BUILDLEN	STCK11	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK11	121.14	117.63	110.54	100.09	86.61	56.92
BUILDLEN	STCK11	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN	STCK11	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK11	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK11	89.21	96.68	109.30	118.60	124.29	126.21
BUILDLEN	STCK12	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK12	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK12	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN	STCK12	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK12	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK12	89.21	96.68	109.30	118.60	124.29	126.21
BUILDLEN	STCK13	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK13	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK13	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN	STCK13	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK13	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK13	89.21	96.68	109.30	118.60	124.29	126.21
BUILDLEN	STCK14	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK14	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK14	68.95	78.88	86.42	91.33	93.47	92.77
BUILDLEN	STCK14	124.29	118.60	117.51	124.02	126.75	125.64
BUILDLEN	STCK14	121.14	117.63	110.54	100.09	86.61	79.74
BUILDLEN	STCK14	89.21	96.68	109.30	118.60	124.29	126.21
XBADJ	STCK1	-65.18	-58.28	-51.66	-51.09	-48.98	-45.37
XBADJ	STCK1	-40.38	-34.17	-26.92	-18.85	-10.21	-2.63
XBADJ	STCK1	-6.87	-10.91	-14.61	-17.87	-20.58	-22.67
XBADJ	STCK1	-24.07	-24.74	-26.95	-34.89	-41.77	-47.39
XBADJ	STCK1	-51.56	-54.16	-55.12	-54.40	-52.04	-54.28
XBADJ	STCK1	-62.07	-67.98	-71.81	-73.47	-72.89	-70.10
XBADJ	STCK2	-60.96	-53.89	-47.25	-46.79	-44.90	-41.65
XBADJ	STCK2	-37.14	-31.50	-24.90	-17.54	-9.66	-2.85
XBADJ	STCK2	-7.85	-12.62	-17.00	-20.87	-24.10	-26.60
XBADJ	STCK2	-28.29	-29.12	-31.37	-39.20	-45.85	-51.10
XBADJ	STCK2	-54.80	-56.83	-57.14	-55.71	-52.59	-54.07
XBADJ	STCK2	-61.09	-66.26	-69.42	-70.47	-69.37	-66.17
XBADJ	STCK3	-56.85	-49.67	-43.03	-42.71	-41.09	-38.22
XBADJ	STCK3	-34.19	-29.12	-23.16	-16.50	-9.34	-3.27
XBADJ	STCK3	-9.00	-14.46	-19.47	-23.90	-27.60	-30.46
XBADJ	STCK3	-32.40	-33.35	-35.58	-43.28	-49.66	-54.54
XBADJ	STCK3	-57.75	-59.22	-58.88	-56.75	-52.90	-53.65
XBADJ	STCK3	-59.95	-64.43	-66.95	-67.43	-65.87	-62.31
XBADJ	STCK4	-53.16	-45.88	-39.27	-39.08	-37.70	-35.18
XBADJ	STCK4	-31.59	-27.04	-21.67	-15.64	-9.13	-3.72
XBADJ	STCK4	-10.10	-16.17	-21.75	-26.67	-30.78	-33.95
XBADJ	STCK4	-36.09	-37.14	-39.35	-46.91	-53.05	-57.57
XBADJ	STCK4	-60.35	-61.29	-60.37	-57.62	-53.11	-53.19
XBADJ	STCK4	-58.84	-62.71	-64.67	-64.66	-62.69	-58.82
XBADJ	STCK5	-48.75	-41.30	-34.66	-34.57	-33.44	-31.30
XBADJ	STCK5	-28.20	-24.24	-19.55	-14.26	-8.54	-3.94
XBADJ	STCK5	-11.11	-17.95	-24.24	-29.80	-34.45	-38.05
XBADJ	STCK5	-40.50	-41.71	-43.96	-51.41	-57.31	-61.46
XBADJ	STCK5	-63.74	-64.09	-62.49	-58.99	-53.70	-52.98
XBADJ	STCK5	-57.83	-60.93	-62.18	-61.54	-59.03	-54.72
XBADJ	STCK6	-122.64	-116.84	-111.45	-107.98	-101.22	-91.39

XBADJ	STCK6	-79.21	-69.30	-93.56	-97.47	-98.41	-97.74
XBADJ	STCK6	-106.00	-111.03	-112.70	-110.94	-105.81	-1.49
XBADJ	STCK6	-1.65	-1.76	-6.06	-16.04	-25.53	-34.25
XBADJ	STCK6	-41.93	-48.33	11.52	-56.58	-58.17	-63.26
XBADJ	STCK6	-80.97	-96.21	-108.53	19.60	12.33	-124.72
XBADJ	STCK7	-118.44	-112.50	-107.11	-103.77	-97.27	-87.82
XBADJ	STCK7	-76.13	-66.80	-55.44	-96.34	-98.03	-98.12
XBADJ	STCK7	-107.13	-112.88	-115.20	-114.02	-109.38	-5.44
XBADJ	STCK7	-5.86	-6.10	-10.40	-20.25	-29.48	-37.82
XBADJ	STCK7	-45.01	-50.82	-55.10	-57.70	-58.55	-62.88
XBADJ	STCK7	-79.84	-94.37	-106.03	-114.47	15.90	-120.77
XBADJ	STCK8	-114.74	-108.67	-103.27	-100.03	-93.74	-84.62
XBADJ	STCK8	-73.35	-64.52	-53.73	-95.26	-97.61	-98.36
XBADJ	STCK8	-108.03	-114.42	-117.33	-116.68	-112.48	-8.89
XBADJ	STCK8	-9.55	-9.92	-14.25	-23.99	-33.01	-41.02
XBADJ	STCK8	-47.79	-53.11	-56.81	-58.79	-58.98	-62.64
XBADJ	STCK8	-78.93	-92.82	-103.90	-111.81	19.01	-117.32
XBADJ	STCK9	-111.68	-105.50	-100.08	-96.92	-90.81	-81.95
XBADJ	STCK9	-71.02	-62.61	-52.30	-40.40	-97.24	-98.56
XBADJ	STCK9	-108.78	-115.69	-119.09	-118.88	-115.05	-11.75
XBADJ	STCK9	-12.62	-13.10	-17.44	-27.10	-35.94	-43.69
XBADJ	STCK9	-50.11	-55.01	-58.24	-59.70	-59.34	-62.44
XBADJ	STCK9	-78.19	-91.55	-102.14	-109.62	21.57	-114.46
XBADJ	STCK10	-102.32	-95.90	-90.54	-87.72	-82.24	-74.26
XBADJ	STCK10	-64.46	-57.37	-48.53	-38.22	-26.75	-99.71
XBADJ	STCK10	-111.57	-120.04	-124.86	-125.89	-123.10	-116.56
XBADJ	STCK10	-21.98	-22.70	-26.98	-36.30	-44.51	-51.38
XBADJ	STCK10	-56.68	-60.26	-62.01	-61.88	-59.86	-61.29
XBADJ	STCK10	-75.39	-87.20	-96.36	-102.60	-105.72	-105.62
XBADJ	STCK11	-99.00	-92.48	-87.12	-84.42	-79.15	-71.47
XBADJ	STCK11	-62.06	-55.43	-47.11	-37.36	-26.48	-100.04
XBADJ	STCK11	-112.49	-121.52	-126.86	-128.34	-125.92	-119.68
XBADJ	STCK11	-25.30	-26.11	-30.39	-39.60	-47.61	-54.17
XBADJ	STCK11	-59.08	-62.20	-63.43	-62.73	-60.13	-60.96
XBADJ	STCK11	-74.47	-85.73	-94.37	-100.15	-102.89	-102.50
XBADJ	STCK12	-95.12	-88.49	-83.13	-80.54	-75.51	-68.19
XBADJ	STCK12	-59.22	-53.13	-45.42	-36.33	-26.14	-19.14
XBADJ	STCK12	-113.53	-123.22	-129.16	-131.18	-129.21	-123.32
XBADJ	STCK12	-29.17	-30.11	-34.39	-43.47	-51.24	-57.45
XBADJ	STCK12	-61.91	-64.50	-65.12	-63.76	-60.47	-60.60
XBADJ	STCK12	-73.43	-84.02	-92.07	-97.31	-99.60	-98.86
XBADJ	STCK13	-91.49	-84.78	-79.46	-77.03	-72.25	-65.28
XBADJ	STCK13	-56.76	-51.18	-44.05	-35.58	-26.03	-19.67
XBADJ	STCK13	-114.70	-124.98	-131.46	-133.95	-132.36	-126.76
XBADJ	STCK13	-32.80	-33.81	-38.05	-46.99	-54.50	-60.36
XBADJ	STCK13	-64.38	-66.44	-66.49	-64.52	-60.58	-60.07
XBADJ	STCK13	-72.27	-82.27	-89.77	-94.55	-96.45	-95.42
XBADJ	STCK14	-87.11	-80.32	-75.05	-72.80	-68.34	-61.80
XBADJ	STCK14	-53.82	-48.87	-42.43	-34.71	-25.93	-20.35
XBADJ	STCK14	-116.13	-127.12	-134.25	-137.30	-136.18	-130.92
XBADJ	STCK14	-37.18	-38.28	-42.46	-51.22	-58.42	-63.84
XBADJ	STCK14	-67.32	-68.76	-68.11	-65.39	-60.68	-59.39
XBADJ	STCK14	-70.83	-80.12	-86.98	-91.19	-92.63	-91.26
YBADJ	STCK1	-17.78	-20.91	-25.83	-27.60	-28.53	-28.60
YBADJ	STCK1	-27.80	-26.16	-23.71	-20.55	-16.77	-12.35
YBADJ	STCK1	-8.10	-3.60	1.01	5.59	10.00	14.10
YBADJ	STCK1	17.78	20.91	25.83	27.60	28.53	28.60
YBADJ	STCK1	27.80	26.16	23.71	20.55	16.77	12.35
YBADJ	STCK1	8.10	3.60	-1.01	-5.59	-10.00	-14.10
YBADJ	STCK2	-19.08	-21.47	-25.61	-26.62	-26.82	-26.21
YBADJ	STCK2	-24.80	-22.64	-19.78	-16.33	-12.38	-7.94

YBADJ	STCK2	-3.79	0.47	4.72	8.83	12.67	16.12
YBADJ	STCK2	19.08	21.47	25.61	26.62	26.82	26.21
YBADJ	STCK2	24.80	22.64	19.78	16.33	12.38	7.94
YBADJ	STCK2	3.79	-0.47	-4.72	-8.83	-12.67	-16.12
YBADJ	STCK3	-20.13	-21.78	-25.19	-25.47	-24.98	-23.74
YBADJ	STCK3	-21.77	-19.14	-15.92	-12.23	-8.16	-3.73
YBADJ	STCK3	0.28	4.29	8.16	11.78	15.05	17.86
YBADJ	STCK3	20.13	21.78	25.19	25.47	24.98	23.74
YBADJ	STCK3	21.77	19.14	15.92	12.23	8.16	3.73
YBADJ	STCK3	-0.28	-4.29	-8.16	-11.78	-15.05	-17.86
YBADJ	STCK4	-20.99	-21.99	-24.73	-24.37	-23.27	-21.46
YBADJ	STCK4	-19.00	-15.96	-12.43	-8.53	-4.37	0.04
YBADJ	STCK4	3.92	7.67	11.20	14.38	17.12	19.35
YBADJ	STCK4	20.99	21.99	24.73	24.37	23.27	21.46
YBADJ	STCK4	19.00	15.96	12.43	8.53	4.37	-0.04
YBADJ	STCK4	-3.92	-7.67	-11.20	-14.38	-17.12	-19.35
YBADJ	STCK5	-22.36	-22.58	-24.52	-23.36	-21.49	-18.97
YBADJ	STCK5	-15.87	-12.29	-8.33	-4.13	0.21	4.65
YBADJ	STCK5	8.42	11.93	15.08	17.77	19.92	21.47
YBADJ	STCK5	22.36	22.58	24.52	23.36	21.49	18.97
YBADJ	STCK5	15.87	12.29	8.33	4.13	-0.21	-4.65
YBADJ	STCK5	-8.42	-11.93	-15.08	-17.77	-19.92	-21.47
YBADJ	STCK6	-6.53	-14.87	-23.39	-36.36	-47.87	-53.88
YBADJ	STCK6	-58.25	-60.86	51.07	41.53	30.72	19.10
YBADJ	STCK6	6.36	-6.58	-19.31	-31.45	-42.65	-2.01
YBADJ	STCK6	6.53	14.87	23.39	36.36	47.87	53.88
YBADJ	STCK6	58.25	60.86	-51.07	60.50	57.54	52.69
YBADJ	STCK6	45.97	37.84	28.57	31.45	42.65	2.01
YBADJ	STCK7	-7.65	-15.24	-23.01	-35.23	-46.03	-51.38
YBADJ	STCK7	-55.17	-57.29	-57.66	45.74	35.06	23.44
YBADJ	STCK7	10.57	-2.63	-15.74	-28.37	-40.15	-0.17
YBADJ	STCK7	7.65	15.24	23.01	35.23	46.03	51.38
YBADJ	STCK7	55.17	57.29	57.66	56.29	53.20	48.35
YBADJ	STCK7	41.76	33.90	25.00	15.56	40.15	0.17
YBADJ	STCK8	-8.74	-15.67	-22.77	-34.32	-44.48	-49.25
YBADJ	STCK8	-52.52	-54.19	-54.21	49.43	38.89	27.28
YBADJ	STCK8	14.31	0.90	-12.53	-25.59	-37.86	1.54
YBADJ	STCK8	8.74	15.67	22.77	34.32	44.48	49.25
YBADJ	STCK8	52.52	54.19	54.21	52.59	49.38	44.51
YBADJ	STCK8	38.02	30.37	21.80	12.78	37.86	-1.54
YBADJ	STCK9	-9.65	-16.04	-22.57	-33.58	-43.21	-47.48
YBADJ	STCK9	-50.32	-51.62	-51.35	-49.53	42.06	30.47
YBADJ	STCK9	17.42	3.83	-9.87	-23.27	-35.96	2.97
YBADJ	STCK9	9.65	16.04	22.57	33.58	43.21	47.48
YBADJ	STCK9	50.32	51.62	51.35	49.53	46.20	41.32
YBADJ	STCK9	34.91	27.43	19.13	10.46	35.96	-2.97
YBADJ	STCK10	-11.83	-16.56	-21.42	-30.79	-38.86	-41.71
YBADJ	STCK10	-43.30	-43.57	-42.51	-40.17	-36.60	40.01
YBADJ	STCK10	26.61	12.40	-2.18	-16.70	-30.71	-43.79
YBADJ	STCK10	11.83	16.56	21.42	30.79	38.86	41.71
YBADJ	STCK10	43.30	43.57	42.51	40.17	36.60	31.78
YBADJ	STCK10	25.71	18.86	11.44	3.89	-1.45	-6.74
YBADJ	STCK11	-12.68	-16.82	-21.09	-29.87	-37.38	-39.72
YBADJ	STCK11	-40.85	-40.74	-39.39	-36.85	-33.19	43.42
YBADJ	STCK11	29.92	15.50	0.61	-14.30	-28.77	-42.37
YBADJ	STCK11	12.68	16.82	21.09	29.87	37.38	39.72
YBADJ	STCK11	40.85	40.74	39.39	36.85	33.19	28.37
YBADJ	STCK11	22.41	15.77	8.65	1.49	-3.39	-8.16
YBADJ	STCK12	-13.72	-17.17	-20.73	-28.82	-35.68	-37.41
YBADJ	STCK12	-38.01	-37.45	-35.75	-32.97	-29.19	-24.37
YBADJ	STCK12	33.79	19.13	3.89	-11.47	-26.47	-40.68

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   YBADJ    STCK12          13.72    17.17    20.73    28.82    35.68    37.41
   YBADJ    STCK12          38.01    37.45    35.75    32.97    29.19    24.37
   YBADJ    STCK12          18.53    12.14     5.37    -1.35    -5.68    -9.85

   YBADJ    STCK13         -14.47   -17.28   -20.20   -27.66   -33.93   -35.12
   YBADJ    STCK13         -35.25   -34.30   -32.31   -29.35   -25.49   -20.71
   YBADJ    STCK13          37.31    22.39     6.80    -9.00   -24.53   -39.31
   YBADJ    STCK13          14.47    17.28    20.20    27.66    33.93    35.12
   YBADJ    STCK13          35.25    34.30    32.31    29.35    25.49    20.71
   YBADJ    STCK13          15.02     8.88     2.46    -3.81    -7.63   -11.22

   YBADJ    STCK14         -15.34   -17.38   -19.52   -26.23   -31.78   -32.33
   YBADJ    STCK14         -31.89   -30.49   -28.15   -24.97   -21.02   -16.29
   YBADJ    STCK14          41.53    26.31    10.28    -6.06   -22.21   -37.69
   YBADJ    STCK14          15.34    17.38    19.52    26.23    31.78    32.33
   YBADJ    STCK14          31.89    30.49    28.15    24.97    21.02    16.29
   YBADJ    STCK14          10.79     4.96    -1.02    -6.75    -9.95   -12.84

   URBANSRC ALL
   SRCGROUP SRCGP1:A PAREA1 PAREA2
   SRCGROUP SRCGP2:P STCK1 STCK2 STCK3 STCK4 STCK5 STCK6 STCK7 STCK8 STCK9
   SRCGROUP SRCGP2:P STCK10 STCK11 STCK12 STCK13 STCK14
   SRCGROUP ALL
SO FINISHED
**
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** AERMOD Receptor Pathway
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**
**
RE STARTING
** DESCRREC "" ""
   DISCCART    410950.74   3764880.49
   DISCCART    411067.05   3764215.23
   DISCCART    410926.17   3764850.70
   DISCCART    410887.58   3764834.95
   DISCCART    410831.12   3764867.53
   DISCCART    410860.55   3764905.68
   DISCCART    410884.53   3764938.37
   DISCCART    411048.91   3764220.74
   DISCCART    411034.74   3764225.47
   DISCCART    411018.20   3764233.34
   DISCCART    411004.03   3764241.22
   DISCCART    410988.28   3764249.09
   DISCCART    410958.35   3764269.57
   DISCCART    411080.41   3764208.93
   DISCCART    411096.16   3764198.69
   DISCCART    410947.33   3764201.84
   DISCCART    410973.31   3764219.96
   DISCCART    410940.24   3764230.19
   DISCCART    410959.02   3764905.39
   DISCCART    410898.63   3764949.84
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE pico8.sfc
   PROFFILE pico8.PFL
   SURFDATA 0 2008
   UAIRDATA 3190 2008
   SITEDATA 99999 2008
   PROFBASE 0.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
```

```
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL Parriott.AD\AN00GALL.PLT 31
   PLOTFILE ANNUAL SRCGP1:A Parriott.AD\AN00G001.PLT 32
   PLOTFILE ANNUAL SRCGP2:P Parriott.AD\AN00G002.PLT 33
   SUMMFILE Parriott.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           15 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 CO W320      22       URBOPT: Input Parameter May Be Out-of-Range for Parameter       URB-POP
 SO W320      75        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      76        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      77        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      78        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      79        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      85        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      86        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      87        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      88        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      89        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      90        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      91        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      92        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      93        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************
```

```
 **MODELOPTs:   NonDFAULT CONC      FLAT

                                            ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    16 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =       463.0 ;  Urban Roughness Length =  1.000 m

 **Model Allows User-Specified Options:
         1. Stack-tip Downwash.
         2. Model Assumes Receptors on FLAT Terrain.
         3. Use Calms Processing Routine.
         4. Use Missing Data Processing Routine.
         5. No Exponential Decay.
         6. Urban Roughness Length of 1.0 Meter Used.

 **Other Options Specified:
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  OTHER

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:     16 Source(s);       3 Source Group(s); and      20 Receptor(s)

 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  14134

 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     0.00 ;  Decay Coef. =    0.000     ;
Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                                ;  Emission Rate Unit
Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Detailed Error/Message File:   Parriott.err
 **File for Summary of Results:   Parriott.sum
```

**MODELOPTs: NonDFAULT CONC FLAT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BLDG EXISTS	URBAN SOURCE	CAP/ HOR VARY BY	EMIS RATE SCALAR
STCK1	0	0.10000E+01	411170.3	3764782.4	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK2	0	0.10000E+01	411168.3	3764778.4	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK3	0	0.10000E+01	411166.5	3764774.6	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK4	0	0.10000E+01	411165.0	3764771.1	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK5	0	0.10000E+01	411162.9	3764767.0	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK6	0	0.10000E+01	411236.9	3764707.6	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK7	0	0.10000E+01	411235.1	3764703.6	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK8	0	0.10000E+01	411233.4	3764700.2	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK9	0	0.10000E+01	411232.0	3764697.3	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK10	0	0.10000E+01	411228.2	3764688.5	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK11	0	0.10000E+01	411226.8	3764685.4	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK12	0	0.10000E+01	411225.1	3764681.7	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK13	0	0.10000E+01	411223.7	3764678.3	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	
STCK14	0	0.10000E+01	411222.1	3764674.1	0.0	4.15	366.00	51.71	0.10	YES	YES	NO	

**MODELOPTs: NonDFAULT CONC FLAT

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.98483E-03	411133.2	3764802.9	0.0	4.15	9	1.93	YES	
PAREA2	0	0.51377E-03	411169.0	3764649.2	0.0	4.15	8	1.93	YES	

**MODELOPTs: NonDFAULT CONC FLAT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
SRCGP1:A	PAREA1 , PAREA2 ,
SRCGP2:P	STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , STCK6 , STCK7 , STCK8 ,
	STCK9 , STCK10 , STCK11 , STCK12 , STCK13 , STCK14 ,
ALL	PAREA1 , STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , PAREA2 , STCK6 ,
	STCK7 , STCK8 , STCK9 , STCK10 , STCK11 , STCK12 , STCK13 , STCK14 ,

**MODELOPTs: NonDFAULT CONC FLAT

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
463.		PAREA1 , STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , PAREA2 , STCK6 , STCK7 , STCK8 , STCK9 , STCK10 , STCK11 , STCK12 , STCK13 , STCK14 ,

**MODELOPTs: NonDFAULT CONC FLAT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	73.3,	89.2,	-65.2,	-17.8,	2	11.0,	62.2,	83.0,	-58.3,	-20.9,
3	11.0,	56.9,	78.6,	-51.7,	-25.8,	4	11.0,	69.0,	86.0,	-51.1,	-27.6,
5	11.0,	78.9,	90.8,	-49.0,	-28.5,	6	11.0,	86.4,	92.8,	-45.4,	-28.6,
7	11.0,	91.3,	91.9,	-40.4,	-27.8,	8	11.0,	93.5,	88.3,	-34.2,	-26.2,
9	11.0,	92.8,	82.0,	-26.9,	-23.7,	10	11.0,	89.2,	73.3,	-18.9,	-20.6,
11	11.0,	83.0,	62.2,	-10.2,	-16.8,	12	11.0,	78.6,	56.9,	-2.6,	-12.4,
13	11.0,	86.0,	69.0,	-6.9,	-8.1,	14	11.0,	90.8,	78.9,	-10.9,	-3.6,
15	11.0,	92.8,	86.4,	-14.6,	1.0,	16	11.0,	91.9,	91.3,	-17.9,	5.6,
17	11.0,	88.3,	93.5,	-20.6,	10.0,	18	11.0,	82.0,	92.8,	-22.7,	14.1,
19	11.0,	73.3,	89.2,	-24.1,	17.8,	20	11.0,	62.2,	83.0,	-24.7,	20.9,
21	11.0,	56.9,	78.6,	-26.9,	25.8,	22	11.0,	69.0,	86.0,	-34.9,	27.6,
23	11.0,	78.9,	90.8,	-41.8,	28.5,	24	11.0,	86.4,	92.8,	-47.4,	28.6,
25	11.0,	91.3,	91.9,	-51.6,	27.8,	26	11.0,	93.5,	88.3,	-54.2,	26.2,
27	11.0,	92.8,	82.0,	-55.1,	23.7,	28	11.0,	89.2,	73.3,	-54.4,	20.6,
29	11.0,	83.0,	62.2,	-52.0,	16.8,	30	11.0,	78.6,	56.9,	-54.3,	12.4,
31	11.0,	86.0,	69.0,	-62.1,	8.1,	32	11.0,	90.8,	78.9,	-68.0,	3.6,
33	11.0,	92.8,	86.4,	-71.8,	-1.0,	34	11.0,	91.9,	91.3,	-73.5,	-5.6,
35	11.0,	88.3,	93.5,	-72.9,	-10.0,	36	11.0,	82.0,	92.8,	-70.1,	-14.1,

SOURCE ID: STCK2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	73.3,	89.2,	-61.0,	-19.1,	2	11.0,	62.2,	83.0,	-53.9,	-21.5,
3	11.0,	56.9,	78.6,	-47.2,	-25.6,	4	11.0,	69.0,	86.0,	-46.8,	-26.6,
5	11.0,	78.9,	90.8,	-44.9,	-26.8,	6	11.0,	86.4,	92.8,	-41.6,	-26.2,
7	11.0,	91.3,	91.9,	-37.1,	-24.8,	8	11.0,	93.5,	88.3,	-31.5,	-22.6,
9	11.0,	92.8,	82.0,	-24.9,	-19.8,	10	11.0,	89.2,	73.3,	-17.5,	-16.3,
11	11.0,	83.0,	62.2,	-9.7,	-12.4,	12	11.0,	78.6,	56.9,	-2.8,	-7.9,
13	11.0,	86.0,	69.0,	-7.8,	-3.8,	14	11.0,	90.8,	78.9,	-12.6,	0.5,
15	11.0,	92.8,	86.4,	-17.0,	4.7,	16	11.0,	91.9,	91.3,	-20.9,	8.8,
17	11.0,	88.3,	93.5,	-24.1,	12.7,	18	11.0,	82.0,	92.8,	-26.6,	16.1,
19	11.0,	73.3,	89.2,	-28.3,	19.1,	20	11.0,	62.2,	83.0,	-29.1,	21.5,
21	11.0,	56.9,	78.6,	-31.4,	25.6,	22	11.0,	69.0,	86.0,	-39.2,	26.6,
23	11.0,	78.9,	90.8,	-45.8,	26.8,	24	11.0,	86.4,	92.8,	-51.1,	26.2,
25	11.0,	91.3,	91.9,	-54.8,	24.8,	26	11.0,	93.5,	88.3,	-56.8,	22.6,
27	11.0,	92.8,	82.0,	-57.1,	19.8,	28	11.0,	89.2,	73.3,	-55.7,	16.3,
29	11.0,	83.0,	62.2,	-52.6,	12.4,	30	11.0,	78.6,	56.9,	-54.1,	7.9,
31	11.0,	86.0,	69.0,	-61.1,	3.8,	32	11.0,	90.8,	78.9,	-66.3,	-0.5,
33	11.0,	92.8,	86.4,	-69.4,	-4.7,	34	11.0,	91.9,	91.3,	-70.5,	-8.8,
35	11.0,	88.3,	93.5,	-69.4,	-12.7,	36	11.0,	82.0,	92.8,	-66.2,	-16.1,

SOURCE ID: STCK3

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	73.3,	89.2,	-56.8,	-20.1,	2	11.0,	62.2,	83.0,	-49.7,	-21.8,
3	11.0,	56.9,	78.6,	-43.0,	-25.2,	4	11.0,	69.0,	86.0,	-42.7,	-25.5,
5	11.0,	78.9,	90.8,	-41.1,	-25.0,	6	11.0,	86.4,	92.8,	-38.2,	-23.7,
7	11.0,	91.3,	91.9,	-34.2,	-21.8,	8	11.0,	93.5,	88.3,	-29.1,	-19.1,
9	11.0,	92.8,	82.0,	-23.2,	-15.9,	10	11.0,	89.2,	73.3,	-16.5,	-12.2,
11	11.0,	83.0,	62.2,	-9.3,	-8.2,	12	11.0,	78.6,	56.9,	-3.3,	-3.7,
13	11.0,	86.0,	69.0,	-9.0,	0.3,	14	11.0,	90.8,	78.9,	-14.5,	4.3,
15	11.0,	92.8,	86.4,	-19.5,	8.2,	16	11.0,	91.9,	91.3,	-23.9,	11.8,
17	11.0,	88.3,	93.5,	-27.6,	15.1,	18	11.0,	82.0,	92.8,	-30.5,	17.9,
19	11.0,	73.3,	89.2,	-32.4,	20.1,	20	11.0,	62.2,	83.0,	-33.3,	21.8,
21	11.0,	56.9,	78.6,	-35.6,	25.2,	22	11.0,	69.0,	86.0,	-43.3,	25.5,
23	11.0,	78.9,	90.8,	-49.7,	25.0,	24	11.0,	86.4,	92.8,	-54.5,	23.7,
25	11.0,	91.3,	91.9,	-57.8,	21.8,	26	11.0,	93.5,	88.3,	-59.2,	19.1,
27	11.0,	92.8,	82.0,	-58.9,	15.9,	28	11.0,	89.2,	73.3,	-56.8,	12.2,

29	11.0,	83.0,	62.2,	-52.9,	8.2,	30	11.0,	78.6,	56.9,	-53.6,	3.7,
31	11.0,	86.0,	69.0,	-59.9,	-0.3,	32	11.0,	90.8,	78.9,	-64.4,	-4.3,
33	11.0,	92.8,	86.4,	-67.0,	-8.2,	34	11.0,	91.9,	91.3,	-67.4,	-11.8,
35	11.0,	88.3,	93.5,	-65.9,	-15.1,	36	11.0,	82.0,	92.8,	-62.3,	-17.9,

SOURCE ID: STCK4

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	73.3,	89.2,	-53.2,	-21.0,	2	11.0,	62.2,	83.0,	-45.9,	-22.0,
3	11.0,	56.9,	78.6,	-39.3,	-24.7,	4	11.0,	69.0,	86.0,	-39.1,	-24.4,
5	11.0,	78.9,	90.8,	-37.7,	-23.3,	6	11.0,	86.4,	92.8,	-35.2,	-21.5,
7	11.0,	91.3,	91.9,	-31.6,	-19.0,	8	11.0,	93.5,	88.3,	-27.0,	-16.0,
9	11.0,	92.8,	82.0,	-21.7,	-12.4,	10	11.0,	89.2,	73.3,	-15.6,	-8.5,
11	11.0,	83.0,	62.2,	-9.1,	-4.4,	12	11.0,	78.6,	56.9,	-3.7,	0.0,
13	11.0,	86.0,	69.0,	-10.1,	3.9,	14	11.0,	90.8,	78.9,	-16.2,	7.7,
15	11.0,	92.8,	86.4,	-21.8,	11.2,	16	11.0,	91.9,	91.3,	-26.7,	14.4,
17	11.0,	88.3,	93.5,	-30.8,	17.1,	18	11.0,	82.0,	92.8,	-33.9,	19.4,
19	11.0,	73.3,	89.2,	-36.1,	21.0,	20	11.0,	62.2,	83.0,	-37.1,	22.0,
21	11.0,	56.9,	78.6,	-39.3,	24.7,	22	11.0,	69.0,	86.0,	-46.9,	24.4,
23	11.0,	78.9,	90.8,	-53.0,	23.3,	24	11.0,	86.4,	92.8,	-57.6,	21.5,
25	11.0,	91.3,	91.9,	-60.3,	19.0,	26	11.0,	93.5,	88.3,	-61.3,	16.0,
27	11.0,	92.8,	82.0,	-60.4,	12.4,	28	11.0,	89.2,	73.3,	-57.6,	8.5,
29	11.0,	83.0,	62.2,	-53.1,	4.4,	30	11.0,	78.6,	56.9,	-53.2,	-0.0,
31	11.0,	86.0,	69.0,	-58.8,	-3.9,	32	11.0,	90.8,	78.9,	-62.7,	-7.7,
33	11.0,	92.8,	86.4,	-64.7,	-11.2,	34	11.0,	91.9,	91.3,	-64.7,	-14.4,
35	11.0,	88.3,	93.5,	-62.7,	-17.1,	36	11.0,	82.0,	92.8,	-58.8,	-19.4,

**MODELOPTs: NonDFAULT CONC FLAT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK5

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	73.3,	89.2,	-48.8,	-22.4,	2	11.0,	62.2,	83.0,	-41.3,	-22.6,
3	11.0,	56.9,	78.6,	-34.7,	-24.5,	4	11.0,	69.0,	86.0,	-34.6,	-23.4,
5	11.0,	78.9,	90.8,	-33.4,	-21.5,	6	11.0,	86.4,	92.8,	-31.3,	-19.0,
7	11.0,	91.3,	91.9,	-28.2,	-15.9,	8	11.0,	93.5,	88.3,	-24.2,	-12.3,
9	11.0,	92.8,	82.0,	-19.6,	-8.3,	10	11.0,	89.2,	73.3,	-14.3,	-4.1,
11	11.0,	83.0,	62.2,	-8.5,	0.2,	12	11.0,	78.6,	56.9,	-3.9,	4.6,
13	11.0,	86.0,	69.0,	-11.1,	8.4,	14	11.0,	90.8,	78.9,	-17.9,	11.9,
15	11.0,	92.8,	86.4,	-24.2,	15.1,	16	11.0,	91.9,	91.3,	-29.8,	17.8,
17	11.0,	88.3,	93.5,	-34.4,	19.9,	18	11.0,	82.0,	92.8,	-38.0,	21.5,
19	11.0,	73.3,	89.2,	-40.5,	22.4,	20	11.0,	62.2,	83.0,	-41.7,	22.6,
21	11.0,	56.9,	78.6,	-44.0,	24.5,	22	11.0,	69.0,	86.0,	-51.4,	23.4,
23	11.0,	78.9,	90.8,	-57.3,	21.5,	24	11.0,	86.4,	92.8,	-61.5,	19.0,
25	11.0,	91.3,	91.9,	-63.7,	15.9,	26	11.0,	93.5,	88.3,	-64.1,	12.3,
27	11.0,	92.8,	82.0,	-62.5,	8.3,	28	11.0,	89.2,	73.3,	-59.0,	4.1,
29	11.0,	83.0,	62.2,	-53.7,	-0.2,	30	11.0,	78.6,	56.9,	-53.0,	-4.6,
31	11.0,	86.0,	69.0,	-57.8,	-8.4,	32	11.0,	90.8,	78.9,	-60.9,	-11.9,
33	11.0,	92.8,	86.4,	-62.2,	-15.1,	34	11.0,	91.9,	91.3,	-61.5,	-17.8,
35	11.0,	88.3,	93.5,	-59.0,	-19.9,	36	11.0,	82.0,	92.8,	-54.7,	-21.5,

SOURCE ID: STCK6

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-122.6,	-6.5,	2	11.0,	86.6,	118.6,	-116.8,	-14.9,
3	11.0,	79.7,	117.5,	-111.5,	-23.4,	4	11.0,	89.2,	124.0,	-108.0,	-36.4,
5	11.0,	96.7,	126.8,	-101.2,	-47.9,	6	11.0,	109.3,	125.6,	-91.4,	-53.9,
7	11.0,	118.6,	121.1,	-79.2,	-58.2,	8	11.0,	124.3,	117.6,	-69.3,	-60.9,
9	11.0,	92.8,	82.0,	-93.6,	51.1,	10	11.0,	89.2,	73.3,	-97.5,	41.5,
11	11.0,	83.0,	62.2,	-98.4,	30.7,	12	11.0,	78.6,	56.9,	-97.7,	19.1,
13	11.0,	86.0,	69.0,	-106.0,	6.4,	14	11.0,	90.8,	78.9,	-111.0,	-6.6,
15	11.0,	92.8,	86.4,	-112.7,	-19.3,	16	11.0,	91.9,	91.3,	-110.9,	-31.4,
17	11.0,	88.3,	93.5,	-105.8,	-42.6,	18	11.0,	110.5,	126.2,	-1.5,	-2.0,
19	11.0,	100.1,	124.3,	-1.7,	6.5,	20	11.0,	86.6,	118.6,	-1.8,	14.9,
21	11.0,	79.7,	117.5,	-6.1,	23.4,	22	11.0,	89.2,	124.0,	-16.0,	36.4,
23	11.0,	96.7,	126.8,	-25.5,	47.9,	24	11.0,	109.3,	125.6,	-34.2,	53.9,
25	11.0,	118.6,	121.1,	-41.9,	58.2,	26	11.0,	124.3,	117.6,	-48.3,	60.9,
27	11.0,	92.8,	82.0,	11.5,	-51.1,	28	11.0,	124.3,	100.1,	-56.6,	60.5,
29	11.0,	118.6,	86.6,	-58.2,	57.5,	30	11.0,	117.5,	79.7,	-63.3,	52.7,
31	11.0,	124.0,	89.2,	-81.0,	46.0,	32	11.0,	126.8,	96.7,	-96.2,	37.8,
33	11.0,	125.6,	109.3,	-108.5,	28.6,	34	11.0,	91.9,	91.3,	19.6,	31.4,
35	11.0,	88.3,	93.5,	12.3,	42.6,	36	11.0,	110.5,	126.2,	-124.7,	2.0,

SOURCE ID: STCK7

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-118.4,	-7.6,	2	11.0,	86.6,	118.6,	-112.5,	-15.2,
3	11.0,	79.7,	117.5,	-107.1,	-23.0,	4	11.0,	89.2,	124.0,	-103.8,	-35.2,
5	11.0,	96.7,	126.8,	-97.3,	-46.0,	6	11.0,	109.3,	125.6,	-87.8,	-51.4,
7	11.0,	118.6,	121.1,	-76.1,	-55.2,	8	11.0,	124.3,	117.6,	-66.8,	-57.3,
9	11.0,	126.2,	110.5,	-55.4,	-57.7,	10	11.0,	89.2,	73.3,	-96.3,	45.7,
11	11.0,	83.0,	62.2,	-98.0,	35.1,	12	11.0,	78.6,	56.9,	-98.1,	23.4,
13	11.0,	86.0,	69.0,	-107.1,	10.6,	14	11.0,	90.8,	78.9,	-112.9,	-2.6,
15	11.0,	92.8,	86.4,	-115.2,	-15.7,	16	11.0,	91.9,	91.3,	-114.0,	-28.4,
17	11.0,	88.3,	93.5,	-109.4,	-40.1,	18	11.0,	110.5,	126.2,	-5.4,	-0.2,
19	11.0,	100.1,	124.3,	-5.9,	7.6,	20	11.0,	86.6,	118.6,	-6.1,	15.2,
21	11.0,	79.7,	117.5,	-10.4,	23.0,	22	11.0,	89.2,	124.0,	-20.2,	35.2,
23	11.0,	96.7,	126.8,	-29.5,	46.0,	24	11.0,	109.3,	125.6,	-37.8,	51.4,
25	11.0,	118.6,	121.1,	-45.0,	55.2,	26	11.0,	124.3,	117.6,	-50.8,	57.3,
27	11.0,	126.2,	110.5,	-55.1,	57.7,	28	11.0,	124.3,	100.1,	-57.7,	56.3,

29	11.0,	118.6,	86.6,	-58.5,	53.2,	30	11.0,	117.5,	79.7,	-62.9,	48.3,
31	11.0,	124.0,	89.2,	-79.8,	41.8,	32	11.0,	126.8,	96.7,	-94.4,	33.9,
33	11.0,	125.6,	109.3,	-106.0,	25.0,	34	11.0,	121.1,	118.6,	-114.5,	15.6,
35	11.0,	88.3,	93.5,	15.9,	40.1,	36	11.0,	110.5,	126.2,	-120.8,	0.2,

SOURCE ID: STCK8

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-114.7,	-8.7,	2	11.0,	86.6,	118.6,	-108.7,	-15.7,
3	11.0,	79.7,	117.5,	-103.3,	-22.8,	4	11.0,	89.2,	124.0,	-100.0,	-34.3,
5	11.0,	96.7,	126.8,	-93.7,	-44.5,	6	11.0,	109.3,	125.6,	-84.6,	-49.2,
7	11.0,	118.6,	121.1,	-73.3,	-52.5,	8	11.0,	124.3,	117.6,	-64.5,	-54.2,
9	11.0,	126.2,	110.5,	-53.7,	-54.2,	10	11.0,	89.2,	73.3,	-95.3,	49.4,
11	11.0,	83.0,	62.2,	-97.6,	38.9,	12	11.0,	78.6,	56.9,	-98.4,	27.3,
13	11.0,	86.0,	69.0,	-108.0,	14.3,	14	11.0,	90.8,	78.9,	-114.4,	0.9,
15	11.0,	92.8,	86.4,	-117.3,	-12.5,	16	11.0,	91.9,	91.3,	-116.7,	-25.6,
17	11.0,	88.3,	93.5,	-112.5,	-37.9,	18	11.0,	110.5,	126.2,	-8.9,	1.5,
19	11.0,	100.1,	124.3,	-9.6,	8.7,	20	11.0,	86.6,	118.6,	-9.9,	15.7,
21	11.0,	79.7,	117.5,	-14.2,	22.8,	22	11.0,	89.2,	124.0,	-24.0,	34.3,
23	11.0,	96.7,	126.8,	-33.0,	44.5,	24	11.0,	109.3,	125.6,	-41.0,	49.2,
25	11.0,	118.6,	121.1,	-47.8,	52.5,	26	11.0,	124.3,	117.6,	-53.1,	54.2,
27	11.0,	126.2,	110.5,	-56.8,	54.2,	28	11.0,	124.3,	100.1,	-58.8,	52.6,
29	11.0,	118.6,	86.6,	-59.0,	49.4,	30	11.0,	117.5,	79.7,	-62.6,	44.5,
31	11.0,	124.0,	89.2,	-78.9,	38.0,	32	11.0,	126.8,	96.7,	-92.8,	30.4,
33	11.0,	125.6,	109.3,	-103.9,	21.8,	34	11.0,	121.1,	118.6,	-111.8,	12.8,
35	11.0,	88.3,	93.5,	19.0,	37.9,	36	11.0,	110.5,	126.2,	-117.3,	-1.5,

**MODELOPTs: NonDFAULT CONC FLAT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK9

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-111.7,	-9.7,	2	11.0,	86.6,	118.6,	-105.5,	-16.0,
3	11.0,	79.7,	117.5,	-100.1,	-22.6,	4	11.0,	89.2,	124.0,	-96.9,	-33.6,
5	11.0,	96.7,	126.8,	-90.8,	-43.2,	6	11.0,	109.3,	125.6,	-82.0,	-47.5,
7	11.0,	118.6,	121.1,	-71.0,	-50.3,	8	11.0,	124.3,	117.6,	-62.6,	-51.6,
9	11.0,	126.2,	110.5,	-52.3,	-51.3,	10	11.0,	124.3,	100.1,	-40.4,	-49.5,
11	11.0,	83.0,	62.2,	-97.2,	42.1,	12	11.0,	78.6,	56.9,	-98.6,	30.5,
13	11.0,	86.0,	69.0,	-108.8,	17.4,	14	11.0,	90.8,	78.9,	-115.7,	3.8,
15	11.0,	92.8,	86.4,	-119.1,	-9.9,	16	11.0,	91.9,	91.3,	-118.9,	-23.3,
17	11.0,	88.3,	93.5,	-115.0,	-36.0,	18	11.0,	110.5,	126.2,	-11.8,	3.0,
19	11.0,	100.1,	124.3,	-12.6,	9.7,	20	11.0,	86.6,	118.6,	-13.1,	16.0,
21	11.0,	79.7,	117.5,	-17.4,	22.6,	22	11.0,	89.2,	124.0,	-27.1,	33.6,
23	11.0,	96.7,	126.8,	-35.9,	43.2,	24	11.0,	109.3,	125.6,	-43.7,	47.5,
25	11.0,	118.6,	121.1,	-50.1,	50.3,	26	11.0,	124.3,	117.6,	-55.0,	51.6,
27	11.0,	126.2,	110.5,	-58.2,	51.3,	28	11.0,	124.3,	100.1,	-59.7,	49.5,
29	11.0,	118.6,	86.6,	-59.3,	46.2,	30	11.0,	117.5,	79.7,	-62.4,	41.3,
31	11.0,	124.0,	89.2,	-78.2,	34.9,	32	11.0,	126.8,	96.7,	-91.5,	27.4,
33	11.0,	125.6,	109.3,	-102.1,	19.1,	34	11.0,	121.1,	118.6,	-109.6,	10.5,
35	11.0,	88.3,	93.5,	21.6,	36.0,	36	11.0,	110.5,	126.2,	-114.5,	-3.0,

SOURCE ID: STCK10

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-102.3,	-11.8,	2	11.0,	86.6,	118.6,	-95.9,	-16.6,
3	11.0,	79.7,	117.5,	-90.5,	-21.4,	4	11.0,	89.2,	124.0,	-87.7,	-30.8,
5	11.0,	96.7,	126.8,	-82.2,	-38.9,	6	11.0,	109.3,	125.6,	-74.3,	-41.7,
7	11.0,	118.6,	121.1,	-64.5,	-43.3,	8	11.0,	124.3,	117.6,	-57.4,	-43.6,
9	11.0,	126.2,	110.5,	-48.5,	-42.5,	10	11.0,	124.3,	100.1,	-38.2,	-40.2,
11	11.0,	118.6,	86.6,	-26.8,	-36.6,	12	11.0,	78.6,	56.9,	-99.7,	40.0,
13	11.0,	86.0,	69.0,	-111.6,	26.6,	14	11.0,	90.8,	78.9,	-120.0,	12.4,
15	11.0,	92.8,	86.4,	-124.9,	-2.2,	16	11.0,	91.9,	91.3,	-125.9,	-16.7,
17	11.0,	88.3,	93.5,	-123.1,	-30.7,	18	11.0,	82.0,	92.8,	-116.6,	-43.8,
19	11.0,	100.1,	124.3,	-22.0,	11.8,	20	11.0,	86.6,	118.6,	-22.7,	16.6,
21	11.0,	79.7,	117.5,	-27.0,	21.4,	22	11.0,	89.2,	124.0,	-36.3,	30.8,
23	11.0,	96.7,	126.8,	-44.5,	38.9,	24	11.0,	109.3,	125.6,	-51.4,	41.7,
25	11.0,	118.6,	121.1,	-56.7,	43.3,	26	11.0,	124.3,	117.6,	-60.3,	43.6,
27	11.0,	126.2,	110.5,	-62.0,	42.5,	28	11.0,	124.3,	100.1,	-61.9,	40.2,
29	11.0,	118.6,	86.6,	-59.9,	36.6,	30	11.0,	117.5,	79.7,	-61.3,	31.8,
31	11.0,	124.0,	89.2,	-75.4,	25.7,	32	11.0,	126.8,	96.7,	-87.2,	18.9,
33	11.0,	125.6,	109.3,	-96.4,	11.4,	34	11.0,	121.1,	118.6,	-102.6,	3.9,
35	11.0,	117.6,	124.3,	-105.7,	-1.4,	36	11.0,	110.5,	126.2,	-105.6,	-6.7,

SOURCE ID: STCK11

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-99.0,	-12.7,	2	11.0,	86.6,	118.6,	-92.5,	-16.8,
3	11.0,	79.7,	117.5,	-87.1,	-21.1,	4	11.0,	89.2,	124.0,	-84.4,	-29.9,
5	11.0,	96.7,	126.8,	-79.1,	-37.4,	6	11.0,	109.3,	125.6,	-71.5,	-39.7,
7	11.0,	118.6,	121.1,	-62.1,	-40.8,	8	11.0,	124.3,	117.6,	-55.4,	-40.7,
9	11.0,	126.2,	110.5,	-47.1,	-39.4,	10	11.0,	124.3,	100.1,	-37.4,	-36.8,
11	11.0,	118.6,	86.6,	-26.5,	-33.2,	12	11.0,	78.6,	56.9,	-100.0,	43.4,
13	11.0,	86.0,	69.0,	-112.5,	29.9,	14	11.0,	90.8,	78.9,	-121.5,	15.5,
15	11.0,	92.8,	86.4,	-126.9,	0.6,	16	11.0,	91.9,	91.3,	-128.3,	-14.3,
17	11.0,	88.3,	93.5,	-125.9,	-28.8,	18	11.0,	82.0,	92.8,	-119.7,	-42.4,
19	11.0,	100.1,	124.3,	-25.3,	12.7,	20	11.0,	86.6,	118.6,	-26.1,	16.8,
21	11.0,	79.7,	117.5,	-30.4,	21.1,	22	11.0,	89.2,	124.0,	-39.6,	29.9,
23	11.0,	96.7,	126.8,	-47.6,	37.4,	24	11.0,	109.3,	125.6,	-54.2,	39.7,
25	11.0,	118.6,	121.1,	-59.1,	40.8,	26	11.0,	124.3,	117.6,	-62.2,	40.7,
27	11.0,	126.2,	110.5,	-63.4,	39.4,	28	11.0,	124.3,	100.1,	-62.7,	36.8,

29	11.0,	118.6,	86.6,	-60.1,	33.2,	30	11.0,	117.5,	79.7,	-61.0,	28.4,
31	11.0,	124.0,	89.2,	-74.5,	22.4,	32	11.0,	126.8,	96.7,	-85.7,	15.8,
33	11.0,	125.6,	109.3,	-94.4,	8.7,	34	11.0,	121.1,	118.6,	-100.1,	1.5,
35	11.0,	117.6,	124.3,	-102.9,	-3.4,	36	11.0,	110.5,	126.2,	-102.5,	-8.2,

SOURCE ID: STCK12

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-95.1,	-13.7,	2	11.0,	86.6,	118.6,	-88.5,	-17.2,
3	11.0,	79.7,	117.5,	-83.1,	-20.7,	4	11.0,	89.2,	124.0,	-80.5,	-28.8,
5	11.0,	96.7,	126.8,	-75.5,	-35.7,	6	11.0,	109.3,	125.6,	-68.2,	-37.4,
7	11.0,	118.6,	121.1,	-59.2,	-38.0,	8	11.0,	124.3,	117.6,	-53.1,	-37.4,
9	11.0,	126.2,	110.5,	-45.4,	-35.8,	10	11.0,	124.3,	100.1,	-36.3,	-33.0,
11	11.0,	118.6,	86.6,	-26.1,	-29.2,	12	11.0,	117.5,	79.7,	-19.1,	-24.4,
13	11.0,	86.0,	69.0,	-113.5,	33.8,	14	11.0,	90.8,	78.9,	-123.2,	19.1,
15	11.0,	92.8,	86.4,	-129.2,	3.9,	16	11.0,	91.9,	91.3,	-131.2,	-11.5,
17	11.0,	88.3,	93.5,	-129.2,	-26.5,	18	11.0,	82.0,	92.8,	-123.3,	-40.7,
19	11.0,	100.1,	124.3,	-29.2,	13.7,	20	11.0,	86.6,	118.6,	-30.1,	17.2,
21	11.0,	79.7,	117.5,	-34.4,	20.7,	22	11.0,	89.2,	124.0,	-43.5,	28.8,
23	11.0,	96.7,	126.8,	-51.2,	35.7,	24	11.0,	109.3,	125.6,	-57.4,	37.4,
25	11.0,	118.6,	121.1,	-61.9,	38.0,	26	11.0,	124.3,	117.6,	-64.5,	37.4,
27	11.0,	126.2,	110.5,	-65.1,	35.8,	28	11.0,	124.3,	100.1,	-63.8,	33.0,
29	11.0,	118.6,	86.6,	-60.5,	29.2,	30	11.0,	117.5,	79.7,	-60.6,	24.4,
31	11.0,	124.0,	89.2,	-73.4,	18.5,	32	11.0,	126.8,	96.7,	-84.0,	12.1,
33	11.0,	125.6,	109.3,	-92.1,	5.4,	34	11.0,	121.1,	118.6,	-97.3,	-1.4,
35	11.0,	117.6,	124.3,	-99.6,	-5.7,	36	11.0,	110.5,	126.2,	-98.9,	-9.9,

**MODELOPTs: NonDFAULT CONC FLAT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK13

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-91.5,	-14.5,	2	11.0,	86.6,	118.6,	-84.8,	-17.3,
3	11.0,	79.7,	117.5,	-79.5,	-20.2,	4	11.0,	89.2,	124.0,	-77.0,	-27.7,
5	11.0,	96.7,	126.8,	-72.2,	-33.9,	6	11.0,	109.3,	125.6,	-65.3,	-35.1,
7	11.0,	118.6,	121.1,	-56.8,	-35.2,	8	11.0,	124.3,	117.6,	-51.2,	-34.3,
9	11.0,	126.2,	110.5,	-44.0,	-32.3,	10	11.0,	124.3,	100.1,	-35.6,	-29.4,
11	11.0,	118.6,	86.6,	-26.0,	-25.5,	12	11.0,	117.5,	79.7,	-19.7,	-20.7,
13	11.0,	86.0,	69.0,	-114.7,	37.3,	14	11.0,	90.8,	78.9,	-125.0,	22.4,
15	11.0,	92.8,	86.4,	-131.5,	6.8,	16	11.0,	91.9,	91.3,	-134.0,	-9.0,
17	11.0,	88.3,	93.5,	-132.4,	-24.5,	18	11.0,	82.0,	92.8,	-126.8,	-39.3,
19	11.0,	100.1,	124.3,	-32.8,	14.5,	20	11.0,	86.6,	118.6,	-33.8,	17.3,
21	11.0,	79.7,	117.5,	-38.0,	20.2,	22	11.0,	89.2,	124.0,	-47.0,	27.7,
23	11.0,	96.7,	126.8,	-54.5,	33.9,	24	11.0,	109.3,	125.6,	-60.4,	35.1,
25	11.0,	118.6,	121.1,	-64.4,	35.2,	26	11.0,	124.3,	117.6,	-66.4,	34.3,
27	11.0,	126.2,	110.5,	-66.5,	32.3,	28	11.0,	124.3,	100.1,	-64.5,	29.4,
29	11.0,	118.6,	86.6,	-60.6,	25.5,	30	11.0,	117.5,	79.7,	-60.1,	20.7,
31	11.0,	124.0,	89.2,	-72.3,	15.0,	32	11.0,	126.8,	96.7,	-82.3,	8.9,
33	11.0,	125.6,	109.3,	-89.8,	2.5,	34	11.0,	121.1,	118.6,	-94.5,	-3.8,
35	11.0,	117.6,	124.3,	-96.5,	-7.6,	36	11.0,	110.5,	126.2,	-95.4,	-11.2,

SOURCE ID: STCK14

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	11.0,	100.1,	124.3,	-87.1,	-15.3,	2	11.0,	86.6,	118.6,	-80.3,	-17.4,
3	11.0,	79.7,	117.5,	-75.0,	-19.5,	4	11.0,	89.2,	124.0,	-72.8,	-26.2,
5	11.0,	96.7,	126.8,	-68.3,	-31.8,	6	11.0,	109.3,	125.6,	-61.8,	-32.3,
7	11.0,	118.6,	121.1,	-53.8,	-31.9,	8	11.0,	124.3,	117.6,	-48.9,	-30.5,
9	11.0,	126.2,	110.5,	-42.4,	-28.2,	10	11.0,	124.3,	100.1,	-34.7,	-25.0,
11	11.0,	118.6,	86.6,	-25.9,	-21.0,	12	11.0,	117.5,	79.7,	-20.4,	-16.3,
13	11.0,	86.0,	69.0,	-116.1,	41.5,	14	11.0,	90.8,	78.9,	-127.1,	26.3,
15	11.0,	92.8,	86.4,	-134.2,	10.3,	16	11.0,	91.9,	91.3,	-137.3,	-6.1,
17	11.0,	88.3,	93.5,	-136.2,	-22.2,	18	11.0,	82.0,	92.8,	-130.9,	-37.7,
19	11.0,	100.1,	124.3,	-37.2,	15.3,	20	11.0,	86.6,	118.6,	-38.3,	17.4,
21	11.0,	79.7,	117.5,	-42.5,	19.5,	22	11.0,	89.2,	124.0,	-51.2,	26.2,
23	11.0,	96.7,	126.8,	-58.4,	31.8,	24	11.0,	109.3,	125.6,	-63.8,	32.3,
25	11.0,	118.6,	121.1,	-67.3,	31.9,	26	11.0,	124.3,	117.6,	-68.8,	30.5,
27	11.0,	126.2,	110.5,	-68.1,	28.2,	28	11.0,	124.3,	100.1,	-65.4,	25.0,
29	11.0,	118.6,	86.6,	-60.7,	21.0,	30	11.0,	117.5,	79.7,	-59.4,	16.3,
31	11.0,	124.0,	89.2,	-70.8,	10.8,	32	11.0,	126.8,	96.7,	-80.1,	5.0,
33	11.0,	125.6,	109.3,	-87.0,	-1.0,	34	11.0,	121.1,	118.6,	-91.2,	-6.8,
35	11.0,	117.6,	124.3,	-92.6,	-10.0,	36	11.0,	110.5,	126.2,	-91.3,	-12.8,

**MODELOPTs: NonDFAULT CONC FLAT

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
     ( 410950.7, 3764880.5,       0.0,       0.0,       0.0);         ( 411067.0, 3764215.2,
0.0,       0.0,       0.0);
     ( 410926.2, 3764850.7,       0.0,       0.0,       0.0);         ( 410887.6, 3764834.9,
0.0,       0.0,       0.0);
     ( 410831.1, 3764867.5,       0.0,       0.0,       0.0);         ( 410860.5, 3764905.7,
0.0,       0.0,       0.0);
     ( 410884.5, 3764938.4,       0.0,       0.0,       0.0);         ( 411048.9, 3764220.7,
0.0,       0.0,       0.0);
     ( 411034.7, 3764225.5,       0.0,       0.0,       0.0);         ( 411018.2, 3764233.3,
0.0,       0.0,       0.0);
     ( 411004.0, 3764241.2,       0.0,       0.0,       0.0);         ( 410988.3, 3764249.1,
0.0,       0.0,       0.0);
     ( 410958.3, 3764269.6,       0.0,       0.0,       0.0);         ( 411080.4, 3764208.9,
0.0,       0.0,       0.0);
     ( 411096.2, 3764198.7,       0.0,       0.0,       0.0);         ( 410947.3, 3764201.8,
0.0,       0.0,       0.0);
     ( 410973.3, 3764220.0,       0.0,       0.0,       0.0);         ( 410940.2, 3764230.2,
0.0,       0.0,       0.0);
     ( 410959.0, 3764905.4,       0.0,       0.0,       0.0);         ( 410898.6, 3764949.8,
0.0,       0.0,       0.0);
```

**MODELOPTs: NonDFAULT CONC FLAT

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1
1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

**MODELOPTs: NonDFAULT CONC FLAT

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: pico8.sfc
Met Version: 14134
Profile file: pico8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	285.4	5.5	
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	284.2	5.5	
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	283.8	5.5	
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	284.2	5.5	
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	284.9	5.5	
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	285.4	5.5	
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	285.9	5.5	
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	0.54	999.00	999.	-9.0	286.4	5.5	
08	01	01	1	09	28.6	-9.000	-9.000	-9.000	61.	-999.	-99999.0	0.34	1.00	0.32	999.00	999.	-9.0	287.0	5.5	
08	01	01	1	10	83.5	-9.000	-9.000	-9.000	164.	-999.	-99999.0	0.34	1.00	0.24	999.00	999.	-9.0	289.2	5.5	
08	01	01	1	11	131.2	-9.000	-9.000	-9.000	427.	-999.	-99999.0	0.34	1.00	0.21	999.00	999.	-9.0	292.5	5.5	
08	01	01	1	12	130.6	-9.000	-9.000	-9.000	620.	-999.	-99999.0	0.34	1.00	0.20	999.00	999.	-9.0	294.2	5.5	
08	01	01	1	13	112.1	-9.000	-9.000	-9.000	723.	-999.	-99999.0	0.34	1.00	0.20	999.00	999.	-9.0	294.9	5.5	
08	01	01	1	14	86.7	-9.000	-9.000	-9.000	762.	-999.	-99999.0	0.34	1.00	0.21	999.00	999.	-9.0	294.9	5.5	
08	01	01	1	15	37.3	-9.000	-9.000	-9.000	778.	-999.	-99999.0	0.34	1.00	0.25	999.00	999.	-9.0	294.2	5.5	
08	01	01	1	16	12.7	-9.000	-9.000	-9.000	783.	-999.	-99999.0	0.34	1.00	0.33	999.00	999.	-9.0	293.8	5.5	
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	0.60	999.00	999.	-9.0	292.5	5.5	
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	291.4	5.5	
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	290.9	5.5	
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	288.8	5.5	
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	288.1	5.5	
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	288.1	5.5	
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.	-9.0	288.8	5.5	
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.34	1.00	1.00	999.00	999.				

```
-9.0  287.5    5.5

 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 08 01 01 01    5.5 0 -999.  -99.00   285.4   99.0  -99.00  -99.00
 08 01 01 01    9.1 1 -999.  -99.00  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

**MODELOPTs: NonDFAULT CONC FLAT

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: SRCGP1:A ***
INCLUDING SOURCE(S): PAREA1 , PAREA2 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
410950.74	3764880.49	41.36070	411067.05	3764215.23	5.48007
410926.17	3764850.70	35.86641	410887.58	3764834.95	28.64442
410831.12	3764867.53	20.70637	410860.55	3764905.68	23.38904
410884.53	3764938.37	25.86072	411048.91	3764220.74	7.01446
411034.74	3764225.47	8.41746	411018.20	3764233.34	10.38510
411004.03	3764241.22	12.29457	410988.28	3764249.09	14.43439
410958.35	3764269.57	18.96287	411080.41	3764208.93	4.46882
411096.16	3764198.69	3.45777	410947.33	3764201.84	14.02743
410973.31	3764219.96	13.37678	410940.24	3764230.19	16.70715
410959.02	3764905.39	42.47376	410898.63	3764949.84	27.52208

**MODELOPTs: NonDFAULT CONC FLAT

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: SRCGP2:P ***
INCLUDING SOURCE(S): STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , STCK6 , STCK7 , STCK8 , STCK9 , STCK10 , STCK11 , STCK12 , STCK13 , STCK14 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
410950.74	3764880.49	123.53449	411067.05	3764215.23	39.99548
410926.17	3764850.70	110.87483	410887.58	3764834.95	95.88822
410831.12	3764867.53	78.39193	410860.55	3764905.68	87.11322
410884.53	3764938.37	94.46728	411048.91	3764220.74	51.31190
411034.74	3764225.47	61.45050	411018.20	3764233.34	74.93591
411004.03	3764241.22	87.05301	410988.28	3764249.09	98.81482
410958.35	3764269.57	117.97419	411080.41	3764208.93	32.38581
411096.16	3764198.69	25.31065	410947.33	3764201.84	93.11035
410973.31	3764219.96	92.16654	410940.24	3764230.19	106.06736
410959.02	3764905.39	127.01476	410898.63	3764949.84	98.22432

**MODELOPTs: NonDFAULT CONC FLAT

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): PAREA1 , STCK1 , STCK2 , STCK3 , STCK4 , STCK5 , PAREA2 , STCK6 , STCK7 , STCK8 , STCK9 , STCK10 , STCK11 , STCK12 , STCK13 , STCK14 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
410950.74	3764880.49	164.89520	411067.05	3764215.23	45.47555
410926.17	3764850.70	146.74124	410887.58	3764834.95	124.53264
410831.12	3764867.53	99.09830	410860.55	3764905.68	110.50225
410884.53	3764938.37	120.32800	411048.91	3764220.74	58.32636
411034.74	3764225.47	69.86797	411018.20	3764233.34	85.32101
411004.03	3764241.22	99.34758	410988.28	3764249.09	113.24921
410958.35	3764269.57	136.93706	411080.41	3764208.93	36.85463
411096.16	3764198.69	28.76842	410947.33	3764201.84	107.13778
410973.31	3764219.96	105.54332	410940.24	3764230.19	122.77451
410959.02	3764905.39	169.48852	410898.63	3764949.84	125.74640

**MODELOPTs: NonDFAULT CONC FLAT

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

```
NETWORK
GROUP ID                      AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)
OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - -

SRCGP1:A  1ST HIGHEST VALUE IS      42.47376 AT (  410959.02,  3764905.39,     0.00,     0.00,
0.00)  DC
          2ND HIGHEST VALUE IS      41.36070 AT (  410950.74,  3764880.49,     0.00,     0.00,
0.00)  DC
          3RD HIGHEST VALUE IS      35.86641 AT (  410926.17,  3764850.70,     0.00,     0.00,
0.00)  DC
          4TH HIGHEST VALUE IS      28.64442 AT (  410887.58,  3764834.95,     0.00,     0.00,
0.00)  DC
          5TH HIGHEST VALUE IS      27.52208 AT (  410898.63,  3764949.84,     0.00,     0.00,
0.00)  DC
          6TH HIGHEST VALUE IS      25.86072 AT (  410884.53,  3764938.37,     0.00,     0.00,
0.00)  DC
          7TH HIGHEST VALUE IS      23.38904 AT (  410860.55,  3764905.68,     0.00,     0.00,
0.00)  DC
          8TH HIGHEST VALUE IS      20.70637 AT (  410831.12,  3764867.53,     0.00,     0.00,
0.00)  DC
          9TH HIGHEST VALUE IS      18.96287 AT (  410958.35,  3764269.57,     0.00,     0.00,
0.00)  DC
         10TH HIGHEST VALUE IS      16.70715 AT (  410940.24,  3764230.19,     0.00,     0.00,
0.00)  DC

SRCGP2:P  1ST HIGHEST VALUE IS     127.01476 AT (  410959.02,  3764905.39,     0.00,     0.00,
0.00)  DC
          2ND HIGHEST VALUE IS     123.53449 AT (  410950.74,  3764880.49,     0.00,     0.00,
0.00)  DC
          3RD HIGHEST VALUE IS     117.97419 AT (  410958.35,  3764269.57,     0.00,     0.00,
0.00)  DC
          4TH HIGHEST VALUE IS     110.87483 AT (  410926.17,  3764850.70,     0.00,     0.00,
0.00)  DC
          5TH HIGHEST VALUE IS     106.06736 AT (  410940.24,  3764230.19,     0.00,     0.00,
0.00)  DC
          6TH HIGHEST VALUE IS      98.81482 AT (  410988.28,  3764249.09,     0.00,     0.00,
0.00)  DC
          7TH HIGHEST VALUE IS      98.22432 AT (  410898.63,  3764949.84,     0.00,     0.00,
0.00)  DC
          8TH HIGHEST VALUE IS      95.88822 AT (  410887.58,  3764834.95,     0.00,     0.00,
0.00)  DC
          9TH HIGHEST VALUE IS      94.46728 AT (  410884.53,  3764938.37,     0.00,     0.00,
0.00)  DC
         10TH HIGHEST VALUE IS      93.11035 AT (  410947.33,  3764201.84,     0.00,     0.00,
0.00)  DC

ALL       1ST HIGHEST VALUE IS     169.48852 AT (  410959.02,  3764905.39,     0.00,     0.00,
0.00)  DC
          2ND HIGHEST VALUE IS     164.89520 AT (  410950.74,  3764880.49,     0.00,     0.00,
0.00)  DC
          3RD HIGHEST VALUE IS     146.74124 AT (  410926.17,  3764850.70,     0.00,     0.00,
0.00)  DC
          4TH HIGHEST VALUE IS     136.93706 AT (  410958.35,  3764269.57,     0.00,     0.00,
```

```
0.00)  DC
          5TH HIGHEST VALUE IS     125.74640 AT (  410898.63,  3764949.84,     0.00,     0.00,
0.00)  DC
          6TH HIGHEST VALUE IS     124.53264 AT (  410887.58,  3764834.95,     0.00,     0.00,
0.00)  DC
          7TH HIGHEST VALUE IS     122.77451 AT (  410940.24,  3764230.19,     0.00,     0.00,
0.00)  DC
          8TH HIGHEST VALUE IS     120.32800 AT (  410884.53,  3764938.37,     0.00,     0.00,
0.00)  DC
          9TH HIGHEST VALUE IS     113.24921 AT (  410988.28,  3764249.09,     0.00,     0.00,
0.00)  DC
         10TH HIGHEST VALUE IS     110.50225 AT (  410860.55,  3764905.68,     0.00,     0.00,
0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
 *** AERMOD - VERSION  14134 ***   ***
C:\Users\nvermilion\Desktop\HRA\IND-07.143\Parriott\Parriott.isc     ***        07/17/15
 *** AERMET - VERSION  14134 ***   ***
***        16:34:30

PAGE  17
 **MODELOPTs:   NonDFAULT CONC      FLAT

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of           15 Warning Message(s)
 A Total of         1222 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of           13 Calm Hours Identified

 A Total of         1209 Missing Hours Identified (  2.76 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 CO W320      22       URBOPT: Input Parameter May Be Out-of-Range for Parameter       URB-POP
 SO W320      75        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      76        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      77        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      78        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      79        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      85        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      86        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      87        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      88        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      89        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      90        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      91        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      92        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS
 SO W320      93        PPARM: Input Parameter May Be Out-of-Range for Parameter            VS

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

Results Summary

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Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		169.48852	ug/m^3	410959.02	3764905.39	0.00	0.00	0.00	

Concentration - Source Group: SRCGP1:A

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		42.47376	ug/m^3	410959.02	3764905.39	0.00	0.00	0.00	

Concentration - Source Group: SRCGP2:P

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		127.01476	ug/m^3	410959.02	3764905.39	0.00	0.00	0.00	

Appendix D Noise Background Information

Appendix

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Noise Background Information

1. Noise and Vibration Basics

1.1 TERMINOLOGY AND NOISE DESCRIPTORS

The following are brief definitions of noise terminology:

- **Sound.** A vibratory disturbance that, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel** (**dB**). A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels which approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}).** The mean of the noise level averaged over the measurement period, regarded as an average level.

- **Day-Night Level (L_{dn}).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM. The L_{dn} and the CNEL are similar noise descriptors and rarely differ by more than 1 dBA.

- **Community Noise Equivalent Level (CNEL)**. The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring during the period from 7 to 10 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM.

  Note that L_{dn} and CNEL values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

- **Sensitive Receptor.** Certain land uses are particularly sensitive to noise and vibration. Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, guest lodging (motels and hotels), libraries, religious institutions, hospitals, nursing homes, and passive recreation areas are generally more sensitive to noise than are commercial and industrial land uses.

1.2 CHARACTERISTICS OF SOUND

Sound is a pressure wave transmitted through the air. When an object vibrates, it radiates part of its energy as acoustical pressure in the form of a sound wave. Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). The standard unit of measurement of the loudness of sound is the decibel (dB). The human hearing system is not equally sensitive to sound at all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Because of the physical characteristics of noise transmission and noise perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1, Change in Sound Pressure Level, dB, presents the subjective effect of changes in sound pressure levels. Typical human hearing can detect changes of approximately 3 dBA or greater under normal conditions. Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A change of 5 dBA or greater is typically noticeable to most people in an exterior environment and a change of 10 dBA is perceived as a doubling (or halving) of the noise.

Table 1 Change in Sound Pressure Level, dB

Change in Apparent Loudness	
± 3 dB	Threshold of human perceptibility
± 5 dB	Clearly noticeable change in noise level
± 10 dB	Half or twice as loud
± 20 dB	Much quieter or louder

Source: Bies and Hansen 2009.

1.2.1 Point and Line Sources

Noise may be generated from a point source, such as a piece of construction equipment, or from a line source, such as a road containing moving vehicles. Because noise spreads in an ever-widening pattern, the given amount of noise striking an object, such as an eardrum, is reduced with distance from the source. This is known as "spreading loss." The typical spreading loss for point source noise is 6 dBA per doubling of the distance from the noise source.

A line source of noise, such as vehicles proceeding down a roadway, would also be reduced with distance, but the rate of reduction is affected by of both distance and the type of terrain over which the noise passes. Hard sites, such as developed areas with paving, reduce noise at a rate of 3 dBA per doubling of the distance while soft sites, such as undeveloped areas, open space and vegetated areas reduce noise at a rate of 4.5 dBA per doubling of the distance. These represent the extremes and most areas would actually contain a combination

of hard and soft elements with the noise reduction placed somewhere in between these two factors. Unfortunately the only way to actually determine the absolute amount of attenuation that an area provides is through field measurement under operating conditions with subsequent noise level measurements conducted at varying distances from a constant noise source.

Objects that block the line of sight attenuate the noise source if the receptor is located within the "shadow" of the blockage (such as behind a sound wall). If a receptor is located behind the wall, but has a view of the source, the wall would do little to reduce the noise. Additionally, a receptor located on the same side of the wall as the noise source may experience an increase in the perceived noise level, as the wall would reflect noise back to the receptor compounding the noise.

1.2.2 Noise Metrics

Several rating scales (or noise "metrics") exist to analyze adverse effects of noise, including traffic-generated noise, on a community. These scales include the equivalent noise level (Leq), the community noise equivalent level (CNEL) and the day/night noise level (Ldn). Leq is a measurement of the sound energy level averaged over a specified time period.

The CNEL noise metric is based on 24 hours of measurement. CNEL differs from Leq in that it applies a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when quiet time and sleep disturbance is of particular concern). Noise occurring during the daytime period (7:00 AM to 7:00 PM) receives no penalty. Noise produced during the evening time period (7:00 to 10:00 PM) is penalized by 5 dB, while nighttime (10:00 PM to 7:00 AM) noise is penalized by 10 dB. The Ldn noise metric is similar to the CNEL metric except that the period from 7:00 to 10:00 PM receives no penalty. Both the CNEL and Ldn metrics yield approximately the same 24-hour value (within 1 dB) with the CNEL being the more restrictive (i.e., higher) of the two.

1.2.3 Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear. Table 2 shows typical noise levels from various noise sources.

Table 2 Typical Noise Levels from Noise Sources

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 1998, Table N-2136.2.

1.3 CHARACTERISTICS OF VIBRATION

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources, but can also be associated with construction equipment, such as jackhammers, pile drivers, and hydraulic hammers. Vibration displacement is the distance that a point on a surface moves away from its original static position. The instantaneous speed that a point on a surface moves is described as the velocity, and the rate of change of the speed is described as the acceleration. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During the construction of a building, the operation of construction equipment could cause groundborne vibration. The three main wave types of concern in the propagation of groundborne vibrations are surface or Rayleigh waves, compression or P-waves, and shear or S-waves.

- Surface or Rayleigh waves travel along the ground surface. They carry most of their energy along an expanding cylindrical wave front, similar to the ripples produced by throwing a rock into a lake. The

particle motion is more or less perpendicular to the direction of propagation (known as retrograde elliptical).

- Compression or P-waves are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal, in a push-pull motion. P-waves are analogous to airborne sound waves.

- Shear or S-waves are also body waves, carrying their energy along an expanding spherical wave front. Unlike P-waves, however, the particle motion is transverse, or perpendicular to the direction of propagation.

The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal and RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response.

The units for PPV and RMS velocity are normally inches per second (in/sec). Often, vibration is presented and discussed in dB units to compress the range of numbers required to describe the vibration. All PPV and RMS velocity are in in/sec and all vibration levels in this study are in dB relative to 1 micro-inch per second (abbreviated as VdB). The threshold of perception is approximately 65 VdB. Typically groundborne vibration generated by manmade activities attenuates rapidly with distance from the source of the vibration. Manmade vibration problems are usually confined to short distances (500 feet or less) from the source.

Construction generally includes a wide range of activities that can generate groundborne vibration. In general, demolition of structures generates the highest vibrations. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at distances within 200 feet of the vibration sources. Heavy trucks can also generate groundborne vibrations that vary, depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, etc., all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions. Trains generate substantial quantities of vibration due to their engines, steel wheels, and heavy loads.

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2. Noise Regulatory Environment

To limit exposure of people to intrusive and physically and/or psychologically damaging noise levels, the federal government, the State of California, some county governments, and most municipalities in the state have established standards and ordinances to control noise. The proposed project site is within the City of Industry, but the city boundary is along Nelson Avenue; immediately to the north of the site. Beyond Nelson Avenue, farther to the north, is a residential area within the City of La Puente. Both the City of Industry and the City of La Puente are in Los Angeles County. The pertinent federal and local regulations regarding noise and vibration are discussed below.

2.1 FEDERAL

2.1.1 Noise

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the U.S. Environmental Protection Agency (EPA). Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan. The construction of the project would be subject to these OSHA limitations and all workers would receive appropriate training, hearing protection, and breaks, accordingly, ensuring that they are not exposed to harmful noise levels. Similarly, once operational, noise in the workplace would be subject to OSHA limitations.

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 45 dBA Ldn as a desirable maximum interior standard for residential units developed under HUD funding. This level is also generally accepted within the State of California. While HUD does not specify acceptable exterior noise levels, standard construction of residential dwellings constructed under Code of Federal Regulations, Title 24 standards typically provide 20 dBA of attenuation with the windows closed. Based on this premise, the exterior Ldn should not exceed 65 dBA.

2.1.2 Vibration

The human reaction to various levels of vibration varies from person to persons and is highly subjective. Table 3 shows the level at which vibration becomes perceptible based on various types of land uses that are sensitive to vibration.

Table 3 Vibration Perceptibility

Land Use Category	Max L_v (VdB)[1]	Description
Workshop	90	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	84	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	78	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	72	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

Source: FTA 2006.
[1] As measured in 1/3 octave bands of frequency over the frequency ranges of 8 to 80 Hz.

In addition to the vibration standards for human annoyance, the FTA also has vibration standards for architectural damage, as shown in Table 4. Architectural damage is possible when the peak particle velocity (PPV) exceeds 0.2 inch per second. This criterion is the threshold at which there is a risk of damage to residential buildings. For structures of reinforced concrete, steel, or timber, architectural damage is possible when the PPV exceeds 0.5 inch per second.

Table 4 Groundborne Vibration Impact Criteria, Architectural Damage

Building Category	PPV (inches per second)[1]	VdB
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2006.
[1] RMS velocity calculated from vibration level (VdB) using the reference of one micro-inch per second.

2.2 STATE OF CALIFORNIA

The California Office of Noise Control has set acceptable noise limits for sensitive uses. Sensitive-type land uses, such as homes and schools, are "normally acceptable" in exterior noise environments up to 65 dBA CNEL and "conditionally acceptable" in areas up to 70 dBA CNEL. A "conditionally acceptable" designation implies that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use type is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements.

Applicable interior standards for new multi-family dwellings are governed by Title 24 of the California Code of Regulations (California Building Standards Code). These standards require that acoustical studies be performed prior to construction in areas that exceed 60 dBA Ldn. Such studies are required to establish measures that will limit interior noise to no more than 45 dBA Ldn and this level has been applied to many communities in California.

2.3 LOCAL

2.3.1 County of Los Angeles Standards

The County of Los Angeles regulates noise through the County Code, Title 12, Chapter 12.08 (Noise Control). Pursuant to the County Code, the county restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time.

Stationary Sources of Noise

The County of Los Angeles noise and vibration regulation is provided within Title 12, Chapter 12.08, of the County Code. Table 5 identifies the maximum permissible noise limits generated by stationary sources of noise at noise zones within the County. Pursuant to the Noise Ordinance, the County restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time. The standards are applied to non-transportation fans, blowers, pumps, turbines, saws, engines, and other like machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property, as measured at the property line of the noise receptor. The County's Noise Ordinance is designed to protect people from objectionable non-transportation noise sources such as music, machinery, pumps, and heating, ventilation and air conditioning (HVAC) systems.

Table 5 County of Los Angeles Community Noise Criteria

		Exterior Noise Limits (dBA)				
		Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
Noise Zone	Time Period	L_{50}	L_{25}	$L_{8.3}$	$L_{1.7}$	L_{max}
Noise Sensitive Area	Anytime	45	50	55	60	65
Residential Properties	10 PM to 7 AM	45	50	55	60	65
	7 AM to 10 PM	50	55	60	65	70
Commercial Properties	10 PM to 7 AM	55	60	65	70	75
	7 AM to 10 PM	60	65	70	75	80
Industrial Properties	Anytime	70	75	80	85	90

Source: County of Los Angeles Municipal Code Section 12.08.390

Notes:

- If the measured ambient level differs from that permissible within any of the noise limit categories above, the allowable noise exposure standard shall reflect the ambient noise level.
- If the measurement location is on a boundary property between two different zones, the exterior noise standard shall be the arithmetic mean of the exterior noise levels, except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the receptor property.
- For any source of sound which emits a pure tone or impulsive noise, the maximum permissible noise levels shall be reduced by five decibels.

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable L_{50} noise level shown above; or, if the ambient L_{50} exceeds the foregoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable L_{50} noise level shown above plus 5dB; or, if the ambient L_{25} exceeds the foregoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable L_{50} noise level shown above plus 10dB; or, if the ambient L_8 exceeds the foregoing level, then the ambient L_8 becomes exterior noise level for Standard No. 3.

- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable L_{50} noise level shown above plus 15dB; or, if the ambient L_2 exceeds the foregoing level, then the ambient L_2 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable L_{50} noise level shown above plus 20dB; or, if the ambient L_0 exceeds the foregoing level then the ambient L_{max} becomes the exterior noise level for Standard No. 5.

Construction Noise

The County also regulates construction noise through the County Code sections 12.08.440 and 12.12.030. Pursuant to section 12.08.440, the County prohibits the operation of tools or equipment used in construction between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line. For these tools, the County also sets maximum noise limits for long-term construction operation as shown in Table 6. However, the County permits noise levels to exceed these limits if the activity, operation, or noise source cannot be feasibly be done in a manner that would comply with these conditions. In addition, the County prohibits construction activities that involve excavating/earth moving activities between weekday hours of 8:00 PM and 6:30 AM, or at any time on Sundays or holidays that makes loud noises that disturb persons occupying sleeping quarters in a place of residence.

Table 6 Maximum Construction Noise for Stationary Equipment Operating for Periods 10 Days or More

Time Period	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Source: County of Los Angeles Municipal Code Section 12.08.440 for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment.

Vibration

The County of Los Angeles Municipal Code, Section 12.08.560, prohibits the operation of any device that creates vibration that is above 0.01 in/sec at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This criterion will be utilized to evaluate vibration-annoyance impacts from industrial uses to nearby sensitive receptors.

2.3.2 City of Industry Standards

Industry Noise Standards

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the City of Industry addresses public nuisances under Chapter 1.30 (Public Nuisance) of the City's Municipal Code. The City of Industry has not adopted long-term noise and vibration criteria for land use compatibility consideration. The City of Industry uses the County of Los Angeles Noise Ordinance and Community Noise Guidelines for environmental noise assessments, and is included by reference in the City of Industry Municipal Code. For the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) are used as significance thresholds for noise.

Industry Vibration Standards

The City of Industry does not have regulatory standards for construction or operational vibration sources. To evaluate project impacts for CEQA analyses, the City relies on the Los Angeles County Municipal Code to address vibration impacts from the operation of equipment to adjacent uses.

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Construction Generated Vibration

Vibration Annoyance Criteria

Receptor:	Average Vibration Level - Houses across tracks	Average Distance (feet):	580

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	67
Caisson Drill	87	60
Large bulldozer	87	60
Small bulldozer	58	31
Jackhammer	79	52
Loaded trucks	86	59
	Criteria	**78**

Structural Damage Criteria

Receptor:	Maximum Vibration Levels - Houses across tracks	Closest Distance (feet):	75

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.040
Caisson Drill	0.089	0.017
Large bulldozer	0.089	0.017
Small bulldozer	0.003	0.001
Jackhammer	0.035	0.007
Loaded trucks	0.076	0.015
	Criteria	**0.200**

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*

Appendix E Traffic Data

Appendix

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Counts Unlimited, Inc

PO Box 1178
Corona, CA 92878
Phone: 951-268-6268
email: counts@countsunlimited.com

City of Industry
Parriot Place
B/ Don Julian Road - El Encanto Road
24 Hour Directional Volume Count

CIDPADJEE
Site Code: 999-15390

Start Time	09-Jul-15 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	22			1	10				
12:15		1	17			1	19				
12:30		3	15			0	10				
12:45		0	12	4	66	1	14	3	53	7	119
01:00		0	16			0	16				
01:15		1	13			1	17				
01:30		0	**30**			1	16				
01:45		0	**18**	1	77	0	13	2	62	3	139
02:00		0	**21**			0	17				
02:15		5	**19**			0	9				
02:30		0	17			2	**23**				
02:45		1	19	6	76	1	**13**	3	62	9	138
03:00		0	11			2	**30**				
03:15		0	21			0	**12**				
03:30		5	9			0	16				
03:45		10	13	15	54	1	17	3	75	18	129
04:00		4	9			4	12				
04:15		1	8			8	11				
04:30		5	14			7	17				
04:45		4	11	14	42	5	13	24	53	38	95
05:00		10	8			10	14				
05:15		12	8			6	16				
05:30		18	8			1	21				
05:45		15	11	55	35	3	4	20	55	75	90
06:00		10	12			0	8				
06:15		11	2			1	4				
06:30		12	5			2	2				
06:45		**22**	6	55	25	12	6	15	20	70	45
07:00		**14**	4			6	1				
07:15		**14**	6			2	4				
07:30		**21**	4			9	5				
07:45		17	6	66	20	7	5	24	15	90	35
08:00		14	2			9	2				
08:15		14	3			5	6				
08:30		14	5			11	4				
08:45		11	4	53	14	8	1	33	13	86	27
09:00		12	1			5	1				
09:15		13	1			8	1				
09:30		16	1			6	0				
09:45		17	2	58	5	10	4	29	6	87	11
10:00		13	2			13	5				
10:15		3	0			9	0				
10:30		23	0			4	1				
10:45		14	6	53	8	12	3	38	9	91	17
11:00		13	2			**16**	1				
11:15		13	1			**6**	2				
11:30		14	1			**8**	3				
11:45		21	0	61	4	**19**	3	49	9	110	13
Total		441	426	441	426	243	432	243	432	684	858
Combined Total		867		867		675		675		1542	
AM Peak	-	06:45	-	-	-	11:00	-	-	-	-	-
Vol.	-	71	-	-	-	49	-	-	-	-	-
P.H.F.		0.807				0.645					
PM Peak	-	-	01:30	-	-	-	02:30	-	-	-	-
Vol.	-	-	88	-	-	-	78	-	-	-	-
P.H.F.			0.733				0.650				
Percentage		50.9%	49.1%			36.0%	64.0%				
ADT/AADT		ADT 1,542		AADT 1,542							

City of Industry

Radar Speed Survey

Speed	E/B	W/B	MPH	Northbound	Southbound	TOT. VEH.
65	0	0	65			0
64	0	0	64			0
63	0	0	63			0
62	0	0	62			0
61	0	0	61			0
60	0	0	60			0
59	0	0	59			0
58	0	0	58			0
57	0	0	57			0
56	0	0	56			0
55	0	0	55			0
54	0	0	54			0
53	0	0	53			0
52	0	0	52			0
51	1	0	51	X		1
50	0	0	50			0
49	1	0	49	X		1
48	0	0	48			0
47	0	0	47			0
46	0	0	46			0
45	0	1	45		X	1
44	1	0	44	X		1
43	1	1	43	X	X	2
42	0	0	42			0
41	2	1	41	X X	X	3
40	1	0	40	X		1
39	4	2	39	X X X X	X X	6
38	6	1	38	X X X X X X	X	7
37	4	2	37	X X X X	X X	6
36	3	4	36	X X X	X X X X	7
35	3	4	35	X X X	X X X X	7
34	3	2	34	X X X	X X	5
33	2	2	33	X X	X X	4
32	1	5	32	X	X X X X X	6
31	6	3	31	X X X X X X	X X X	9
30	1	3	30	X	X X X	4
29	2	4	29	X X	X X X X	6
28	1	5	28	X	X X X X X	6
27	1	0	27	X		1
26	0	2	26		X X	2
25	2	1	25	X X	X	3
24	1	2	24	X	X X	3
23	1	2	23	X	X X	3
22	2	1	22	X X	X	3
21	0	0	21			0
20	0	0	20			0
19	0	2	19		X X	2
18	0	0	18			0
17	0	0	17			0
16	0	0	16			0
15	0	0	15			0
					GRAND TOTALS	100

Location: Parriot Place

Between: Don Julian Drive - El Encanto Road

Weather: Sunny

Date: 7/8/15

Time From: 11:00

Time To: 12:00

Existing Speed Limit: N/P M. P. H.

PACE

% Over Pace: 10%

% In Pace: 61%

% Under Pace: 29%

Average Speed: 33 M.P.H.

Pace Speed: 30 - 39 M.P.H.

15th Percentile / Critical Speed: 25 MPH

50th Percentile / Critical Speed: 32 MPH

85th Percentile / Critical Speed: 38 MPH

Radar Survey Conducted By:

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92880

T 951-268-6268 F 951-268-6267

Exhibit A.3
Mitigation Monitoring and Reporting Program for Development Plan 15-10 and Zone Exception 15-2, August 2015

August 2015 | City of Industry

MITIGATION MONITORING PROGRAM
PROPOSED PARRIOTT WAREHOUSE PROJECT

Development Plan 15-10 and Zone Exception 15-2

Prepared for:

City of Industry
Brian James, Planning Director
15625 East Stafford, Suite 100
City of Industry, California 91744-0366
626.333.2211

Project Number:
IND-07.143

Prepared by:

PlaceWorks
Dwayne Mears, Principal, Environmental Planning
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
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www.placeworks.com

PLACEWORKS

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1.2 PROJECT SUMMARY 2
1.3 PROJECT LOCATION 3
1.4 ENVIRONMENTAL IMPACTS 3
1.5 MITIGATION MONITORING PROGRAM ORGANIZATION 4

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1. Introduction

1.1 PURPOSE OF MITIGATION MONITORING PROGRAM

This Mitigation Monitoring Program (MMP) has been developed to provide a vehicle to monitor mitigation measures and conditions of approval outlined in the Mitigated Negative Declaration. The MMP has been prepared in conformance with Section 21081.6 of the Public Resources Code and City of Industry monitoring requirements. Section 21081.6 states:

a) **When making the findings required by paragraph (1) of subdivision subsection (a) of Section 21081 or when adopting a mitigated negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the following requirements shall apply:**

   1) The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

   2) The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.

b) **A public agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.**

c) **Prior to the close of the public review period for a draft environmental impact report or mitigated negative declaration, a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit the authority of the responsible agency or agency having**

jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

The MMP will serve to document compliance with adopted/certified mitigation measures that are formulated to minimize impacts associated with the construction of the proposed project.

1.2 PROJECT SUMMARY

The project involves construction of the following improvements:

Two concrete tilt-up warehouse/office buildings would be constructed on an approximately 6.4 acre site consisting of a 4.1-acre, and 2.3-acre building area. The first building (Building A) would be 84,660 square-feet in size, including two stories of office space with 5,000 square feet on the first floor, and 5,000 square feet on the second floor. The building would occupy 47.9 percent of the 4.1-acre area. The building would be approximately 41 feet high and would front Parriott Place with an approximate 30-foot setback. Building A would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 36-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site.

A total of 105 standard and 20 compact parking spaces, including 5 van accessible spaces would be provided in marked stalls around the building. A bike rack accommodating 9 bicycle parking spaces would be installed near the site entrance.

A loading dock at the northeast corner of the building, would accommodate 9 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater collection and removal.

A total of 25,938 square feet of landscaping (14.7 percent) would be provided, primarily along the property borders and building perimeter. The project site would be secured with the existing 5 to 6-foot high split face masonry wall on the south and east sides, an 8-foot high wrought iron fence on the north side, and a 10-foot, high concrete tilt-up wall on the north and west sides around the truck loading area.

A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed in the southwestern corner to service the building.

The second building would be 45,510 square-feet in size, including two stories of office space with 4,000 square feet on the first floor, and 3,000 square feet on the second floor. The building would occupy 45.4 percent of the 2.3-acre area. The building would be approximately 41 feet high and would front Parriott Place with an approximate 30-foot setback. Building B would be accessed from Parriott Place via two single use driveways that measure 28-foot wide and 40-foot wide. The driveways would accommodate all truck and employee traffic entering and exiting the site.

A total of 59 standard and 15 compact parking spaces, including 4 van accessible spaces would be provided in marked stalls on the northeast and western sides of the building. A bike rack accommodating 9 bicycle parking spaces would be installed near the entrance.

A loading dock on the northern side of the building, would accommodate 5 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater collection and removal.

A total of 18,229 square feet of landscaping (18.2 percent) would be provided, primarily along the property borders and building perimeter. Site property would be secured with the existing 5 to 6-foot high split face masonry wall on the east and partially on the south side, an 8-foot high wrought iron fence on the south side, and a 10-foot high concrete tilt-up wall on the north and west sides in the front setback.

A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the north side of the building, and a pad-mounted electrical transformer would be installed to service the building.

The buildings would be built on speculation; thus, the prospective occupants are currently unknown. The buildings are intended for industrial warehouse/office use. The proposed project would have a single construction phase. Construction would begin upon project approval by the City of Industry and is expected to require approximately twelve months to complete. It is anticipated that construction would occur from October 2015 through October 2016. Operation of the warehouse/office buildings would commence shortly thereafter.

1.3 PROJECT LOCATION

The project site is in the City of Industry in the San Gabriel Valley in Los Angeles County, California. The City of Industry extends approximately 14 miles east-west across the southern San Gabriel Valley. The San Gabriel Valley extends east-west from near central Los Angeles on the west to the eastern Los Angeles County boundary; and is bounded to the north by the San Gabriel Mountains and to the south by the Puente Hills. The project site is on the northwest side of the City of Industry. Regional access to the site is from the Pomona Freeway (State Route [SR] 60) via the Hacienda Boulevard interchange.

The project site is located on the east side of Parriott Place, between Proctor Avenue and Don Julian Road. The assigned addresses of the project site are 489 and 499 Parriott Place, City of Industry, Los Angeles County. The site is 6.4 acres in area and is comprised of portions of Los Angeles County Tax Assessor Parcel Numbers (APN) 8208-027-911, and 8208-027-912.

1.4 ENVIRONMENTAL IMPACTS

The environmental document for this project is a "Mitigated Negative Declaration," meaning that at least one impact was found to be potentially significant unless mitigation was incorporated. In this instance, mitigation was required for environmental impacts in four evaluation categories – Tribal Cultural Resources, Air Quality, Hazards and Hazardous Materials, and Transportation and Traffic. With adoption of the mitigation measures, the Initial Study found that all identified impacts would be reduced to a less than significant level. No impacts were found to be significant and unavoidable.

1.5 MITIGATION MONITORING PROGRAM ORGANIZATION

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Mitigated Negative Declaration, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in the MMP. To effectively track and document the status of mitigation measures, a mitigation matrix has been prepared.

Table 1 Mitigation Monitoring Requirements

	Mitigation Measure	Timing	Responsible Implementing Party	Responsible Monitoring Party	Document Location (Monitoring Record)	Completion Date	
						Responsible Monitoring Party	Project Mitigation Monitor
3.3 Air Quality							
AQ-1	A note shall be added to the building plans stating that the construction contractor shall only use interior and exterior paints with a VOC content of 90 grams per liter (g/L) or less for the building structures to reduce VOC emissions. Prior to issuance of building permits, the construction contractor shall provide documentation to the satisfaction of the City of Industry Planning Department that verifies use of coatings with a VOC content of 90 g/L or less.	Prior to Issuance of a Building Permit and During construction	Contractor	Planning Department	Planning Department		
3.7 Tribal Cultural Resources							
CR-1	If buried tribal cultural resources are discovered during ground disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.	During construction	Contractor	Planning Department	Planning Department		
3.10 Hazards and Hazardous Materials							
HHM-1	A soil vapor survey shall be conducted by a qualified environmental professional to evaluate the potential presence of volatile organic contaminants on the project site. Should volatile organic contaminants be detected, a human health risk screening analysis shall be performed, and the resultant cancer risk shall not exceed one excess case in one million. The soil vapor survey shall be conducted, and it shall be confirmed that the calculated cancer risk is not in exceedance of one excess case in one million prior to issuance of a building permit.	Prior to Issuance of a Building Permit	Contractor	Planning Department	Planning Department		
3.18 Transportation and Traffic							
TRANS-1	Prior to obtaining building permits for the project, the project applicant/developer shall construct improvements to restrict access at the northern project driveway allowing only right-in/right-out movements. The restriction would be implemented by (1) the installation of regulatory signage at the driveway outbound leg to prohibit left turns out, or to indicate that only right turns are permitted, and by (2) painting pavement markings on Parriott Lane to designate a median island, which would prohibit crossings and left	Prior to Issuance of a Building Permit	Contractor	Planning Department	Planning Department		

Table 1 Mitigation Monitoring Requirements

	Mitigation Measure	Timing	Responsible Implementing Party	Responsible Monitoring Party	Document Location (Monitoring Record)	Completion Date	
						Responsible Monitoring Party	Project Mitigation Monitor
	turns into the northern driveway. Alternatively, the project applicant shall prepare an engineering study to the satisfaction of the City Engineer to demonstrate that the driveway can safely accommodate full access and implement the necessary design features (such lane restriping to allow for a dual left turn lane, warning signage, sight distance improvement by relocation of the trash enclosure or masonry wall removal) to safely accommodate full access without turn restrictions. Traffic control features at that driveway and the pavement markings shall be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices.						
TRANS-2	Landscaping along the site's frontage facing Parriott Place from the parking lot to the road right of way shall be restricted to ground covers and low shrubs not exceeding 3 feet in height from the northern driveway to the project's northern boundary. Landscaping plans shall include this restriction and be submitted to the City of Industry Planning Director for review and approval prior to obtaining building permits.	During construction and operation	Contractor and Owner/ Operator	Planning Department	Planning Department		

Exhibit A.4
Response to Comments

September 2015 | Response to Comments

Proposed Parriott Warehouse Project

Development Plan 15-10 and Zone Exception 15-2
for City of Industry

Prepared for:

City of Industry
Contact: Brian James, Planning Director
15625 East Stafford, Suite 100
City of Industry, California 91774-0366
626.333.2211

Project Number:
IND-07.143

Prepared by:

PlaceWorks
Contact: Dwayne Mears, Principal, Environmental Services
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

PLACEWORKS

Response to Comments

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Tuesday, September 08, 2015 3:40 PM
To: Brian D James <BJames@cityofindustry.org>; andysalas07@yahoo.com
Subject: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

MR JAMES-

A1-1 we have just been informed of this proposed project by Mr. Andy Salas and we are concerned about the process defects and lack of legal tribal consultation and possible exclusion of TATTN as we are on all the NAHC contact s lists -

A1-2 we are also concerned you/COI doesn't understand the significance of that area for us and our tribal cultural resources and its well documented sacred sites -

A1-3 please send us all the proposed project info and documents on those 2 adjoining projects asap-

A1-4 if you refuse we will be forced to take action against COI -

we are demanding full tribal consultation .

my grandfather worked for rowland there and my father was born there so our family has direct lineal descendants status with those tribal lands-

I left you a voice mail message please respond when you can -

thanks

/S/ JOHNTOMMY ROSAS

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
A TRIBAL SOVEREIGN NATION UNDER UNDRIP
AND AS A CALIFORNIA NATIVE AMERICAN TRIBE / SB18-AJ52-AJR 42
25 U.S. Code § 1679 - Public Law 85-671
August 18, 1958 | [H. R. 2824] 72 Stat. 619
Tribal sovereignty in the United States is the inherent authority of indigenous tribes to govern themselves within and outside the borders and waters of the United States of America .
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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©
tongvanation.org

Response to Comments

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Wednesday, September 16, 2015 1:44 PM
To: Brian D James <BJames@cityofindustry.org>; Andy Salas <andysalas07@yahoo.com>
Subject: Re: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

//Documents/IND-07.14.J%20Parriott%20Initial%20Study.pdf

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X			X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	X		X	
c) Disturb any human remains, including those interred outside of formal cemeteries?	X		X	
VI. PALEONTOLOGICAL RESOURCES. Would the project:				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
VII. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	X	X		

On Wed, Sep 16, 2015 at 12:05 PM, Johntommy Rosas <tattnlaw@gmail.com>wrote:
Brian -

A1-5 1. we do not accept the time frame that is on noi -. A 20-day public review period for the Mitigated Negative Declaration begins September 3, 2015, and ends September 23, 2015.
A1-6 2. its too short and not legal since we were not contacted for the IS -
A1-7 3. we also know that there are numerous tribal cultural areas on that property and around there-
A1-8 4. the 1 page cultural report is defective and illegal -
A1-9 5. we also know there was no legal tribal consultation-
A1-10 6. on those grounds we object and oppose the project and its defective process-

/s/ johntommy rosas

Response to Comments

A1. Response to Email Comments from John Tommy Rosas, Tribal Administrator, Tribal Litigator, Tongva Ancestral Territorial Tribal Nation (TATTN), dated September 8, 2015 and September 16, 2015.

A1-1 With respect to the City of Industry's (COI) tribal consultation process for the proposed Parriott Warehouse project, all activities have been conducted in accordance with the requirements of Public Resources Code (PRC) Section 21080.3.1. This section of the PRC requires the COI as lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project prior to the release of an environmental document. However, such consultation is only required if the California Native American tribe has formally requested to the lead agency, in writing, to be informed of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe.

The Native American Heritage Commission (NAHC) was to provide each tribe with a list of public agencies that may be lead agencies under the California Environmental Quality Act (CEQA) within the geographic area with which the tribe is traditionally and culturally affiliated on or before July 1, 2015. As described above, the PRC provides that if a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency. The COI did not receive such notification from the TATTN. Notifications were received by the COI from the Gabrieleño Band of Mission Indians – Kizh Nation on July 22, 2105, and the Soboba Band of Luiseño Indians on July 2, 2015, and were therefore consulted in accordance with PRC Section 21080.3.1.

A1-2 Based on the analysis in the Initial Study, there are no resources listed on the National Register of Historic Places or California Historical Resources on the project site. In addition, the COI does not list any historical resources associated with the project site in a local register, and does not have substantial evidence indicating that a significant resource is located on the project site associated with California Native American tribes.

The project site has been extensively used and is graded, relatively flat, and partially developed. The northern part of the project site has been graded, used for stockpiling, and regraded several times. The southern portion of the project site has been graded and is developed as a paved parking lot. There are no existing buildings or structures that would require demolition and project construction would not be expected to involve a significant level of excavation.

Response to Comments

Based on communications from the Gabrieleño Band of Mission Indians – Kizh Nation, the project site is located within its traditional use territory. The Soboba Band of Luiseño Indians (SBLI) deferred issues with respect to consultation to the Gabrieleño Band of Mission Indians – Kizh Nation.

While the Initial Study found that no impacts to tribal cultural resources are anticipated, mitigation was developed to reduce potential impacts to a less than significant level should any be encountered during project activities. The mitigation provides that if buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, COI, and other appropriate agencies.

In an effort to be responsive to TATTN concerns, the mitigation measure will be modified accordingly:

Mitigation Measure:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation and other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1, the City of Industry, and other appropriate agencies.

With the implementation of the mitigation measure identified above, a less than significant impact to tribal cultural resources would occur as a result of the proposed project.

A1-3 Project documents are available for review at the COI. A copy of the Mitigated Negative Declaration (MND) and Notice of Intent to adopt the MND were provided to Mr. John Tommy Rosas of TATTN on September 11, 2015.

A1-4 As mentioned above, the PRC provides that if a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency. The COI did not receive such notification from the TATTN. Notifications were received by the COI from the Gabrieleño Band of Mission Indians – Kizh Nation on July 22, 2105, and the Soboba Band of Luiseño Indians on July 2, 2015, and were therefore consulted in accordance with

Response to Comments

PRC Section 21080.3.1. With respect to future projects in the COI that may be located within the geographic area with which the TATTN tribe is traditionally and culturally affiliated, a written request should be submitted to the COI to be notified of such projects, along with a map indicating the boundaries of the area pursuant to PRC Section 21080.3.1.

A1-5 The public review period was conducted in accordance with the requirements of PRC 15073, which indicates that the lead agency shall provide a public review period of not less than 20 days. The public review period was held from September 3, 2015 through September 23, 2015, and is compliant with the PRC.

A1-6 With respect to the length of the public review period, see response A1-5. As for the notification process, PRC Section 21080.3.1 requires that the tribe provide initial notification if it is traditionally and culturally affiliated with certain geographic areas. The lead agency is required to respond to such notification. As described above, no such notification was received from the TATTN for this project.

A1-7 Comment noted. With respect to future projects in the COI that may be located within the geographic area with which the TATTN tribe is traditionally and culturally affiliated, a written request should be submitted to the COI to be notified of such projects, along with a map indicating the boundaries of the area pursuant to PRC Section 21080.3.1. As indicated above in response A1-2, in an effort to be responsive to TATTN concerns, the mitigation measure will be modified to include TATTN notification and consultation should buried tribal cultural resources be discovered during ground-disturbing activities.

A1-8 The Initial Study evaluated impacts to Tribal Cultural Resources, and the resultant mitigation measures are described in response A1-2.

A1-9 Please refer to response A1-1.

A1-10 Comment noted. Please refer to response A1-1.

Response to Comments

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Response to Comments

From: Andy Salas [mailto:andysalas07@yahoo.com]
Sent: Wednesday, September 16, 2015 10:18 PM
To: Johntommy Rosas <tattnlaw@gmail.com>
Cc: Brian D James <BJames@cityofindustry.org>
Subject: Re: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

Mr. james
Mr Rosas is correct you need to retract your final letter. You must still impose all feasible measures necessary to mitigate this is regards to AB52.

http://www.publicceo.com/2015/08/ceqa-takes-closer-look-at-native-american-cultural-resources/

B1-1 *Consultations come to an end when 1) the agency agrees to include mitigation measures agreed upon during consultation, 2) consultation was requested but the requesting tribe failed to engage in the process, or 3) a party to the consultation, after good faith and reasonable efforts, concludes that mutual agreement cannot be reached. Even if no agreement is reached, the agency must still impose all feasible measures necessary to mitigate a project's significant impacts on tribal cultural resources.*
Further, regardless of whether a tribe requests consultation, CEQA documents must now disclose and analyze whether the proposed project will cause a substantial adverse impact to a tribal cultural resource.

B1-2 *#1)* From the letters You sent us You did not provide any mitigating measures I identified .

B1-3 #2) your letter date 8/31 you claimed you met the consultation process. However, no agreement was reached. According to this article, You must still impose all feasible measures necessary to mitigate a project' significant impacts on tribal cultural resources. Based on your letters it looks like you are still operating under the standard CEQA guidelines and superficially interjecting AB52 which you felt met the 'consultation' requirement, not looking at any mitigating options.

Response to Comments

B1. Response to Email Comments from Andy Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation dated September 16, 2015.

B1-1 With respect to the COI's tribal consultation process for the proposed Parriott Warehouse project, all activities have been conducted in accordance with the requirements of the PRC. The COI has noted concerns from the commenter with regard to the potential for uncovering artifacts at the project site, however, no evidence of tribal cultural resources on the project site has been provided or found. In accordance with PRC Section 21074, tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:

- (a)(1)(A) included in or determined eligible for inclusion in the California Register of Historic Resources; or
- (a)(1)(B) included in a local register of historical resources; or
- (a)(2) determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Section 5024.1(c). When applying the criteria of Section 5024.1(c), the lead agency must consider the significance of the resource to the California Native American tribe.

The COI has not received any information indicating that the project site is included in, or determined eligible for inclusion in, the California Register of Historic Resources. Further, the COI has not received any information that the project site is included in a local register of historical resources. Lastly, the COI does not have substantial evidence which supports the factors set forth in Public Resources Code Section 5024.1(c).

Pursuant to Public Resources Code Section 21082.3(e), if substantial evidence demonstrates that the project will cause a significant effect, the lead agency must consider feasible mitigation measures pursuant to Section 21084.3(b). The aforementioned sections of the Public Resources Code, do not mandate the COI to impose all feasible measures.

Response to Comments

Moreover, there has been no finding of significant effect in regards to cultural, paleontological, and tribal cultural resources at 489 and 499 Parriott Place. Even though the project will not cause a significant environmental effect to cultural resources, in good faith, the COI included the following mitigation measure, as modified in response A1-2 above:

Mitigation Measure:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation and other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1, the City of Industry, and other appropriate agencies.

Based on the information set forth above, the COI has complied with the requirements of AB 52.

B1-2 As described above, the following mitigation was included as a direct result of the commenter's request.

Mitigation Measure:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation and other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1, the City of Industry, and other appropriate agencies.

B1-3 Please note that PRC Section 21080.3.2(b)(2) indicates that consultation may be considered concluded when "a party acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached". The COI believes that it has acted in good faith, and even though the project will not cause a significant environmental effect to cultural resources, it has included the mitigation measure described above.

Response to Comments

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Response to Comments

From: Andy [mailto:gabrielenoindians@yahoo.com]
Sent: Tuesday, September 08, 2015 10:29 PM
To: Brian D James <BJames@cityofindustry.org>; Peter Garcia <pgarcia@placeworks.com>
Cc: Katy@NAHC Sanchez <katy.sanchez@nahc.ca.gov>; Rob Wood <rw_nahc@pacbell.net>; Terrie@NAHC Robinson <terrie.robinson@nahc.ca.gov>; Christina Swindall Martinez. Kizh Gabrieleno <christinaswindall@yahoo.com>; Nadine Salas. Kizh Gabrieleno <nadinesalas@hotmail.com>; Albert Perez.Kizh Gabrieleno <cedarez@aol.com>; Martha Gonzalez. Kizh Gabrieleno <marthagonzalez777@yahoo.com>; Richard Gradias <RGRADIAS@Yahoo.com>; Matt Teutimez.Kizh Gabrieleno <Matt.Teutimez@gmail.com>; Henrypedregon <henrypedregon@aol.com>
Subject: Projects regarding the- Parriott Place Development - 489 and 499 Parriott Place. NEAR the Homestead Museum.

Brian D. James

C1-1 I've received your letter (attached below) and I'm not in agreement with your determination that the project site has no cultural sensitivity. Attached is a report from 1992 written by VanHorn which he describes the sensitivity within his own project area but also discusses the adjacent area and indicates that there were other village sites within this area. Your two project locations (the Parriot location & Nelson location) are within this discussed sensitive area. Please understand we are in no way trying to halt or stop your project, we are just requesting to have one of our knowledgeable monitors on site because of the high sensitivity to protect any resources. Sincerely Andrew Salas Gabrieleño Band of Mission Indians Kizh Nation pronounced (Keech) https://www.laconservancy.org/sites/default/files/community_documents/Historic%20Resource%20Report,%20Downtown%20Business%20District%20Specific%20Plan%20Area,%201992.pdf

Response to Comments

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

August 31, 2015

The Honorable Andrew Salas
Chairman
Gabrieleño Band of Mission Indians – Kizh Nation
PO Box 393
Covina, CA 91723

Subject: Proposed Parriott Place Warehouse Building Project, City of Industry, California.

Dear Chairman Salas:

The City of Industry ("City") appreciates the email response from the Tribal Archaeologist, Mr. Stickel, dated August 21, 2015, regarding Native American Consultation for the property located at 489 and 499 Parriott Place ("Subject Site"). In his response, Mr. Stickel restated the Tribe's opinion that Subject Site is culturally sensitive, and the need for a Kizh monitor to be present during all ground disturbing activities.

However, based on the independent analysis contained in the Initial Study and considering the condition of the Subject Site, there has been no finding of significant effect in regards to cultural, paleontological, and tribal cultural resources on the Subject Site. Based on this analysis, the City does not agree that an on-site monitor is merited for this project. In accordance with AB 52, the City has consulted in good faith with the Gabrieleno Band of Mission Indians, Kizh Nation, as evidenced by communications on July 14, 16, 17, 21, and August 12, 2015 from both the City, and Placeworks, the environmental consultant preparing the environmental analysis on the City's behalf. While the project will not cause a significant environmental effect, as part of the City's good faith consultation process, an alternative mitigation measure was proposed that provides a means of avoiding or substantially lessening any potential significant impacts to tribal cultural resources. However, the City's proposal to stop work in the event of the discovery of tribal cultural resources, and to consult with a qualified archaeologist regarding the findings, was rejected by the Tribe.

Therefore, in accordance AB 52, and after a good faith and reasonable effort, the City hereby concludes that a mutual agreement cannot be reached. Accordingly, the City will move forward and circulate the Mitigated Negative Declaration containing the following Mitigation Measure as originally proposed:

Mitigation Measure CR-1: *If buried tribal cultural resources (as defined in Section 21074 of the California Public Resources Code) are discovered during ground-*

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Response to Comments

C1. Response to Email Comments from Andy Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation dated September 8, 2015.

C1-1 The commenter provided a web link to a report entitled *An Historic Resource Report on the City of La Puente, Downtown Business District Specific Plan Area, Los Angeles County, California* (Report). According to the commenter, the report not only describes the sensitivity for cultural resources within the Downtown Business District Specific Plan Area (DBDSPA), but also discusses other potential village sites in areas adjacent to it. The commenter concludes that the Parriott Warehouse project is within a culturally sensitive area.

The purpose of the Report was to identify and evaluate the significance of all cultural resources known to be situated within the DBDSPA, which is generally located north of Old Valley Boulevard, and east of Glendora Avenue. The Report concludes that the DBDSPA is sensitive for cultural and historic resources, and that a historic Indian village identified as Awig-na, was located west of Glendora Avenue near its intersection with Nelson Avenue where La Puente High School is located. In addition, the Report suggests that smaller related village sites were situated nearby Awig-na.

The conclusions of the report cover a very limited area of the COI. The Parriott Warehouse project is not located in the local vicinity of the areas described in the Report. The Parriott Warehouse project is located approximately 0.4 miles west (DBDSPA), and 0.5 miles southwest (La Puente High School) of the culturally sensitive areas described in the Report. Even though the project will not cause a significant environmental effect to cultural resources, in good faith, the COI included the following mitigation measure.

Mitigation Measure:

CR-1 If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation and other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1, the City of Industry, and other appropriate agencies.

Attachment 12
Resolution CC 2015-32

RESOLUTION NO. CC 2015-32

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA APPROVING ZONE EXCEPTION 15-2 TO ALLOW A TEN FOOT TALL SCREEN WALL IN THE FRONT SETBACK; AND DEVELOPMENT PLAN NO. 15-10 FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS FOR THE PROPERTY LOCATED AT 489 AND 499 PARRIOTT PLACE IN THE CITY OF INDUSTRY

RECITALS

WHEREAS, on June 26, 2015, CT Realty Investors ("Applicant") filed a complete application requesting the approval of Development Plan ("DP") No. 15-10 and Zone Exception 15-2 described herein ("Application"); and

WHEREAS, the Application applies to a 6.4 acre property at 489 and 499 Parriott Place, City of Industry, California, Assessor's Parcel Numbers 8208-027-911 and 8208-027-912 ("Property"); and

WHEREAS, the Applicant desires to construct two industrial buildings (84,660 square feet and 45,510 square feet) within the "M"-Manufacturing Zone (the "Project"), and in accordance with Section 17.36.020 of the City's Municipal Code ("Code"), a Development Plan is required for this type of activity; and

WHEREAS, the Application includes a request to allow a ten foot tall screen wall to be located within the required 30 foot setback and, in accordance with Chapter 17.40 of the Code, a Zone Exception is required for this request; and

WHEREAS, the Land Use Element of the General Plan designates the Property as Employment. The Project is consistent with the General Plan as it would allow the construction of industrial buildings similar to other properties in the same land use designation, and does not conflict with the established goals and objectives of the Land Use Element; and

WHEREAS, given the curvature of Parriott Place and resulting odd shape of the Property, and in order to comply with other development standards stipulated in Chapter 17.36 of the City's Code, such as the truck maneuvering area, parking, and trash/recycling enclosure, there is inadequate room to also comply with screening requirements without placing a wall exceeding 42 inches in height within 30 feet of the front curb as stipulated in Section 17.32.020 of the City's Code. A ten foot tall wall to screen is proposed to be located 18 feet from the front curb to screen the loading area and maintain the character of the area; and

WHEREAS, pursuant to Section 17.40.020 of the City's Code, the City Council may grant an exception to the City's development standards where (1) the exception is necessary for the preservation of a substantial property right, and (2) the exception will

not be materially detrimental to the public welfare nor to the property of other persons located in the vicinity thereof; and

WHEREAS, Section 17.40.030 of the City's Code provides that an exception to the City's development standards may be granted where practical difficulties or unnecessary hardships interfere with carrying out the strict letter of the Municipal Code, and the spirit of the Code will be observed, public safety secured, and substantial justice done; and

WHEREAS, granting the Zoning Exception will allow for the preservation of a substantial property right be accommodating the development of a well-designed, marketable, and efficient industrial building, and will not be materially detrimental to the public welfare nor to property located in the vicinity because the ten foot tall wall in the setback will screen the loading area, maintain the high quality visual character of the area, and minimize noise impacts to nearby sensitive uses; and

WHEREAS, an Environmental Assessment form was submitted for the Project by the Applicant pursuant to the City's requirements. Based upon the information received and Staff's review and assessment, it was determined that the Project could have a significant impact on the environment, and an a Initial Study/Mitigated Negative Declaration were prepared in accordance with the requirements of the California Environmental Quality Act ("CEQA"), California Public Resources Code section 21000 *et seq.,* the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, sections 15000 *et seq.,* and the Environmental Impact Report Guidelines of the City of Industry; and

WHEREAS, the Initial Study/Mitigated Negative Declaration was circulated for public and agency review and comment on September 3, 2015, through, and including, September 24, 2015; and

WHEREAS, the City Council reviewed and carefully considered the information in the Initial Study/Mitigated Negative Declaration, and by Resolution No. 2015-31, adopted the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project; and

WHEREAS, notice of the City Council's October 8, 2015, public hearing on the Application was published in *The San Gabriel Valley Tribune* on September 25, 2015, in compliance with the City's Code and Government Code Section 65091, and was posted at the Property and at three public places on September 25, 2015; and

WHEREAS, on October 8, 2015, the City Council of the City of Industry conducted a duly noticed public hearing on the Application, and considered all testimony written and oral; and

WHEREAS, all legal prerequisites have occurred prior to the adoption of this Resolution.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF INDUSTRY DOES HEREBY RESOLVE, DETERMINE, FIND, AND ORDER AS FOLLOWS:

SECTION 1: The City Council finds that all of the facts set forth in the Recitals are true and correct, and are incorporated herein by reference.

SECTION 2: All necessary public hearings and opportunities for public testimony and comment have been conducted in compliance with State law and the City's Code.

SECTION 3: Based upon substantial evidence presented to the City Council during the October 8, 2015 public meeting, including public testimony and written and oral staff reports, and which includes without limitation, CEQA, the CEQA Guidelines, the Initial Study/Mitigated Negative Declaration, and the City's Code, the City Council finds as follows:

A. A Zoning Exception is necessary for the Project for the preservation of a substantial property right, and will not be materially detrimental to the public welfare nor to the property of other persons located in the vicinity, because a wall taller than 42 inches in the front setback, in this case ten feet tall, is necessary to screen the loading area, maintain the high quality visual character of the area, and minimize noise impacts to nearby sensitive uses while allowing a well-designed, marketable, and efficient industrial building. Further, the landscape frontage along Parriott Place will be largely maintained and consistent with the requirement for professional looking landscape setback along public streets. By allowing the ten foot wall within 30 feet of the front curb, the Applicant is able to develop the Property in a manner consistent with its zoning designation, and the property right is preserved; and

B. There are practical difficulties and unnecessary hardships associated with the development of the Property due to the odd shape of the lot, and the spirit of the Code will be observed, public safety secured and substantial justice done because the proposed ten foot tall wall effectively screens the loading area and, by being located in the setback, also allows for the necessary loading clearance and maneuvering area as well as required parking and trash/recycling enclosure. With the restriction regarding right-in and right-out from the northern driveway of Building B, a potential visual impairment will be addressed and vehicular safety will be maintained.

C. Based on the foregoing, the City Council approves the Zoning Exception to the provisions of Chapter 17.32 stipulating that the maximum height of a wall within 30 feet of the curb cannot exceed 42 inches to instead allow a ten foot tall wall to be located 18 feet from the curb, subject to the Conditions of Approval, attached hereto as Exhibit A, and incorporated herein by reference.

SECTION 4: Based upon substantial evidence presented to the City Council during the October 8, 2015 public meeting, including public testimony and written and oral staff reports, and which includes without limitation, CEQA, the CEQA Guidelines, the Initial Study/Mitigated Negative Declaration, and the City's Code, the City Council finds as follows:

A. The Property is suitable for development in accordance with the Development Plan because the Property has previously been subdivided to comply with minimum lot area and frontage requirements, is flat and free from hazards as noted in the accompanying Initial Study/Mitigated Negative Declaration, and is designated as Employment in the General Plan and zoned Manufacturing, which are consistent with the proposed development; and

B. The total development is arranged so as to avoid traffic congestion, ensure the public health, safety and general welfare or prevent adverse effects upon neighboring properties because, as noted in the accompanying Initial Study/Mitigated Negative Declaration, the Project would add less than 30 trips at each nearby intersection and would not significantly impact road capacity; the screen wall mitigates noise impacts to adjacent non-industrial uses and screens loading areas to maintain the visual character of the area; access from Parriott Place is provided and meets driveway standards; and, with the restriction regarding right-in and right-out from the northern driveway of Building B, a potential visual impairment will be addressed and vehicular safety maintained; and

C. The development is in general accord with all elements of the Industry Zoning Ordinance because, with the approval of the Zoning Exception, the project complies with development standards in regards to building setbacks, height, parking, access, screening, loading, landscaping, and design; and

D. The development is consistent with the provisions of the City's General Plan because is the Property is designated as Employment, which allows the development of buildings for industrial uses.

E. Based on the foregoing, the City Council approves Development Plan No. 15-10, subject to the Conditions of Approval, attached hereto as Exhibit A, and incorporated herein by reference.

SECTION 5: The provisions of this Resolution are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of the Resolution or their applicability to other persons or circumstances.

SECTION 6: That the City Clerk shall certify to the adoption of this Resolution and that the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Industry at a regular meeting held on October 8, 2015 by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
Mark D. Radecki, Mayor

ATTEST:

_____
Cecelia Dunlap, Deputy City Clerk

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

EXHIBIT A

Standard Requirements and Conditions of Approval

Application: **Zone Exception 15-2 and Development Plan 15-10**

Applicant: **CT Realty Investors, 65 Enterprise, Suite 150 Aliso Viejo, CA 92656**

Location: **489 and 499 Parriott Place (APN 8208-027-911 and 912)**

Conditions of Approval

Conditions of approval are unique provisions, beyond the requirements of law, the municipal code, or standard practices that are applied to a project by the City Council per Section 17.36.080 of the Zoning Code. Please note that if the design of your project or site conditions change, the conditions of approval may also change. If you have any questions regarding these requirements, please contact the City of Industry.

1. The landscape irrigation system shall be designed to accept recycled water from future recycled water lines, which are currently being planned to be located in the area. The irrigation plan, which is submitted to the City for approval per Chapter 13.18 of the Municipal Code, shall be designed and clearly noted to allow the transition from potable water to recycled water when and if recycled water lines are eventually installed in the immediate vicinity.

2. Electronic gates shall be equipped with a Knox electric switch and an alternative energy back-up system, such as a generator or battery, which would allow operation of the security gate(s) during an electrical power outage. Access through the gates shall be provided for both the Los Angeles County Fire and Sheriff Departments. The location of Knox boxes shall be shown on the building plans and approved by both the Fire Department and Sheriff Department.

3. Roof-top address numbers that would only be visible from the air shall be installed to assist air borne patrols. The numbering should be a minimum of 3 feet and of a color that contrasts with the roof. If applicable, addresses will include designators for individual tenant addresses, such as Unit A.

4. A note shall be added to the building plans stating that the construction contractor shall only use interior and exterior paints with a VOC content of 90 grams per liter (g/L) or less for the building structures to reduce VOC emissions. Prior to issuance of building permits, the construction contractor shall provide documentation to the satisfaction of the City of Industry Planning Department that verifies use of coatings with a VOC content of 90 g/L or less.

5. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation and

DRAFT

other tribes who have proven traditional and cultural affiliation with the project site pursuant to PRC Section 21080.3.1, the City of Industry, and other appropriate agencies.

6. A soil vapor survey shall be conducted by a qualified environmental professional to evaluate the potential presence of volatile organic contaminants on the project site. Should volatile organic contaminants be detected, a human health risk screening analysis shall be performed, and the resultant cancer risk shall not exceed one excess case in one million. The soil vapor survey shall be conducted, and it shall be confirmed that the calculated cancer risk is not in exceedance of one excess case in one million prior to issuance of a building permit.

7. Prior to obtaining building permits for the project, the project Applicant/developer shall construct improvements to restrict access at the northern project driveway allowing only right-in/right-out movements. The restriction would be implemented by (1) the installation of regulatory signage at the driveway outbound leg to prohibit left turns out, or to indicate that only right turns are permitted, (2) the installation of "No Left Turn" signs on both sides of Parriott Place facing southbound, and, if feasible, by (3) painting pavement markings on Parriott Lane to designate a median island, which would prohibit crossings and left turns into the northern driveway. Alternatively, the project Applicant shall prepare an engineering study to the satisfaction of the City Engineer to demonstrate that the driveway can safely accommodate full access and implement the necessary design features (such lane restriping to allow for a dual left turn lane, warning signage, sight distance improvement by relocation of the trash enclosure or masonry wall removal) to safely accommodate full access without turn restrictions. Traffic control features at that driveway and the pavement markings shall be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices.

8. Landscaping along the site's frontage facing Parriott Place from the parking lot to the road right of way shall be restricted to ground covers and low shrubs not exceeding three feet in height from the northern driveway to the project's northern boundary. Landscaping plans shall include this restriction and be submitted to the City of Industry Planning Director for review and approval prior to obtaining building permits.

<u>Code Requirements and Standards</u>

The following is a list of code requirements and standards deemed applicable to the proposed project. The list is intended to assist the Applicant by identifying requirements that must be satisfied during the various stages of project permitting, implementation, and operation. It should be noted that this list is in addition to any "conditions of approval" adopted by the City Council and noted above. Please note that if the design of your project or site conditions change, the list may also change. If you have any questions regarding these requirements, please contact the City of Industry.

1. The approval expires twelve (12) months after the date of approval by the City Council if a building permit for each building and structure thereby approved has not been obtained within such period.

2. In conformance with Chapter 13.18 of the Municipal Code, the Applicant shall provide landscaping and automatic irrigation plans to be approved by the Planning Director prior to the issuance of a building permit. Such plans shall be in substantial conformity with the approved development plan.

3. The Applicant shall construct adequate fire protection facilities to the satisfaction of the Los Angeles County Fire Department.

4. All exterior surfaces of buildings and appurtenant structures shall be painted in accordance with the approved development plan.

5. The owner of the property must comply with the Subdivision Ordinance of the City of Industry.

6. Depending upon the nature of the proposed use, the Applicant shall obtain an Industrial Waste Permit or receive Domestic Wastewater Clearance from the City Engineer.

7. The Applicant shall provide off-street parking as shown on the approved development plan.

8. The Applicant shall supply sanitary sewer facilities to serve all buildings to the satisfaction of the City Engineer prior to the final approval of the development and hook-up of utilities. One sewer connection per parcel is permitted and, in the case of multiple units or buildings, all sewer lines must join together at the connection point.

9. The Applicant shall provide drainage and grading plans to be approved by the City Engineer prior to the issuance of a building permit. Such plans shall be in substantial conformity with the development plans.

10. In conformance with Chapter 13.16 of the Municipal Code and prior to the start of grading and construction, the Applicant shall provide a Stormwater Pollution Prevention Plan (SWPPP), developed by a Qualified SWPPP Developer (QSD) and consistent with the current National Pollutant Discharge Elimination System (NPDES) construction general permit, along with proof that a Waste Discharger Identification (WDID) Number has been obtained, to the City Engineer for review and approval.

11. The Applicant shall provide building plans to be approved prior to the issuance of a building permit. Such plans shall be in substantial conformity with the development plans. (Building plans shall be submitted to and approved by the Los Angeles County Engineer's Office - Building and Safety Division prior to the issuance of a building permit.)

12. Demolition and construction operations shall be limited to the hours prescribed by the Los Angeles County Noise Ordinance (Los Angeles County Municipal Code, Section 12.08.390).

13. No outdoor storage of any personal property, building materials, or other property not permanently affixed to the real property shall be allowed.

14. Should archeological resources be uncovered during site preparation, grading, or excavation, work shall be stopped for a period not to exceed 14 days. The find shall be immediately evaluated for significance by a county-certified archaeologist. If the archaeological resources are found to be significant, the archaeologist shall perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit resources to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable).

Interpretation and Enforcement

1. The Planning Department, Engineering Department, and contract agencies (Los Angeles County Fire Department, Los Angeles Department of Building and Safety) shall be responsible for ensuring compliance with all applicable code requirements and conditions of approval.

2. The Planning Director may interpret the implementation of each condition of approval and, with advanced notice, grant minor amendments to approved plans and/or conditions of approval based on changed circumstances, new information, and/or relevant factors as long as the spirit and intent of the approved condition of approval is satisfied. Permits shall not be issued until the proposed minor amendment has been reviewed and approved for conformance with the intent of the approved condition of approval. If the proposed changes are substantial in nature, an amendment to the original entitlement may be required pursuant to the provisions of Industry Municipal Code.

Indemnification and Hold Harmless Condition

1. The Applicant, and each of its heirs, successors and assigns, shall defend, indemnify and hold harmless the City of Industry and its agents, officers, and employees from any claim, action or proceedings, liability cost, including attorney's fees and costs against the City or its agents, officers or employees, to attack, set aside, void or annul any approval of the City, including but not limited to any approval granted by the City Council and Planning Commission concerning this project. The City shall promptly notify the Applicant of any claim, action or proceeding and should cooperate fully in the defense thereof.

CITY COUNCIL

ITEM NO. 7.1

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: City Council October 1, 2015

From: Paul J. Philips, City Manager

Staff: Brian James, Planning Director

Subject: Development Plan 15-7

Overview

Section 17.36.020 of the Municipal Code requires approval of a Development Plan by the City Council for new construction. Development Plan Application 15-7 is proposed by Donnellan Builders to develop a 6.18 acre site at 15000 Nelson Avenue with a new 125,344 square foot industrial building. The project site was formerly owned by the Successor Agency.

Project Description

As shown in the attached site plan (Attachment 1), the proposed building would be 125,344 square feet on a 6.18 acre lot (269,087 square feet). The building would include two stories and 10,000 square feet of office space on the north side of the building. The loading area would be located on the west side of the building, approximately 387 feet from the front property line, and would be screened from Nelson Avenue by the adjacent buildings across the Puente Creek and the proposed building itself. There would be a total of 18 dock-high loading bays (four tucked into an alcove) and one grade-level loading door in the loading area, which would be secured by two eight foot tall tubular steel gates. The building would be accessed from Nelson Avenue by one 40 foot wide driveway that would provide access to 159 parking spaces as follows:

- 125 standard spaces (9'x19'), including 6 accessible and van accessible spaces
- 34 compact spaces (8'x16')

In addition, there would be a bike rack accommodating six bicycle parking spaces installed near the office and a total of 29,074 square feet of landscaping (10.8 percent) located primarily along Nelson Avenue. A trash enclosure containing a trash bin and a recycling bin would be provided near the loading dock on the west side of the building and a pad-mounted electrical transformer would be installed on the north side of the building.

As shown on the attached elevations (Attachments 2), the building is proposed to be approximately 41 feet high and the office area would be slightly taller and be adorned with glazing to differentiate it from the warehouse area.

Successor Agency Property Status

This site has been identified as Property 9 on the Long Range Property Management Plan and was acquired in 2007 to facilitate the redevelopment of the site for new industrial development. The property was purchased by Klema Enterprises for $6,705,839.

Location and Surroundings

As shown on the attached location map (Attachment 3), the project site is located south of Nelson Avenue and east of Puente Creek, between California and Unruh Avenues, at 15000 Nelson Avenue. The site is 6.18 acres and is comprised of Los Angeles County Tax Assessor Parcel Number (APN) 8208-011-902. The project site is graded and flat and was previously paved and developed with a trucking facility. The lot itself is narrow on the northern end (198 feet wide) and, following the curvature of the adjacent Puente Creek, gradually widens to approximately 370 feet on the southern end.

Warehouses and manufacturing facilities are located to the east and west of the project site, including AB&I Foundry, O-Nex Automotive, Silao Foods Tortilleria, Solo Enterprise Corporation, and EZ Weigh Public Scales. The Union Pacific Railroad Tracks abut the project site on the south with Valley Boulevard just beyond. South of Valley Boulevard in Los Angeles County are commercial and automotive repair uses as well as a mobile home park. North of the project site across Nelson Avenue are residences and the Nelson Avenue Elementary School, both located in the City of La Puente.

Staff Analysis

Development Plan Application

The proposed development project is consistent with the Zoning ("M" – Manufacturing) and General Plan (Employment) designations of the site and complies with the following development and design standards in Section 17.36, *Design Review*, of the Industry Municipal Code. Specifically, the project:

- Meets development standards. Chapter 17.36 includes standards regarding building height, lot coverage, and trash/recycling enclosures to which the proposed project complies.
- Meets screening and loading requirements. Section 17.36.060.R requires that loading areas not located at the rear of the building be screened by a minimum eight foot tall wall, landscaping, or the building itself. The loading bays face to the west toward the Puente Creek and are located behind a security wall and tubular steel gate. The first set of four loading docks are located approximately 400 feet south of Nelson Avenue and tucked into an alcove. The remaining 14 loading docks are located approximately 160 feet further south, also on the west side of the building. The combination of the distance from Nelson Avenue, the security gate and walls, buildings to the west of the Puente Creek, and the building itself adequately screen the loading area from Nelson Avenue.
- Meets building setback standards. Section 17.36.060.L of the Municipal Code requires that all buildings and structures be set back a minimum of 30 feet from the curb. As proposed, the building would be setback 155 feet from the curb.
- Meets design guidelines. Sections 17.36.060 A-J of the Municipal Code call for well-designed and coordinated buildings, walls, lighting, and landscaping. The architectural treatment of the building is varied and professional in appearance, with the office area facing Nelson Avenue. The bulk of the landscaping is located in the front between Nelson

Avenue and the building, which will provide a green separation between the street and the facility.

- Exceeds access requirements. Sections 17.36.060.K and N of the Municipal Code require a minimum driveway and drive-aisle width of 26 feet. One driveway of 40 feet in width will provide access from Nelson Avenue. Drive-aisle widths of 26 to 40 feet are proposed to provide internal circulation.
- Meets bicycle-parking requirements. Chapter 17.68 of the Municipal Code requires that the development accommodate four bicycles for the first 50,000 square feet and one bicycle per each additional 50,000 square feet. Based on this formula, six bicycles must be accommodated and parking for six bicycles is proposed.
- Complies with drainage and water quality requirements. The project was found complete prior to the effective date of Ordinance 792, which enacted the Low Impact Development provisions, and is therefore subject to Municipal Chapter 13.16 and 13.17 existing prior to approval of Ordinance 792. The applicant is currently working with the City Engineer to ensure compliance with the drainage and water quality standards. Compliance with Municipal Chapters 13.16 and 13.17 will be required prior to issuance of the grading plan and/or the final approval of the building.

Staff recommends that the City Council approve Development Plan 15-7 based on the following findings:

- The proposed improvement is consistent with the General Plan designation of Employment and conforms to the zoning designation of Manufacturing for the subject property in the City of Industry because, as described above, the project would accommodate a new industrial building, which is a permitted use in both the Employment General Plan land use designation and Manufacturing zoning district.
- The proposed development is compatible with the surrounding area, which consists of industrial and commercial uses, an elementary school, and residences, because, as described above, the proposed building complies with the City's development standards, adequately screens the loading area, presents a professional and coordinated architectural design, and provides a large landscape frontage to help separate the building and parking area from the street. In addition, all future occupants of the building will be required to obtain and comply with the requirements of a Use Permit. Through the Use Permit, Staff will scrutinize the operations of future occupants to ensure hours of operation, maintenance, noise, and other issues are addressed to minimize impacts to adjacent residences.
- There is adequate street access and traffic capacity for the proposed development on Nelson Avenue, which serves the project site because, as noted in the attached Initial Study/Negative Declaration (Exhibit A of Attachment 4), the total trip generation for the project is estimated to generate 446 daily vehicle trips, of which 95 would be trucks and the remainder passenger cars. Given the distribution of trips going east and west on Nelson Avenue, the project would add less than 30 trips at the nearby intersections, which would not significantly impact road capacity. The project would result in a small increase of less than 10 percent over the existing traffic and the anticipated volumes would be well below the roadway's capacity.
- The proposed development will have no significant impact on the environment as indicated in the attached Initial Study, and a Negative Declaration has been prepared in accordance with the requirements of the California Environmental Quality Act of 1970, as amended;

and

- Due to the foregoing, the proposed project will not be a menace to or endanger the public health, safety or general welfare to the City.

Minor Exception—Administrative

Section 17.40.040 of the Municipal Code allows the Planning Director to administratively grant a minor exception without a public hearing when the requested deviations are ten percent or less of the standards listed in of Sections 15.32.070 (signs), 16.10.010 (parcel frontage), 16.10.020 (parcel size), and 17.36.060 (development standards). The proposed project includes the following exceptions that will be granted administratively by the Planning Director contingent upon approval of the Development Plan application by the City Council:

- Section 17.36.060.K of the Municipal Code requires that buildings over 100,000 square feet provide 150 parking spaces plus one space per 1,000 square feet of floor area over 100,000 square feet. Based on this formula, 176 parking spaces area required and 159 parking spaces are proposed, which is 17 fewer spaces than required by code and within the ten percent deviation that can be acted upon administratively by the Planning Director. In working with Staff, the applicant reduced parking in order to maximize the amount of landscaping along Nelson Avenue to help screen the business and maximize the separation from nearby sensitive uses.
- Section 17.36.060.K of the Municipal Code limits the amount of compact parking to 20 percent of the total required parking. The applicant proposes 34 compact spaces, which is 21 percent of the required parking and within the ten percent deviation that can be acted upon administratively by the Planning Director. In working with Staff, the increase in the ratio of compact spaces is intended to maximize parking on the site, which was reduced to maximize landscaping along Nelson Avenue.
- Section 17.36.060.Q of the Municipal Code requires that a minimum of 12 percent of the site be devoted to landscaping and 10.8 percent (29,074 square feet) is proposed and within the ten percent deviation that can be acted upon administratively by the Planning Director. The goal of the City is to maximize landscaping along the street frontage and in areas clearly visible from public areas. The applicant has located the majority of the required landscaping along the Nelson Avenue frontage. Given the narrow frontage and odd shape of the lot, the only way to achieve the 12 percent standard would be to add landscaping in areas that cannot be seen by the public. Gaining the additional landscaping in areas of the lot that are not visible in order to strictly meet the 12 percent standard was not deemed as critical as maximizing the building setback and amount of landscaping along Nelson Avenue.

In determining if it is appropriate to support a minor exception request, Staff utilized the same type of analysis used in judging an Exception application. Sections 17.40.020 and 17.40.030 of the Municipal Code allow for the granting of an exception when: 1) it is necessary for the preservation of a substantial property right, 2) it will not be materially detrimental to the public welfare or to the surrounding properties, and 3) if there are practical hardships in the application of the development standards but the spirit of the standards will still be preserved, public safety secured, and substantial justice done. In addition, if there are no protests, an exception may be granted even if it is not necessary for the preservation of a substantial property right. State Planning and Zoning Law (Section 65906) requires that exceptions be granted only when, because of special circumstances applicable to the property, including size, shape, topography, location or

surroundings, the strict application of the zoning ordinance deprives the property of privileges enjoyed by nearby properties in the same zone. State law also requires that any exception not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity.

Staff determined that granting the minor exceptions is merited upon approval by the City Council because of the following:

- Because of the curvature of Puente Creek and resulting odd shape of the lot and narrow frontage (approximately 198 feet wide on north and 370 feet wide on south), the buildable area is limited and challenged by the need to provide 360 degree fire access as well as the necessary access, loading, parking, and landscaping. In addition, because of the adjacent school and residents across Nelson Avenue, the goal was to maximize the separation of the building and building activities from these sensitive uses. The applicant has maximized the landscaping in the north, nearest to Nelson Avenue and the residences, and pushed the building back 145 feet from the front property line. As a trade-off, the amount of parking and landscaping proposed is less than that required by the Municipal Code. In addition, in order to increase the amount of parking, the amount of compact parking is slightly more than the maximum allowed by the Municipal Code. In all other aspects, the project meets development and design standards.
- Granting the minor exceptions would preserve a substantial property right by allowing a well-designed, marketable, and efficient industrial building on an odd shaped lot while preserving the character of the surrounding area by maximizing the amount of landscaping along the Nelson Avenue frontage, locating the building 145 feet from the front property line, screening the loading area on the west side of the building approximately 400 feet south of Nelson Avenue, and minimizing noise impacts to the nearby residences and school, as addressed in the noise section of the Initial Study/Negative Declaration (Attachment 4).
- The minor exceptions will not be materially detrimental to public welfare or surrounding properties and will be safe. The minor exceptions allow the landscaping along Nelson Avenue to be maximized and an efficient site design in which the building is setback 145 feet from the front property line and the loading area is setback approximately 400 feet south of Nelson Avenue to minimize noise impacts. The minor exceptions to landscape area and parking do not result in any safety issues and the site, access, and building are designed to comply with safety requirements.
- The spirit of the City's development standards will be preserved and justice done because the project is designed to be consistent with the development standards and the minor exceptions allow a viable and marketable industrial building that maintains the character of and minimizes impacts to the nearby sensitive uses. A professional landscaping appearance is provided along Nelson Avenue and the building is setback 145 feet from the front property line and the loading area is setback approximately 400 feet south of Nelson Avenue to minimize impacts to nearby sensitive uses.
- Due to the special circumstances applicable to this project site (curvature of Puente Creek and resulting odd shaped parcel), the minor exceptions do not represent a grant of special privileges and is necessary to allow normal development enjoyed by other Industrially zoned properties and minimize impacts to nearby sensitive uses.

Environmental Analysis

An Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to determine if the proposed use could have a significant impact on the environment (Exhibit A of Attachment 4). The Initial Study, which included a traffic analysis, health risk assessment, and noise analysis, among others, determined that the proposed project would not have a significant effect on the environment. Resolution CC 2015-33 (Attachment 4) approving the Negative Declaration accompanies this application for adoption by the City Council.

The Notice of Intent to adopt a Negative Declaration (Exhibit A of Attachment 4) was posted on the site, fire stations, and council chambers, and published in the San Gabriel Tribune by September 17, 2015.

Several project design features have been incorporated into the Negative Declaration and conditions of approval to minimize potential environmental impacts. These include: the use of signage limiting the duration of truck idling; locating stationary construction equipment far from residences; scheduling major noise-producing operations to minimize disturbances; and allowing the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during ground-disturbing activities.

The City received comments on the Initial Study/Negative Declaration regarding the consultation with Native American Tribes per AB 52. Even though CEQA and State CEQA Guidelines do not require written responses to comments received on an Initial Study/Negative Declaration, the City has prepared responses to provide full disclosure to the Council and public. The Response to Comments (Exhibit A of Attachment 4) incorporates the comments received on the Initial Study/Negative Declaration, responses to those comments, and any changes to the Initial Study/Negative Declaration that result from the comments received.

AB 52 requires that the City provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested to be notified. If, after being notified, a tribe requests consultation, the City must consult with the tribe in good faith. Consultation is deemed concluded when either the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when a party concludes that a mutual agreement cannot be reached.

The City received consultation requests from the Gabrieleño Band of Mission Indians – Kizh Nation and the Soboba Band of Luiseño Indians, who later deferred consultation to the Gabrieleño Band of Mission Indians – Kizh Nation. Consultation occurred in good faith and the Gabrieleño Band of Mission Indians – Kizh Nation requested that a tribal monitor be present during earth moving operations. However, no substantial evidence that a tribal cultural resource exists on the site has been provided or uncovered during the Initial Study process and there is no evidence of a substantial impact. Despite the lack of evidence that a tribal resource exists on the site, the applicant was consulted and agreed to accept the tribe's proposed request for an on-site monitor and this measure is incorporated as a project design feature in the Negative Declaration and as a condition of approval.

Recommendation

Because the Development Plan application proposes a project that complies with a majority of development standards of the Municipal Code, does not pose a significant impact on the environment, and satisfies the above-mentioned findings, Staff recommends that the City Council:

1) Adopt Resolution No. CC 2015-33 (Attachment 4) approving the Negative Declaration and Response to Comments prepared for Development Plan 15-7; and

2) Adopt Resolution No. CC 2015-34 (Attachment 5) approving Development Plan No. 15-7 with the Standard Requirements and Conditions of Approval contained in the Resolution.

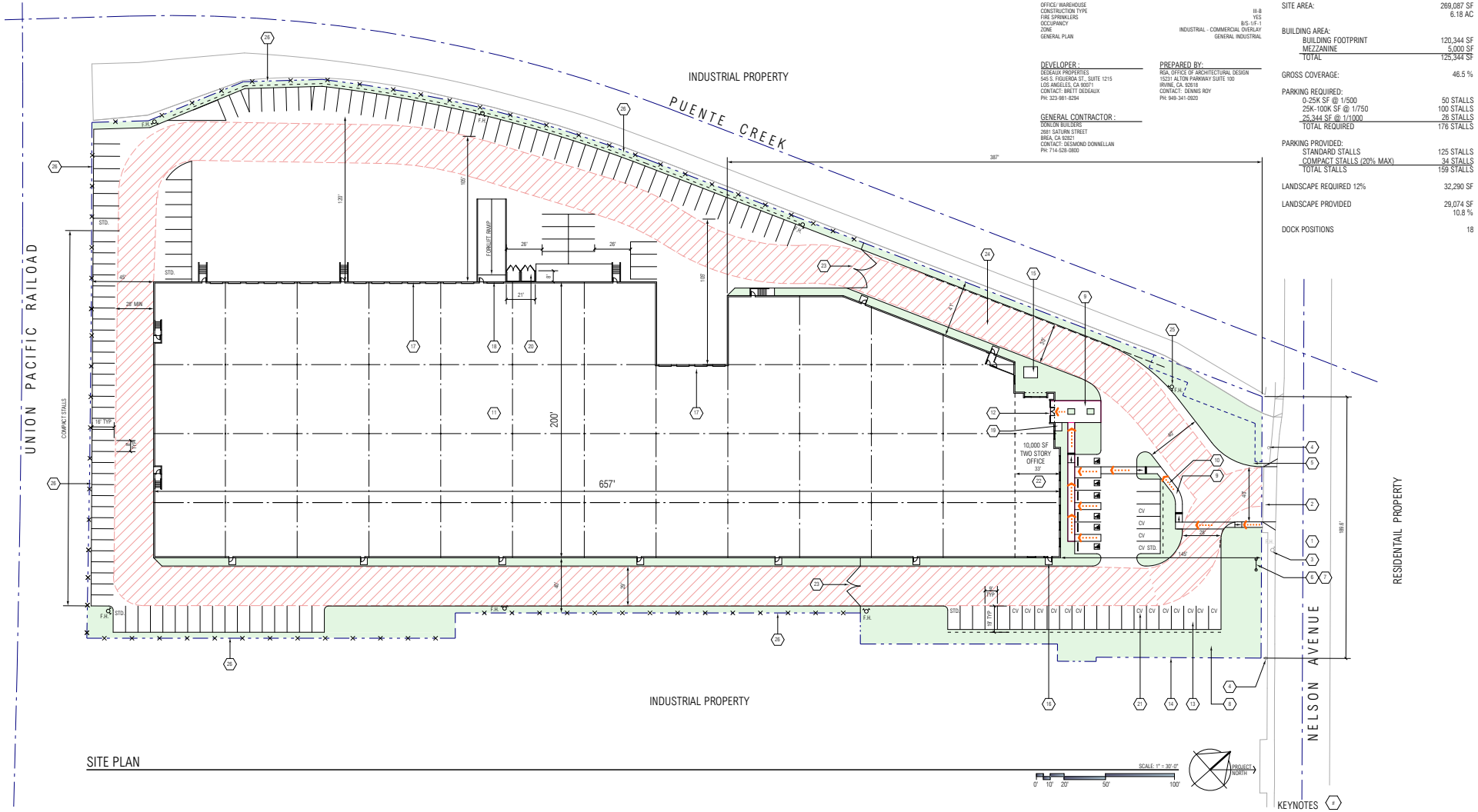
Attachments

- Attachment 1: Site Plan
- Attachment 2: Elevations
- Attachment 3: Location Map
- Attachment 4: Resolution No. CC 2015-33 including the Notice of Intent to Adopt a Negative Declaration for Development Plan 15-7; Initial Study/Negative Declaration for Donlon Building, September 2015; and Response to Comments
- Attachment 5: Resolution No. CC 2015-34

Attachment 1

Site Plan

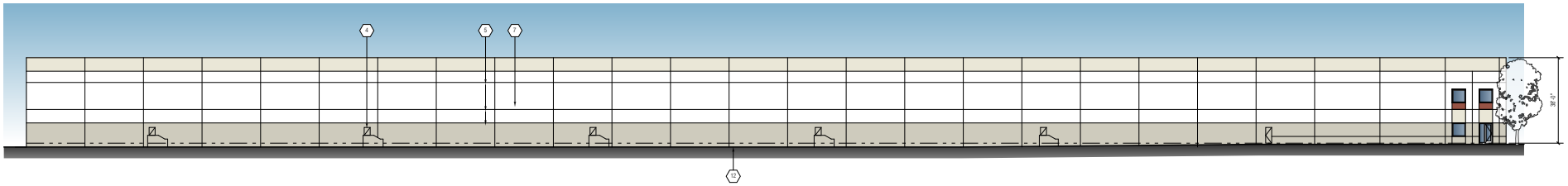
DP 15-7
Site Plan



Attachment 2

Elevations

DP 15-7
Elevation

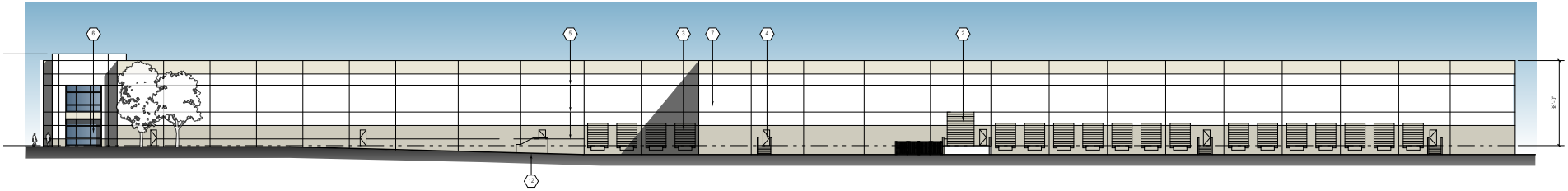


EAST ELEVATION
SCALE: 1" = 20'-0"

NORTH ELEVATION
SCALE: 1" = 20'-0"

KEYNOTES

1. PRIMARY ENTRANCE.
2. PAINTED 12' WIDE X 15' HIGH LEVEL VERTICAL LIFT TRUCK DOOR.
3. PAINTED 9' WIDE X 10' HIGH VERTICAL LIFT TRUCK DOOR.
4. 3' X 7' PAINTED METAL MAN DOOR.
5. 2" WIDE X 3/4" DEEP HORZONTAL / VERTICAL REVEAL.
6. REFLECTIVE GLASS IN STOREFRONT FRAME SYSTEM.
7. PAINTED CONCRETE TILT-UP EXTERIOR WALL CONSTRUCTION.
8. PROPOSED FUTURE TENANT SIGNAGE LOCATION (TWO LOCATIONS).
9. 8' HIGH BLACK TUBULAR STEEL ROLLING GATE - TYP. AT YARD ENTRANCES. SEE SITE PLAN.
10. TYP. PAINTED CONCRETE SCREENWALL ELEVATION W/ ACCENT REVEALS AND PAINTED ACCENTS TO MATCH BUILDING ARCHITECTURE.
11. WALL MOUNTED L.E.D. LIGHT FIXTURE WITH WHITE FIXTURE HOUSING.
12. PROPOSED FINISH GRADE.
13. FUTURE OFFICE HVAC EQUIPMENT TO BE SCREENED FROM ADJACENT STREET VIEW BY BUILDING PARAPET.
14. TOP OF ROOF DECK BEHIND PARAPET WALL.



WEST ELEVATION
SCALE: 1" = 20'-0"

Attachment 3

Location Map

DP 15-7
Location Map

Attachment 4

Resolution No. CC 2015-33

Including:

- **Notice of Intent to Adopt a Negative Declaration**
- **Initial Study/Negative Declaration**
- **Response to Comments**

RESOLUTION NO. CC 2015-33

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA MAKING FINDINGS AND ADOPTING THE NEGATIVE DECLARATION FOR THE CONSTRUCTION OF A 125,344 SQUARE FOOT INDUSTRIAL BUILDING AT 15000 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA, WITHIN THE MANUFACTURING ZONE, AND MAKING FINDINGS IN SUPPORT THEREOF

RECITALS

WHEREAS, on May 11, 2015, Donnellan Builders ("Applicant") filed a complete application requesting the approval of Development Plan ("DP") No. 15-7 described herein ("Application"); and

WHEREAS, the Application applies to a vacant 6.18 acre property at 15000 Nelson Avenue, City of Industry, California, Assessor's Parcel Number 8208-011-902 ("Property"); and

WHEREAS, the Applicant desires to construct a 125,344 square foot industrial building on a 6.18 acre lot in the "M" Manufacturing zone (the "Project"), and in accordance with Section 17.36.020 of the City's Municipal Code ("Code"), a Development Plan is required for this type of activity; and

WHEREAS, the Land Use Element of the General Plan designates the Property as Employment. The proposed use is consistent with the General Plan as it would allow for the development of an industrial building, which is a permitted use in the employment land use designation, and does not conflict with the established goals and objectives of the Land Use Element; and

WHEREAS, an Environmental Assessment form was submitted by the Applicant pursuant to the City's requirements. Based upon the information received and Staff's review and assessment, an Initial Study/Negative Declaration were prepared in accordance with the requirements of the California Environmental Quality Act ("CEQA"), California Public Resources Code section 21000 *et seq.,* the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, sections 15000 *et seq.,* and the Environmental Impact Report Guidelines of the City of Industry, and the City Council has exercised its independent judgment when considering said Initial Study/Negative Declaration and all public comments received in connection therewith; and

WHEREAS, the Initial Study/Negative Declaration was circulated for public and agency review and comment on September 17, 2015 through, and including, October 7, 2015. Copies of the Initial Study/Negative Declaration were made available to the public at the Planning Department on September 17, 2015, and the Initial Study/Negative Declaration was distributed to interested parties and agencies. On September 17, 2015, a Notice of Intent to Adopt an Initial Study/Negative Declaration, including the time and

place of the City Council meeting to review the Application and Initial Study/Negative Declaration was published in the local newspaper and posted at the Property, City Hall, Council Chambers and Fire Station 118; and

WHEREAS, the Initial Study/Negative Declaration and all related environmental documents forming the basis for this Negative Declaration and Resolution are located in, and in the custody of, the Office of the City Clerk, City of Industry; and

WHEREAS, on October 8, 2015, the City Council of the City of Industry conducted a duly noticed public meeting to consider the Initial Study/Negative Declaration, and considered all testimony written and oral; and

WHEREAS, the City Council has reviewed and carefully considered the information in the Initial Study/Negative Declaration, including all comment letters submitted, and makes the findings contained in this Resolution, and adopts the Initial Study/Negative Declaration, as an objective and accurate document that reflects the independent judgment and analysis of the City in the discussion of the Project's environmental impacts; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF INDUSTRY DOES HEREBY RESOLVE, DETERMINE, FIND, AND ORDER AS FOLLOWS:

SECTION 1: That based on the entirety of the record before it, which includes without limitation, the California Environmental Quality Act, Public Resources Code §§ 21000, et seq. ("CEQA") and the CEQA Guidelines, 14 California Code of Regulations § 15000, *et seq.*; the Environmental Impact Report Guidelines of the City of Industry; the Initial Study/Negative Declaration, prepared for the Project, including all written comments received; all reports, minutes, and public testimony submitted as part of the City Council's duly noticed public meeting of October 8, 2015; and any other evidence (within the meaning of Public Resources Code §21080(e) and §21082.2), the City Council of the City of Industry hereby finds as follows:

a. The foregoing recitals are true and correct and made a part of this Resolution.

b. The Initial Study/Negative Declaration for the Project including any comment letters received, are attached hereto as Exhibit A and are incorporated by reference as part of this Resolution, as if each were set forth fully herein.

c. The documents and other material constituting the record for these proceedings are located at the Office of the City Clerk, City of Industry, 15625 E. Stafford, Suite 100, Industry, CA 91744.

d. The proposed Project is consistent with the City's General Plan because the land use, development standards, densities and intensities, buildings and structures proposed are compatible with the goals, policies, and land use designations established in the General Plan (see Gov't Code, § 65860), and none of the land uses, development standards, densities and intensities, buildings and structures will operate to conflict with or impede achievement of the any of the goals, policies, or land use designations established in the General Plan.

e. In accordance with CEQA, the City Council has considered the Initial Study and Negative Declaration for the Project, including all comments received on the Initial Study and Negative Declaration, and based on the entirety of the record, as described above, the City Council, exercising its independent judgment and analysis, makes the following findings regarding the environmental analysis of the Project:

   i. Design features of the Project will operate to ensure the impacts of the proposed Project will not exceed established CEQA thresholds of significance.

   ii. For the reasons stated in this Resolution, the City Council finds that there is no substantial evidence in the record supporting a fair argument that approval of the Project will result in a significant environmental effect.

f. That the City Council of the City of Industry hereby makes the findings contained this Resolution, and adopts the Initial Study/Negative Declaration for the Project.

SECTION 2: The provisions of this Resolution are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of the Resolution or their applicability to other persons or circumstances.

SECTION 3: That the City Clerk shall certify to the adoption of this Resolution and that the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Industry at a regular meeting held on October 8, 2015 by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSTAIN:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:

_____
Mark D. Radecki, Mayor

ATTEST:

_____
Cecelia Dunlap, Deputy City Clerk

Exhibit A.1

Notice of Intent to Adopt a Negative Declaration for Development Plan 15-7

NOTICE OF INTENT TO ADOPT A
NEGATIVE DECLARATION
DEVELOPMENT PLAN 15-7
15000 NELSON AVENUE, CITY OF INDUSTRY

Purpose: In accordance with the State of California Public Resources Code Section 21092, Title 14 of the California Code of Regulations Guidelines for implementation of Section 15063 of the California Environmental Quality Act, and the Industry Municipal Code, this is to advise you that the Planning Department of the City of Industry has prepared an initial study of environmental impacts on the following project and is recommending the environmental determination described below.

Project Description: Development Plan 15-7 is an application from Donlon Builders to develop a vacant but formerly developed 6.18 acre site with a new 125,344 square foot industrial building that includes two stories and 10,000 square feet of office space.

Location: The proposed project is located at 15000 Nelson Avenue in the City of Industry, Los Angeles County (Assessor Parcel No. 8208-011-902).

Environmental Determination: Based on the findings of the Initial Study, the Planning Department has determined that the proposed project would not result in significant environmental impacts and the City intends to adopt a Negative Declaration pursuant to Section 21080 (c) of the Public Resources Code. The project site is not included on the list of hazardous materials facilities, hazardous waste properties, or hazardous waste disposal sites named under Section 65962.5 of the California Government Code (Cortese List).

Public Review and Comment Period: Copies of the proposed Negative Declaration and Initial Study are available in the Planning Department at the address listed below. **A 20-day public review period for the Negative Declaration begins September 17, 2015, and ends October 7, 2015**. Written comments on the adequacy of the document must be received by the City prior to 5:00 PM on October 7, 2015. If you would like to comment, please send written comments to:

Brian James, Planning Director
15625 E. Stafford Street, Suite 100
P.O. Box 3366
City of Industry, CA 91744
bdjames@cityofindustry.org
(626) 333-2211

Public Hearing: The City Council is scheduled to consider the Negative Declaration and proposed project at a regularly scheduled meeting to be held on October 8, 2015, at 9:00 AM in the City of Industry Council Chambers located at 15651 E. Stafford Street, City of Industry, CA 91744. To confirm the date and time of the meeting, please check the City's website: www.cityofindustry.org.

Exhibit A.2

Initial Study/Negative Declaration for Donlon Building, September 2015

September 2015 | Initial Study

DONLON BUILDING

Development Plan 15-7, City of Industry

Prepared for:

City of Industry
Contact: Brian James, Planning Director
15625 East Stafford, Suite 100
City of Industry, California 91774-0366
626.333.2211

Prepared by:

PlaceWorks
Contact: Dwayne Mears, Principal, Environmental Services
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

IND-07.141

PLACEWORKS

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1. Introduction

Donlon Builders, the project applicant, is seeking approval of a Development Plan (No. 15-7) for the construction of a 125,344 square foot tilt-up industrial building on 6.18 acres of land located at 15000 Nelson Avenue, City of Industry, Los Angeles County. The proposed project is consistent with the existing General Plan land use, and current zoning designation.

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended, to determine if approval of the discretionary action requested and subsequent development could have a significant impact on the environment. This analysis will also provide the City of Industry with information to document the potential impacts of the proposed project.

1.1 PROJECT LOCATION

The project site is in the City of Industry in the San Gabriel Valley in Los Angeles County, California. The City of Industry extends approximately 14 miles east-west across the southern San Gabriel Valley (see Figure 1, *Regional Location*). The San Gabriel Valley extends east-west from near central Los Angeles on the west to the eastern Los Angeles County boundary; and is bounded to the north by the San Gabriel Mountains and to the south by the Puente Hills. The project site is on the northwest side of the City of Industry. Regional access to the site is from the Pomona Freeway (State Route [SR] 60) via the Hacienda Boulevard interchange.

The project site is located on the south side of Nelson Avenue, between California Avenue and Unruh Avenue, with an assigned address of 15000 Nelson Avenue (see Figure 2*, Local Vicinity*). The site is 6.18 acres in area and is comprised of Los Angeles County Tax Assessor Parcel Number (APN) 8208-011-902.

1.2 ENVIRONMENTAL SETTING

1.2.1 Existing Land Use

The project site consists of gravel-covered undeveloped vacant land, which includes a small asphalt-paved area in the northwest corner (see Figure 3, *Aerial Photograph*). The site is surrounded by chain link fencing, with wind screen material attached to the fencing on the northern portion of the site. The southern edge of the site contains a limited amount of overgrown vegetation. The project site is accessible from Nelson Avenue on the north, via a gated entrance at the end of a paved cement driveway, with a curb and gutter.

1.2.2 Surrounding Land Use

The project site is situated in an industrial area occupied primarily by warehouses, manufacturing facilities, and various businesses (see Figure 3, *Aerial Photograph*). However, a residential neighborhood in the City of La Puente borders the site to the northeast, across Nelson Avenue, and the Nelson Elementary School is located

due north, and also across Nelson Avenue. The nearest residences are single-family dwellings that are fully exposed to traffic along Nelson Avenue and the industrial activities beyond. Nelson Avenue is a two-lane collector road with street parking provided along its north side. Roadway traffic was relatively quiet during a recent weekday afternoon visit, and activities at nearby businesses were subdued.

Adjacent businesses/features include:

North – Nelson Elementary School and residential properties (across Nelson Avenue)

East – AB&I Foundry LA Service Center

South – Railroad tracks, Valley Boulevard, Bob's Burgers, Garza Auto Upholstery

West – Puente Creek, O-Nex Automotive, Silao Foods Tortilleria, Solo Enterprise Corporation, EZ Weigh Public Scales, McDowell Business Forms, Natur

Adjacent Property Zoning:

North – Low Density Residential (R-1) – City of La Puente

East – Industrial Commercial Overlay (IC)

South – Limited Industrial (M-1 BE) – County of Los Angeles

West – Industrial (I)

1.3 PROJECT DESCRIPTION

1.3.1 Environmental Information Forms

Copies of the Development Plan Application submitted by the project applicant and the Development Plan Review Form completed by the City of Industry Planning Department are provided in Appendix A. In addition, the project applicant provided design drawings that depict the proposed site plan and building elevations, which are depicted in Figures 5 and 6, respectively, of this Initial Study.

1.3.2 Demolition

The project site contains no buildings, and is covered with gravel, and remnants of asphalt in limited areas. Therefore, the project would not involve the demolition of any existing structures. Gravel and asphalt pavement and chain link fencing would be removed as part of site grading activities. It is anticipated that these materials would be transported off-site and recycled by a local waste management firm.

1.3.3 Construction

The project would build the following improvements (see Figure 5, *Site Plan*):

One 125,344-square-foot concrete tilt-up warehouse/office building containing 120,344 square feet of warehouse space, and 5,000 square feet of mezzanine office space would be constructed. The building would occupy approximately 47 percent of the 6.18-acre (269,087-square-foot) site. The building would be approximately 41 feet high (see Figure 6, *Building Elevations*) and would front Nelson Avenue, with an approximate 145-foot setback.

The project site would be entered from Nelson Avenue via a 40-foot wide single use driveway. The entrance and driveway would accommodate all truck and employee traffic entering and exiting the site.

A total of 125 standard and 34 compact parking spaces, including 6 van accessible spaces would be provided in marked stalls around the building. Six bicycle parking spaces would be installed near the site entrance.

A loading dock at the rear southwest corner of the building, would accommodate 18 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater collection and removal. One additional grade-level truck loading bay would be located next to the main loading dock, for a total of 19 truck loading bays.

A total of 29,074 square feet of landscaping (10.8 percent of the project site area) would be provided, primarily along the property borders and building perimeter. Site property lines would be secured with an 8-foot high chain link fence.

A trash enclosure with one trash bin and one recycling bin would be provided near the loading dock on the west side of the building, and a pad-mounted electrical transformer would be installed at the northwest corner of the site to service the building.

1.3.4 Operation

The building would be built on speculation; thus, the prospective occupant is currently unknown. The building is intended for industrial warehouse/office use.

1.3.5 Project Phasing

The proposed project would have a single construction phase. Construction would begin upon project approval by the City of Industry and is expected to require approximately seven months to complete. It is anticipated that construction would occur from October 2015 through April 2016. Operation of the warehouse/office building would commence shortly thereafter.

1.4 EXISTING ZONING AND GENERAL PLAN

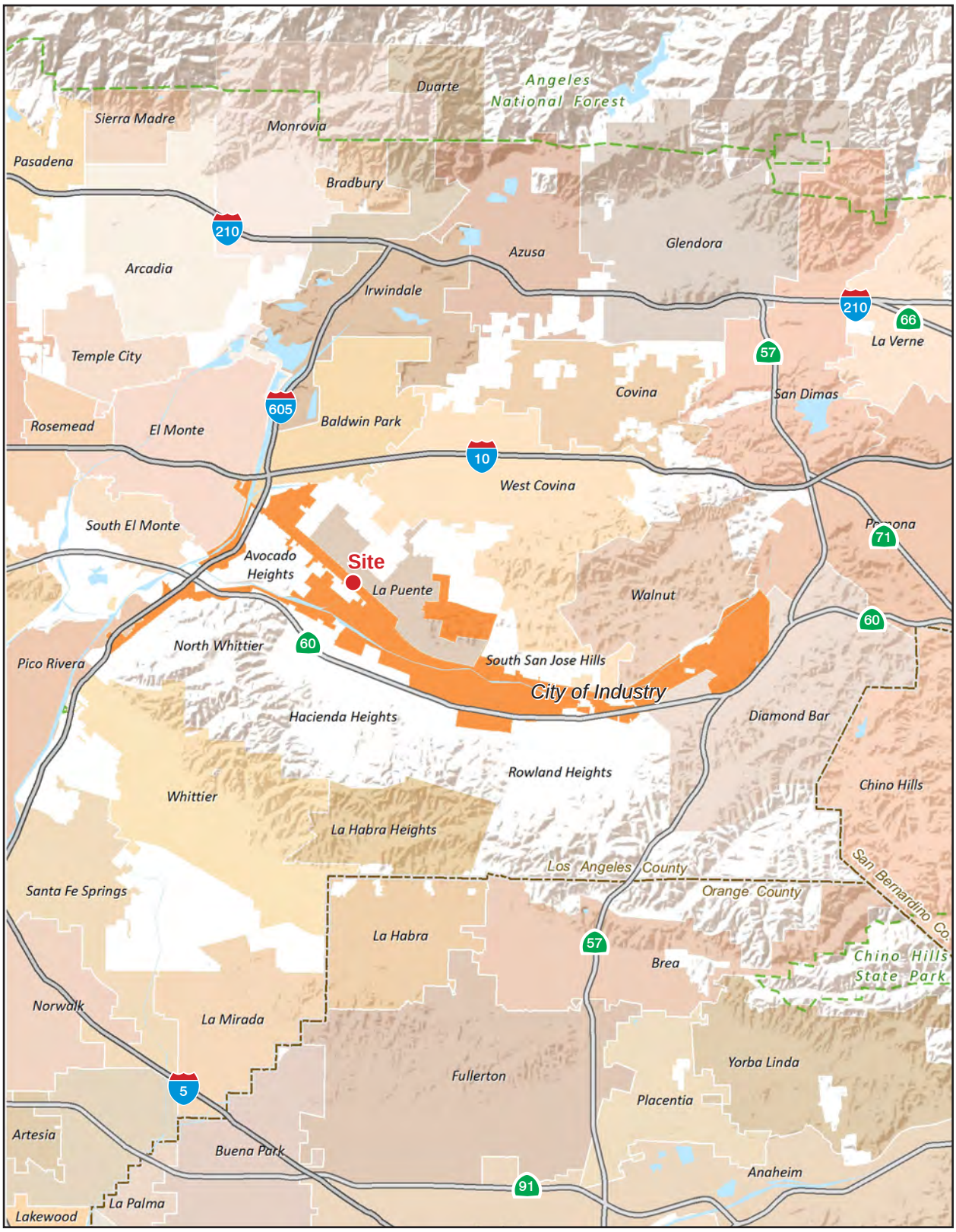
The proposed project would be constructed within Los Angeles County APN 8208-011-902. The existing zoning for the parcel is Industrial Commercial Overlay (IC) and the General Plan land use designation is Employment. Accordingly, the proposed project would be consistent with the General Plan and is allowed under the current zoning designation.

1.5 CITY ACTION REQUESTED

Donlon Builders, the project applicant, is seeking approval of a Development Plan (No. 15-7) for the construction of a 125,344 square foot Tilt-up industrial building on 6.18 acres of land located at 15000 Nelson Avenue, City of Industry, Los Angeles County. The proposed project is consistent with the existing General Plan land use, and current zoning designation. The project would require the City of Industry to perform a design review.

Figure 1 - Regional Location

1. Introduction



Note: Unincorporated county areas shown in white.

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Scale (Miles)

Source: ESRI, 2015.

1. Introduction

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Figure 2 - Local Vicinity
1. Introduction

Subject Property

City Boundary

0 500
Scale (Feet)

Source: ESRI, 2015.

1. Introduction

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Figure 3 - Aerial Photograph
1. Introduction

Subject Property

City Boundary

0 200
Scale (Feet)

Source: Google Earth Pro, 2015

1. Introduction

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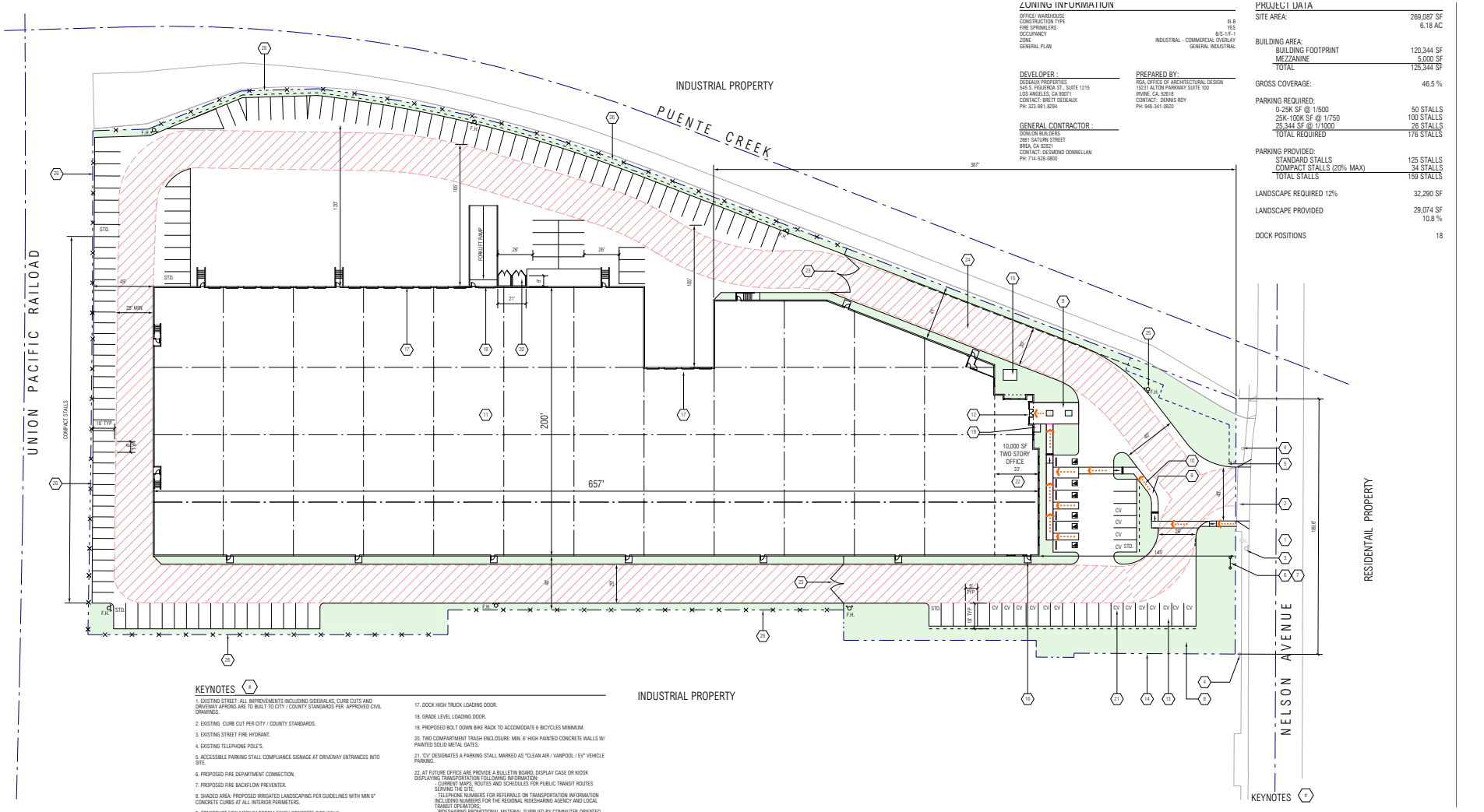
Figure 4 - Site Plan

1. Introduction



ZONING INFORMATION

OFFICE/ WAREHOUSE	
CONSTRUCTION TYPE	II-B
FIRE SPRINKLERS	YES
OCCUPANCY	B/S- 1/F- 1
ZONE	INDUSTRIAL - COMMERCIAL OVERLAY
GENERAL PLAN	GENERAL INDUSTRIAL

DEVELOPER :

DEDEAUX PROPERTIES
545 S. FIGUEROA ST., SUITE 1215
LOS ANGELES, CA 90071
CONTACT: BRETT DEDEAUX
PH: 323-881-8294

GENERAL CONTRACTOR :

DONLON BUILDERS
2681 SATURN STREET
BREA, CA 92821
CONTACT: DESMOND DONNELLAN
PH: 714-528-0800

PREPARED BY:

RGA, OFFICE OF ARCHITECTURAL DESIGN
15231 ALTON PARKWAY SUITE 100
IRVINE, CA. 92618
CONTACT: DENNIS ROY
PH: 949-341-0920

PROJECT DATA

SITE AREA:	269,087 SF 6.18 AC
BUILDING AREA:	
BUILDING FOOTPRINT	120,344 SF
MEZZANINE	5,000 SF
TOTAL	125,344 SF
GROSS COVERAGE:	46.5 %
PARKING REQUIRED:	
0-25K SF @ 1/500	50 STALLS
25K-100K SF @ 1/750	100 STALLS
25,344 SF @ 1/1000	26 STALLS
TOTAL REQUIRED	176 STALLS
PARKING PROVIDED:	
STANDARD STALLS	125 STALLS
COMPACT STALLS (20% MAX)	34 STALLS
TOTAL STALLS	159 STALLS
LANDSCAPE REQUIRED 12%	32,290 SF
LANDSCAPE PROVIDED	29,074 SF 10.8 %
DOCK POSITIONS	18

KEYNOTES

1. EXISTING STREET: ALL IMPROVEMENTS INCLUDING SIDEWALKS, CURB CUTS AND DRIVEWAY APRONS ARE TO BUILT TO CITY / COUNTY STANDARDS PER APPROVED CIVIL DRAWINGS.
2. EXISTING CURB CUT PER CITY / COUNTY STANDARDS.
3. EXISTING STREET FIRE HYDRANT.
4. EXISTING TELEPHONE POLE'S.
5. ACCESSIBLE PARKING STALL COMPLIANCE SIGNAGE AT DRIVEWAY ENTRANCES INTO SITE.
6. PROPOSED FIRE DEPARTMENT CONNECTION.
7. PROPOSED FIRE BACKFLOW PREVENTER.
8. SHADED AREA: PROPOSED IRRIGATED LANDSCAPING PER GUIDELINES WITH MIN 6" CONCRETE CURBS AT ALL INTERIOR PERIMETERS.
9. CONSTRUCT NEW MEDIUM BROOM FINISH CONCRETE SIDE WALK.
10. ACCESSIBLE PATH OF TRAVEL FROM STALLS & PUBLIC WAY TO PRIMARY ENTRANCE.
11. PROPOSED CONCRETE TILT-UP OFFICE / WAREHOUSE FACILITY. THE ROOF STRUCTURE SHALL BE DESIGNED WITH CAPACITY FOR FUTURE SOLAR PANEL LOADING.
12. PRIMARY BUILDING ENTRANCE.
13. TYPICAL STANDARD PARKING STALL 9' X 19'.
14. PROPERTY LINE.
15. PROPOSED LOCATION FOR TRANSFORMER AND VAULT.
16. UNLESS SHOWN OTHERWISE, PROVIDE MIN. 5' SQ CONCRETE LANDING .
17. DOCK HIGH TRUCK LOADING DOOR.
18. GRADE LEVEL LOADING DOOR.
19. PROPOSED BOLT DOWN BIKE RACK TO ACCOMODATE 6 BICYCLES MINIMUM.
20. TWO COMPARTMENT TRASH ENCLOSURE: MIN. 6' HIGH PAINTED CONCRETE WALLS W/ PAINTED SOLID METAL GATES.
21. "CV" DESIGNATES A PARKING STALL MARKED AS "CLEAN AIR / VANPOOL / EV" VEHICLE PARKING.
22. AT FUTURE OFFICE ARE PROVIDE A BULLETIN BOARD, DISPLAY CASE OR KIOSK DISPLAYING TRANSPORTATION FOLLOWING INFORMATION:
    - CURRENT MAPS, ROUTES AND SCHEDULES FOR PUBLIC TRANSIT ROUTES SERVING THE SITE;
    - TELEPHONE NUMBERS FOR REFERRALS ON TRANSPORTATION INFORMATION INCLUDING NUMBERS FOR THE REGIONAL RIDESHARING AGENCY AND LOCAL TRANSIT OPERATORS;
    - RIDESHARING PROMOTIONAL MATERIAL SUPPLIED BY COMMUTER-ORIENTED ORGANIZATIONS;
    - BICYCLE ROUTE AND FACILITY INFORMATION, INCLUDING REGIONAL/LOCAL BICYCLE MAPS AND BICYCLE SAFETY INFORMATION; AND
    - A LISTING OF FACILITIES AVAILABLE FOR CARPOOLERS, VANPOOLERS, BICYCLISTS, TRANSIT RIDERS AND PEDESTRIANS AT THE SITE.
23. NEW 8' HIGH TUBULAR STEEL FENCE AND SWING GATE WITH TOP AND BOTTOM RAILS. PROVIDE KNOX BOX PER FIRE DEPT. DIRECTION.
24. INDICATES 28'-0" CLR. FIRE ACCESS LANE FOR GROUND TO SKY.
25. NEW ON SITE FIRE HYDRANT.
26. 8'-0" HIGH CHAIN LINK FENCE AT INTERIOR PROPERTY LINES.

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Scale (Feet)

Source: RGA, 2014

1. Introduction

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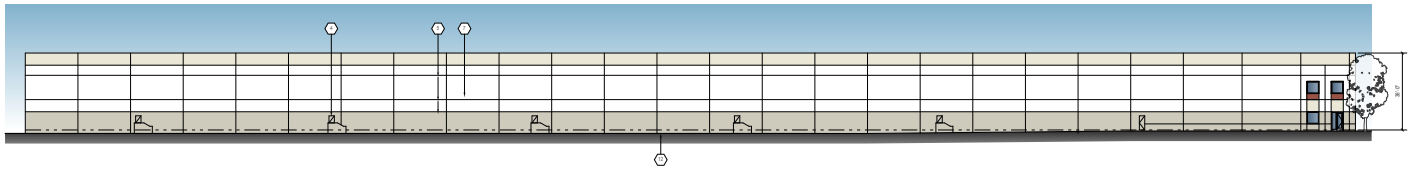
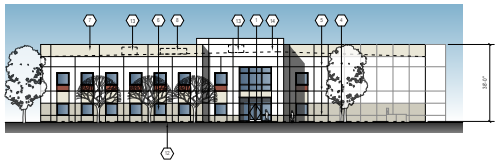
Figure 5 - Building Elevations

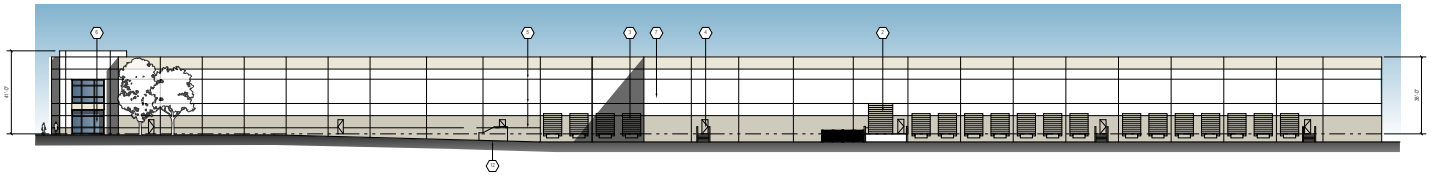
1. Introduction



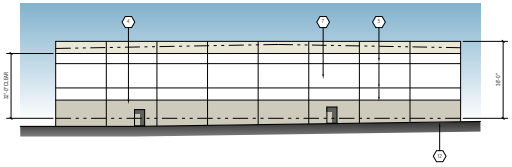
East Elevation



North Elevation



West Elevation



South Elevation

KEYNOTES

1. PRIMARY ENTRANCE.
2. PAINTED 12' WIDE X 15' HIGH LEVEL VERTICAL LIFT TRUCK DOOR.
3. PAINTED 9' WIDE X 10' HIGH VERTICAL LIFT TRUCK DOOR.
4. 3' X 7' PAINTED METAL MAN DOOR.
5. 2" WIDE X 3/4" DEEP HORIZONTAL / VERTICAL REVEAL.
6. REFLECTIVE GLASS IN STOREFRONT FRAME SYSTEM.
7. PAINTED CONCRETE TILT-UP EXTERIOR WALL CONSTRUCTION.
8. PROPOSED FUTURE TENANT SIGNAGE LOCATION (TWO LOCATIONS).
9. 8' HIGH BLACK TUBULAR STEEL ROLLING GATE - TYP. AT YARD ENTRANCES. SEE SITE PLAN.
10. TYP. PAINTED CONCRETE SCREENWALL ELEVATION W/ ACCENT REVEALS AND PAINTED ACCENTS TO MATCH BUILDING ARCHITECTURE.
11. WALL MOUNTED L.E.D. LIGHT FIXTURE WITH WHITE FIXTURE HOUSING.
12. PROPOSED FINISH GRADE.
13. FUTURE OFFICE HVAC EQUIPMENT TO BE SCREENED FROM ADJACENT STREET VIEW BY BUILDING PARAPET.
14. TOP OF ROOF DECK BEHIND PARAPET WALL.

FINISH SCHEDULE

1. FIELD COLOR - SHERWIN WILLIAMS SW 7014 ELDER WHITE
2. ACCENT COLOR - SHERWIN WILLIAMS SW 7016 MINDFUL GRAY
3. BASE ACCENT COLOR - SHERWIN WILLIAMS SW 7018 DOVETAIL
4. ACCENT COLOR - SHERWIN WILLIAMS SW XXXX
5. GLAZING - SEE KEYNOTE 5 - PPG SOLARCOOL PACIFICA REFLECTIVE #2.

0 100
Scale (Feet)

Source: RGA, 2014

1. Introduction

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2. Environmental Checklist

2.1 BACKGROUND

1. **Project Title:** Donlon Builders Industrial Building

2. **Lead Agency Name and Address:**
   City of Industry
   15625 East Stafford, Suite 100
   P.O. Box 3366
   City of Industry, CA 91744-0366

3. **Contact Person and Phone Number:**
   Brian James, Planning Director
   626.333.2211

4. **Project Location:** The project site is located on the south side of Nelson Avenue, between California Avenue and Unruh Avenue, with an assigned address of 15000 Nelson Avenue (see Figure 2*, Local Vicinity*). The site is 6.18 acres in area and is comprised of Los Angeles County Tax Assessor Parcel Number (APN) 8208-011-902

5. **Project Sponsor's Name and Address:**
   Donlon Builders
   2681 Saturn Street
   Brea, CA 92821

6. **General Plan Designation:** Employment

7. **Zoning:** Industrial Commercial Overlay (IC)

Description of Project The project involves the construction of a 125,344-square-foot concrete tilt-up warehouse/office building containing 120,344 square feet of warehouse space, and 5,000 square feet of mezzanine office space. The building would occupy approximately 47 percent of the 6.18-acre (269,087-square-foot) site. The building would be approximately 41 feet high and would front Nelson Avenue, with an approximate 145-foot setback.

The project site would be entered from Nelson Avenue via a 40-foot wide single use driveway. The entrance and driveway would accommodate all truck and employee traffic entering and exiting the site.

A total of 125 standard and 34 compact parking spaces, including 6 van accessible spaces would be provided. Six bicycle parking spaces would be installed near the site entrance.

A loading dock at the rear southwest corner of the building, would accommodate 18 dock-high truck loading bays. Low points in each truck loading bay would contain catch basins and sump pumps for stormwater

collection and removal. One additional grade-level truck loading bay would be located next to the main loading dock, for a total of 19 truck loading bays. Site property lines would be secured with an 8-foot high chain link fence.

The proposed project would have a single construction phase. Construction would begin upon project approval by the City of Industry and is expected to require approximately seven months to complete. It is anticipated that construction would occur from October 2015 through April 2016. Operation of the warehouse/office building would commence shortly thereafter.

8. Surrounding Land Uses and Setting (Briefly describe the project's surroundings):

Adjacent businesses/features include:

North – Nelson Elementary School and residential properties (across Nelson Avenue)

East – AB&I Foundry LA Service Center

South – Railroad tracks, Valley Boulevard, Bob's Burgers, Garza Auto Uphosltery

West – Puente Creek, O-Nex Automotive, Silao Foods Tortilleria, Solo Enterprise Corporation, EZ Weigh Public Scales, McDowell Business Forms, Natur

Adjacent Property Zoning:

North – Low Density Residential (R-1) – City of La Puente

East – Industrial Commercial Overlay (IC)

South – Limited Industrial (M-1 BE) – County of Los Angeles

West – Industrial (I)

9. Other Public Agencies Whose Approval Is Required (e.g. permits, financing approval, or participation agreement):

Los Angeles County Fire Department
Los Angeles County Public Works Department
Los Angeles County Building Department
South Coast Air Quality Management District
State Water Resource Control Board

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☐ Mandatory Findings of Significance

2.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g. the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) **Earlier Analysis Used.** Identify and state where they are available for review.

   b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

2. Environmental Checklist

c) **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?				X
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d)	Expose sensitive receptors to substantial pollutant concentrations?			X	
e)	Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. Would the project:					
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?				X
VI. PALEONTOLOGICAL RESOURCES. Would the project:				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
VII. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?			X	
VIII. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
IX. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	
X. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
XI. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site				X

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	Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			X	
f)	Otherwise substantially degrade water quality?			X	
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j)	Inundation by seiche, tsunami, or mudflow?				X
XII. LAND USE AND PLANNING. Would the project:					
a)	Physically divide an established community?				X
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
XIII. MINERAL RESOURCES. Would the project:					
a)	Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XIV. NOISE. Would the project result in:					
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XVI. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X
XVII. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XVIIII. TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			X	
e) Result in inadequate emergency access?				X
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			X	
e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
XX. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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3. Environmental Analysis

Section 2.3 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

a) Have a substantial adverse effect on a scenic vista?

No Impact. The project site is situated in a highly urbanized area of the City of Industry, and with the exception of residential properties on the north side of the project site, adjacent properties are developed with buildings similar in appearance to the proposed warehouse/office structure. The San Gabriel Mountains to the north and Puente Hills to the south provide the greatest opportunities for scenic vistas in the City of Industry. However, views of these two ranges are largely obscured at the site by existing development. Construction of the 38-foot-high warehouse/office building would not further alter open spaces or scenic vistas in the vicinity of the site. Therefore, no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The project site consists of a gravel parking lot in a fully urbanized area of the City of Industry and does not contain any scenic resources. The site does not contain historic buildings or rock outcrops, and only a few non-biologically sensitive trees are present along the site perimeter for landscape aesthetics. Additionally, the project site is not adjacent to or near a state scenic highway. The nearest officially-designated state scenic highway is SR-2 (Caltrans 2012a), which traverses the Angeles National Forest approximately 20 miles to the north. Therefore, no impact would occur.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. The proposed project would not degrade the existing visual character or quality of the project site and its surroundings. The project would infill an existing industrial warehouse area and the height (41 feet), mass, and design of the building would be similar to existing industrial buildings present along the south side of Nelson Avenue (see Figure 3, Aerial Photograph). Building materials and neutral colors have been selected so that the building would not conflict or be incompatible with the existing character of the site surroundings (see Figure 6, Building Elevations). Exterior signage would be limited to minimal corporate identifications. Therefore, no impact to the visual character or quality of the site and its surroundings would occur.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed project would introduce new sources of light at the project site, including building and loading dock/docking bay lights, parking area lights, and security lighting. Nighttime lighting would be installed to accommodate safety and security while minimizing impacts on surrounding areas. However, the new sources of lighting have the potential to increase nighttime light and glare in the project area.

The lighting to be installed would be consistent with, and similar to, existing lighting in the adjacent industrial/commercial areas adjacent to the site. The locations of outdoor work areas and many parking areas behind the warehouse/office building would help shield new sources of light from the residences across Nelson Avenue.

The City of Industry ensures that the lighting of new developments is installed in accordance with all applicable lighting requirements and guidelines through its Development Plan review process. All lighting would be designed, arranged, directed, or shielded to preventing excess illumination and light spillover onto adjoining land uses, including the adjacent residential neighborhood. Parking area lighting would be the minimum necessary that is consistent with the City's requirements and guidelines. In addition, the building exterior would not contain significant amounts of glass or reflective construction materials that could impose distracting glare on residents and passersby (see Figure 6, *Building Elevations*). Therefore, project impacts associated with light and glare are not expected to be significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

e) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site has no agricultural resources and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as mapped on the Important Farmland Finder maintained by the California Department of Conservation (CDC 2015). In addition, there are no agricultural uses in the vicinity of the site. Therefore, the proposed project would not convert farmland to nonagricultural uses and no impact would occur.

f) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site has no agricultural resources and is not zoned for agricultural use. The Williamson Act applies to parcels consisting of at least 20 acres of Prime Farmland or at least 40 acres of farmland not designated as Prime Farmland; the project site is not under a Williamson Act contract. Therefore, no impact would occur.

g) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The project site is in a fully urbanized area of the City of Industry and does not lie within or adjacent to forest land or timberland. The site is zoned for industrial/commercial use and project development would not change the zoning or result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

h) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is zoned for industrial/commercial use. There is no forest land on or near the project site and no forest land would be converted to non-forest use. Therefore no impact would occur.

i) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The proposed project has no agricultural or forest resources and is not designated as Farmland, as mapped on the Important Farmland Finder maintained by the California Department of Conservation (CDC 2015). Therefore, the proposed project would not convert Farmland to non-agricultural uses or forest land to non-forest use. No impact would occur.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The South Coast Air Quality Management District (SCAQMD) has established the Air Quality Management Plan (AQMP) for the South Coast Air Basin (Basin) to achieve State and federal air quality standards. The AQMP is the primary planning document by which air quality standards and objectives are monitored. Projects that comply with their jurisdiction's general plan are also considered to be consistent with the air quality plan, as set forth by SCAQMD. Because the Project is consistent with the existing land use designation of Employment (i.e. Industrial), as defined in the City of Industry's General Plan, the Project is considered to be consistent with the AQMP. In addition, Project implementation would not exceed any ambient air quality standards or thresholds.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. Per the City of Industry's 2014 General Plan, the City of Industry is home to many manufacturing and warehousing operations, but, in recent years, there has been a general shift from

manufacturing to warehousing and distribution operations. As the City transforms into a logistical center for rail and truck cargo, the type of air pollutant sources affecting the City and surrounding areas would change, and the focus would shift from the reduction of stationary sources to mobile source air pollutants such as diesel particulate matter associated with truck idling and transport refrigeration units.

City of Industry's General Plan includes goals and policies intended to improve the City of Industry's air quality and reduce the city's contribution to global climate change. The General Plan established the following goals and policies which may be relevant to the project.

Goals

RM2 Improved air quality and reduced greenhouse gas emissions.

Policies

RM2-1 Comply with state building codes relative to indoor air quality.

RM2-2 Support efforts to reduce pollutants to meet State and Federal Clean Air Standards.

RM2-3 Collaborate with the CARB and other agencies within the South Coast Air Basin to improve regional air quality and achieve GHG reduction targets.

RM2-4 Prohibit sitting of sensitive land uses within distances defined by CARB unless sufficient mitigation is provided.

Construction: The proposed project would be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with Rule 403 is achieved through application of standard best management practices (BMPs) during construction and operation activities. These BMPs can include the application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activities when winds exceed 25 mph, and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the project area (approximately 6.18 acres), a Fugitive Dust Control Plan or Large Operation Notification would not be required. The project would disturb no more than 3 acres per day[1].

Short-term emissions were evaluated using the CalEEMod version 2013.2.2 computer program. The model evaluated emissions resulting from fugitive dust, as well as exhaust emissions generated by earthmoving and grading activities. Results from the CalEEMod modeling can be found in Appendix B of this IS. Table 1 summarizes the construction-related emissions (using the BMPs from SCAQMD Rule 403 [Fugitive Dust] of watering the site 3-times daily) and compares the results to the SCAQMD's regional significance thresholds.

[1] calculated per the methodology from the SCAQMD "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds". CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment.

Table 1 Construction-Related Regional Pollutant Emissions[1]

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Grading						
On-Site	3.83	40.42	26.67	0.03	4.80	3.45
Off-Site	0.07	0.09	1.15	0.00	0.17	0.05
Subtotal	3.91	40.51	27.82	0.03	4.97	3.49
Building Construction						
On-Site	3.66	30.03	18.74	0.03	2.12	1.99
Off-Site	0.98	5.06	13.60	0.03	1.63	0.49
Subtotal	4.64	35.09	32.35	0.05	3.75	2.49
Paving						
On-Site	2.43	22.39	14.82	0.02	1.26	1.16
Off-Site	0.07	0.08	1.04	0.00	0.17	0.05
Subtotal	2.50	22.47	15.86	0.02	1.43	1.21
Architectural Coating						
On-Site	29.86	2.37	1.88	0.00	0.20	0.20
Off-Site	0.10	0.13	1.60	0.00	0.26	0.07
Subtotal	29.96	2.50	3.48	0.01	0.46	0.27
Total of Overlapping Phases[4]	37.11	60.06	51.68	0.08	5.64	3.96
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds	no	no	no	no	no	no

Notes:
[1] Source: CalEEMod Version 2013.2.2
[2] On-site emissions from equipment operated on-site that is not operated on public roads.
[3] Off-site emissions from equipment operated on public roads.
[4] Construction, architectural coating, and paving phases may overlap.

The project is below the SCAQMD's regional significance for construction thresholds and therefore the impact is less than significant.

Table 2 summarizes the construction-related emissions and compares the results to the SCAQMD's localized significance thresholds of significance.

Table 2 Local Construction Emissions at the Nearest Receptor[1]

Phase	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Grading	40.42	26.67	4.80	3.45
Building Construction	30.03	18.74	2.12	1.99
Paving	22.39	14.82	1.26	1.16
Architectural Coating	2.37	1.88	0.20	0.20
SCAQMD Threshold for 25 meters (80 feet)[2]	128	953	7	5
Exceeds Threshold?	no	no	no	no

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for two acres in East San Gabriel Valley (SRA 9)
[2] The estimated distance from the proposed grading activities to the nearest sensitive receptor (residences to the northeast) of the project site is 25 meters or 80 feet.

3. Environmental Analysis

The project is below the SCAQMD's localized significance thresholds for construction and therefore the impact is less than significant.

Operational: The project involves the construction and operation of a 125,344 square foot warehouse facility with 159 parking spaces on 6.18 acres. Operational emissions incorporate SCAQMD Rule 1113, which limits paint to 50 grams/liter. The project would be required to comply with Green Building Standards (CalGreen), which call for 20-percent indoor water reduction, and 2013 Title 24 commercial building standards[2] which would reduce emissions even further (these reductions are shown as mitigation in CalEEMod).

The fleet mix for the project was adjusted based upon the assumptions/findings within the traffic section of the IS. The vehicle mix was estimated based on the City of Fontana Truck Trip Generation Study (City of Fontana 2005). The vehicle mix assumed for warehousing uses are:

Automobiles = 78.6 percent
2 axle trucks = 8.0 percent
3 axle trucks = 3.9 percent
4+ axle trucks = 9.5 percent.

In addition, operational emissions follow the SCAQMD's recommendation for warehouse land uses, the average commercial-work (C-W) based trip length was increased to 40 miles. Table 3 provides the updated CalEEMod vehicle mix parameters. The trip mix for C-W was changed to 20 percent and to 80 percent for C-NW to reflect the traffic data. The fleet mix in CalEEMod was also revised per traffic data as shown in Table 3 below.

Table 3 CalEEMod Revised Vehicle Mix Parameters for Warehouse Uses

CalEEMod Vehicle Type	Vehicle Mix from Traffic Analysis	CalEEMod Default Mix[1]		CalEEMod Revised Mix[2]	
		Ratio	Number of Vehicles	Ratio	Number of Vehicles
Light Auto	Automobile	0.534	238	0.466	208
Light Truck < 3750 lbs	Automobile	0.058	26	0.051	23
Light Truck 3751-5750 lbs	Automobile	0.178	79	0.156	69
Med Truck 5751-8500 lbs	Automobile	0.126	56	0.110	49
Lite-Heavy Truck 8501-10,000 lbs	2-Axle Truck	0.039	17	0.069	31
Lite-Heavy Truck 10,001-14,000 lbs	2-Axle Truck	0.006	3	0.011	5
Med-Heavy Truck 14,001-33,000 lbs	3-Axle Truck	0.016	7	0.039	17
Heavy-Heavy Truck 33,001-60,000 lbs	4+-Axle Truck	0.031	14	0.095	42
Other Bus	--	0.002	1	0.000	0
Urban Bus	--	0.003	1	0.000	0
Motorcycle	Automobile	0.004	2	0.003	1
School Bus	--	0.001	0	0.000	0
Motor Home	--	0.002	1	0.000	0
Total		1.0	446	1.0	446

Notes:
[1] Source: CalEEMod Version 2013.2.2 default values for Opening year of 2016.
[2] Revised per the vehicle mix provided in the Traffic Impact Analysis of 78.6% Autos, 8.0% 2-Axle Trucks, 3.9% 3-Axle Trucks and 9.5% 4+ Axle Trucks

[2] 2013 Title 24 commercial building standards are approximately 30% more efficient than 2008 Title 24 commercial building standards.

The project's operational emissions were compared the SCAQMD's regional significance operational thresholds and is provided in Table 4.

Table 4 Unmitigated Regional Operational Pollutant Emissions[1]

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO2	PM10	PM2.5
Area Sources[2]	6.02	0.00	0.03	0.00	0.00	0.00
Energy Usage[3]	0.00	0.03	0.03	0.00	0.00	0.00
Mobile Sources[4]	2.39	12.99	30.54	0.07	4.57	1.34
Total Emissions	8.41	13.02	30.60	0.07	4.57	1.35
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Threshold?	no	no	no	no	no	no

Notes:
[1] Source: CalEEMod Version 2013.2.2
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from generation of electricity and on-site natural gas usage.
[4] Mobile sources consist of emissions from vehicles and road dust.

The project is below the SCAQMD's regional significance thresholds for operation and therefore the impact is less than significant.

Table 5 summarizes the operational emissions and compares the results to the SCAQMD's localized significance thresholds of significance.

Table 5 Local Operational Emissions at the Nearest Receptor[1]

On-Site Emission Source	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Area Sources[2]	0.00	0.03	0.00	0.00
Energy Usage[3]	0.03	0.03	0.00	0.00
On-Site Vehicle Emissions[4]	1.30	3.05	0.46	0.13
Total Emissions	1.33	3.11	0.46	0.14
SCAQMD Threshold for 25 meters (80 feet)[5]	203	1,733	4	2
Exceeds Threshold?	no	no	no	no

Notes:
[1] Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for five acres in San Gabriel Valley (SRA 9).
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from generation of electricity and on-site natural gas usage.
[4] On-site vehicular emissions based on 1/10 of the gross vehicular emissions and road dust.
[5] The estimated distance from the proposed project to the nearest sensitive receptor (residences to the northeast) of the project site is 25 meters or 80 feet.

The project is below the SCAQMD's localized significance thresholds for operation and therefore the impact is less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The project region is designated as a nonattainment area for ozone, coarse particulate matter (PM_{10}), and $PM_{2.5}$ for state standards and for ozone and PM10 for federal standards.

3. Environmental Analysis

As shown above, the proposed project's emissions would not exceed SCAQMD significance thresholds during either construction or operation of the project. The project's emissions are not considered to be cumulatively considerable. Therefore, impacts associated with a cumulatively considerable net increase of any criteria pollutant would be less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The closest sensitive receptors to the Project site are located approximately 25 meters (80 feet) to the north of the site boundary. As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology that can be used by public agencies to determine whether a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA).

As demonstrated in Tables 2 and 5, the Project's emissions were compared to the SCAQMD's LST construction look-up table for a two-acre site (which is more conservative, as the project would disturb no more than 3-acres per day during construction) and operational look-up tables for a 5-acre site (5-acre site tables can be used as a screening threshold for sites larger than 5 acres to determine whether further analysis is warranted) and are below the SCAQMD's thresholds of significance. The impacts associated with construction and operation activities potentially exposing sensitive receptors to substantial criteria pollutant concentrations would be less than significant.

<u>Cancer Risks</u>

As the project is placing a warehouse adjacent to residential uses located on the opposite side of Nelson Avenue in the City of La Puente and within 150 feet of Nelson Elementary School, a Health Risk Assessment was conducted.

The on-going operation of the proposed project would generate toxic air contaminant (TAC) emissions from diesel truck emissions. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime would contract cancer, based on the use of standard risk-assessment methodology[3].

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air containments in excess of the following thresholds would be considered to have a significant impact:

[3] In February 2015, the Office of Environmental Health Hazard Assessment updated their "Air Toxics Hot Spots Program, Risk Assessments Guidelines, Guidance Manual for Preparation of Health Risk Assessments; however, the updated OEHHA guidance states in the page footers "do not cite or quote." SCAQMD staff are still in the process of incorporating the updates into their methodology for SCAQMD's Rules 1401, 1401.1, 1402, and 212, and currently updating their HRA Guidance for permitting and CEQA analyses; therefore, the existing SCAQMD guidance was used to assess HRA impacts in this analysis. Per SCAQMD staff (personal communication with Dr. Jillian Wong 6-19-2015), updated SCAQMD HRA guidance will be forthcoming and use of current methodology and EMFAC2011 is acceptable.

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or
- Toxic air containments from the proposed project would result in a Hazard Index of 1 or greater.

As stated above, in Table 3, the project would generate 95 truck trips. Those truck trips are broken down into 36 light-heavy-duty trucks (LHDT), 17 medium-heavy-duty trucks (MHDT), and 42 heavy-heavy-duty trucks (HHDT). Emissions factors were obtained from EMFAC2011 and details regarding the assumptions and calculations (including emissions rates) used in this health risk assessment are included in Appendix C of this IS.

Health risks from diesel particulate matter are twofold: first, diesel particulate matter is a carcinogen according to the State of California; second, long-term chronic exposure to diesel particulate matter can cause health effects to the respiratory system.

According to the Health Risk Assessment for Proposed Land Use Projects, prepared by CAPCOA, July 2009, and the SCAQMD Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality, the cancer risk should be calculated using the following formula:

[Dose-inh (mg/(Kg-day)] * [Oral Slope Factor (kg-day)/mg]*[1x106] = Potential Cancer Risk

Where:

Oral Slope Factor = 1.1

Dose-inh = (C¬air * DBR * A * EF * ED * 10-6) / AT

Where:

Cair[Concentration in air (µg/m^3)] = (Calculated by AERMOD Model)

DBR [Daily breathing rate (L/kg body weight – day)] = 302 for residential, 149 for off-site worker, and 581 for children

A [Inhalation absorption factor] = 1

EF [Exposure frequency (days/year)] = 350 ED [Exposure duration (years)] = 70 for residential, 40 for worker and 9 for school child

106 [Micrograms to milligrams conversion]

AT [Average time period over which exposure is averaged in days] = 25,550

The Year 2016 EPA AERMOD model run results, together with receptor locations and DPM concentration contours are shown in Appendix C. The project diesel emissions at the closest residential receptor (receptor #2) would result in a maximum incremental cancer risk (MICR) increase of 1.18 per million people. The off-site worker cancer risk was calculated using the highest DPM concentration value of 0.00553 µg/m3, which would result in a cancer risk increase of 0.33 per million people. The cancer risk for school children was

calculated using the value of the discrete receptor (receptor #1) located on the school grounds closest to the project site. The DPM concentration value at that location was 0.00284 μg/m3, which would result in a cancer risk increase of 0.43 per million people. All off-site diesel emissions concentrations were found to be below the SCAQMD 10.0 in a million cancer risk threshold discussed above. Therefore, no significant long-term health impacts would occur from the operation of diesel trucks on the project site.

Non-Cancer Risks

The relationship for non-cancer health effects is given by the equation:

HIDPM = CDPM/RELDPM

Where:

HIDPM = Hazard Index; an expression of the potential for non-cancer health effects.

CDPM = Annual average diesel particulate matter concentration in $\mu g/m^3$.

RELDPM = Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The RELDPM is 5 $\mu g/m^3$. The Office of Environmental Health Hazard Assessment as protective for the respiratory system has established this concentration. Using the highest concentration of DPM onsite (0.00553 $\mu g/m^3$), the resulting Hazard Index is:

HIDPM = 0.00553/5 = 0.0011

The values for non-carcinogenic hazards at the closest residential, school child, and worker locations are available in the tables in Appendix C. The criterion for significance is a Hazard Index increase of 1.0 or greater. Therefore, the on-going operations of the proposed project would result in a less than significant impact due to the non-cancer risk from diesel emissions created by the proposed project.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact.

Construction: Construction of the proposed Project would potentially generate odors due to operation of construction equipment (diesel exhaust). These odors, which would be temporary in nature, would occur during daytime hours only and be isolated to the immediate vicinity of the construction activities. The closest receptors are approximately 80 feet from the site, and would not be impacted by construction emissions-related odors. Impacts are considered to be less than significant.

Operations: Based on the project's preliminary site plans, trash enclosures are situated in areas away from and screened from any sensitive receptors and are not adjacent to any residential properties. The project's waste receptacles are located near the center of the site. The nearest sensitive receptors are residences across the Nelson Avenue, approximately 500 feet north from the trash receptacle location. Due to the distance of the refuse storage areas from these uses and because solid waste from the project would be managed and

collected in a manner to prevent the proliferation of odors. The odor from diesel truck emissions may be a source of annoyance for some; however, the loading docks are located at least 440 feet from the closest receptors and are screened by the existing industrial building to the northeast and by the proposed building itself. Therefore no significant operational odor impacts are anticipated to occur.

3.4 BIOLOGICAL RESOURCES

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

No Impact. The project site has been previously graded, and there are no native habitats, sensitive natural communities, or riparian habitats on or in the vicinity of the project site. The Puente Creek which runs adjacent to the project site on the west side is concrete lined, and devoid of any natural habitat. The area surrounding the project site is a highly urbanized and built-out area of the City of Industry that is devoted primarily to industrial/commercial and some residential uses. Therefore, there would be no adverse impacts on candidate, sensitive, or special status species, either directly or via modification of an existing habitat.

f) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant Impact. Sensitive natural communities provide habitat for sensitive animal or plant species. No such communities exist on or in the vicinity of the project site. Riparian habitats are those occurring along the banks of rivers and streams. The National Wetlands Mapper indicates that the Puente Creek located on the east side of the project site is classified as Riverine. Puente Creek is channelized within a concrete trough; there is no natural riparian habitat in or along the banks of the creek. The project site would be designed to contain all surface water runoff, and no discharges would occur to the Puente Creek. Therefore, a less than significant impact is anticipated.

g) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Wetlands are defined by Section 404 of the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. As mentioned above, the project site would be designed to contain all surface water runoff, and no discharges would occur to the Puente Creek. Therefore, a less than significant impact is anticipated.

h) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Wildlife corridors are typically made up of undeveloped wildlife areas and open space between larger patches of wildlife habitat. The project site is currently a fenced parking lot surrounded by developed urban land uses and, therefore, does not contain or support wildlife habitat or nursery use and is not used for overland wildlife movement. The site does not contain trees that would be used for nesting by migratory birds. No impact would occur.

i) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project site and surrounding area do not contain biological resources that are protected by any local policies or ordinances, such as a tree preservation policy or ordinance. The City of Industry Municipal Code does not contain ordinances protecting trees or other biological resources on private property. No impact would occur.

j) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is located in a developed, disturbed, urban environment and is surrounded by contiguous development. It is not located within an adopted Habitat Conservation Plan area, as designated by the United States Fish and Wildlife Service (USFWS 2015b), or a Natural Community Conservation Plan area, as designated by the California Department of Fish and Game (CDFW 2015). Nor is the project site within an existing or proposed Significant Ecological Area (SEA)[4] designated by the County of Los Angeles (LACDRP 2015). The nearest designated SEA is the Rio Hondo College Wildlife Sanctuary, which is approximately 3.2 miles west of the project site. No impact would occur.

3.5 CULTURAL RESOURCES

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

No Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally a resource is considered to be "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

[4] Significant Ecological Areas (SEAs) are ecologically important land and water areas designated by Los Angeles County. SEAs are not preserves; however, development projects proposed in SEAs are subject to increased environmental and design review with the aim of balancing development with ecological resources.

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

The project site is a gravel lot and would not require the demolition of any existing buildings or structures. There are no resources listed on the National Register of Historic Places and no California Historical Landmarks near the project site (COHP 2015; NPS 2015). Therefore, no impact to historical resources would occur as a result of the proposed project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact. No archaeological resources are known to exist within or near the project site. The entire site has been disturbed by previous grading. Construction of the slab-on-grade concrete tilt-up industrial warehouse/office building would require additional grading and trenching, but these activities would not require excavation to significant depths (perhaps 5 feet or so) and would occur within relatively confined areas. Therefore, it is very unlikely that project ground-disturbing activities would uncover or damage buried archaeological resources. A less than significant impact to archaeological resources is anticipated as a result of project implementation.

c) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. No human remains are known to exist within the project site. Given the past ground disturbance and current condition of the site, it is very unlikely that any human remains would be uncovered during project construction. However, California Health and Safety Code Section 7050.5 requires that in the event that human remains are discovered within a project site, disturbance of the site shall halt until the county coroner has conducted an investigation into the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. The proposed project would be required to adhere to existing laws regarding the discovery of human remains and, therefore, no impact would occur.

3.6 PALEONTOLOGICAL RESOURCES

a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. No unique paleontological and geologic resources are known to exist within or near the project site. The site is relatively flat and surrounded by developed land; there are no exposed rock formations or other unique geological features on or near the site. As discussed in Section 3.5.b, it is very unlikely that the

shallow ground-disturbing activities required for construction of the project building would uncover or contact buried paleontological or unique geologic resources. No impact would occur.

3.7 TRIBAL CULTURAL RESOURCES

a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in § 21074?

Less Than Significant Impact. Section 21074 defines tribal cultural resource as either of the following:

1. Site features, places, cultural landscapes, sacred places, and objects of cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.

    b. Included in a local register of historical resources as defined in subdivision (k) of section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of section 5024.1. In applying the criteria set forth in subdivision (c) of section 5024.1, lead agency shall consider the significance of the resource to a California Native American tribe.

There are no resources listed on the National Register of Historic Places or California Historical Resources on the project site (NPS 2015; COHP 2015). Therefore, no impact to historical resources would occur as a result of the proposed project. In addition, the City of Industry does not list any historical resources associated with the project site in a local register, and does not have substantial evidence indicating that a significant resource is located on the project site associated with California Native American tribes.

The project site was previously developed with a trucking yard and several buildings prior to being demolished and regraded to its existing flat state. Prior to being purchased by the applicant, the site was used as a trucking yard (truck storage and repair). Currently, there are no existing buildings or structures that would require demolition and project construction would not be expected to involve a significant level of excavation.

Based on communications from the Gabrieleño Band of Mission Indians – Kizh Nation, the project site is located within its traditional use territory. The Soboba Band of Luiseño Indians (SBLI) was also provided with notification of the proposed project in a letter dated July 6, 2015. Communication from SBLI was received on August 3, 2015 in which they deferred issues with respect to consultation to the Gabrieleño Band of Mission Indians – Kizh Nation.

While it is anticipated that impacts to tribal cultural resources would be less than significant, the following project design feature/condition of approval would be required by the City of Industry:

Project Design Feature:

The project applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

3.8 GEOLOGY AND SOILS

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Fault rupture impacts can occur when a structure is situated on top of an active fault that produces surface displacement during an earthquake event. The project site is not located within an Alquist-Priolo Earthquake Fault Zone,[5] as delineated by the California Geological Survey, nor is it situated on or near any known active fault. Active faults are those where surface rupture has occurred within the last 11,000 years. The Whittier Fault, approximately 4 miles south of the site, is the Alquist-Priolo Earthquake Fault Zone closest to the project site (CGS 2015). Two potentially active faults, the Walnut Creek and San Jose Faults, are located approximately 2,500 feet southeast and 3.8 miles east of the site, respectively (CGS 2010; CGS 2015). Potentially active faults are defined as those where surface rupture has occurred during the past 1,600,000 years.

The Walnut Creek Fault (see Figure 2, *Local Vicinity*) is classified as a Quaternary fault (age undifferentiated). A technical study of this northeast-trending fault concluded that there is no geomorphic evidence (i.e., visible surface expressions) for the existence of the fault, which is known to be present only in the subsurface alluvium of the San Jose Hills (Smith 1977). Rather, the presence of the fault is suggested by groundwater level differences and petroleum exploration data. Because the known active and potentially active faults do not cross the site, project development would not expose people or structures to substantial hazards arising from surface rupture of a known active fault. Compliance with the latest version of the California Building Code (see following response) would mitigate impacts related to seismic activity to an acceptable level and no mitigation measures are necessary.

[55] The Alquist-Priolo Earthquake Fault Zoning Act was passed to prevent construction of buildings used for human occupancy on the surface of active faults, in order to minimize the hazard of surface rupture of a fault to people and buildings. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that the sites are not threatened by surface rupture from future earthquakes.

3. Environmental Analysis

ii) Strong seismic ground shaking?

Less Than Significant Impact. Similar to the rest of southern California, the project site is subject to ground shaking and potential damage in the event of seismic activity. Major active faults near the project site include the Whittier, Cucamonga, Chino and Puente Hills[6] Faults (CGS 2015). More regionally, the San Andreas Fault is capable of producing an earthquake that could cause significant damage at the site. Each of these faults is classified as active, with strong seismic capabilities. Lesser faults that are closer to the site include the Walnut Creek and San Jose Faults. The expected ground-motion characteristics of future earthquakes in the region depend on the distance to the epicenter and magnitude of the earthquake, as well as the soil profile of the site.

Based on the available data, the impacts associated with ground shaking at the project site would not be greater than at other sites in seismically active southern California. Structures for human occupancy must be designed to meet or exceed California Building Code (CBC) standards for earthquake resistance. The CBC contains provisions for earthquake safety based on factors that include occupancy type, the types of soil and rock on-site, and the strength of ground motion with specified probability of occurring at the site. The project would have a geotechnical investigation conducted per CBC requirements; the geotechnical investigation would calculate seismic design parameters that must be used in the design of the proposed building.

The City of Industry's Building Regulations are found in Title 15 of the City's Municipal Code (Buildings and Construction). Chapter 15.04 (Building Code) adopts the most recent version of the Los Angeles County Building Code[7] by reference. The proposed project would be required to adhere to the provisions of the Los Angeles County Building Code, which are imposed on project developments during the City's building plan check and Development Plan review process. Compliance with the requirements of the Los Angeles County Building Code for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. Therefore, impacts would be less than significant and no mitigation measures are necessary.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to unconsolidated, saturated sand or silt deposits that lose their load-supporting capability when subjected to intense shaking. Like much of the available land in the City of Industry, the project site is located in an area that is underlain by unconsolidated sediments that include interbedded silts, sands, and gravel. The thickness of these unconsolidated sediments beneath the site has not been determined. Unconsolidated silts, sands, and gravel may produce surface cracking, differential settlement, and, depending upon groundwater depth, liquefaction during high-intensity seismic ground shaking.

The California Geological Survey, a branch of the State Department of Conservation, has a mandate to identify and map the state's most prominent earthquake hazards pursuant to the Seismic Hazards Mapping Act of 1990. These hazards include areas where earthquakes are likely to cause shaking,

[6] Also known as the Puente Hills blind thrust system.
[7] The Los Angeles County Building Code is a customized amendment of the California Building Code.

liquefaction, or ground failure. In 1999, the California Geological Survey updated existing seismic hazard maps for portions of southern California, including the area that encompasses the City of Industry. The updated map that covers the project site (Baldwin Park 7.5-minute quadrangle) indicates that the site is located in a state-mapped liquefaction zone, which is defined as follows:

> "Areas where historic occurrence of liquefaction or local geological, geotechnical, or groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required" (CDC 1999).

Cities, counties, or another local permitting authority must regulate certain development "projects" within these seismic hazard zones. If a project site is located in one of these zones, development permits must be withheld until the geological and soil conditions of the project site are investigated and appropriate mitigation measures, if necessary, are incorporated into Development Plans.

Future workers or site visitors potentially could be subjected to impacts due to seismically induced liquefaction. However, the new structure proposed for the site would be constructed in accordance with grading and engineering standards outlined in the Los Angeles County and California Building Codes, which would help safeguard the buildings and structures from liquefaction that might occur during future seismic events. Additionally, as standard procedure by the City of Industry, grading and soil compaction requires the preparation of site-specific grading plans, soils and geotechnical reports (which must address liquefaction, subsidence, and other potential soil stability hazards), and hydrology studies, which are required to be submitted to the City for review and approval prior to the commencement of any grading activities.[8] Based on the available information, impacts due to seismic-related ground failure and construction of the proposed project are anticipated to be less than significant. No mitigation measures are necessary.

iv) Landslides?

No Impact. As discussed in the previous section, the California Department of Conservation is mandated by the Seismic Hazards Act of 1990 to identify and map the state's most prominent earthquake hazards, including hazard areas that are at risk for earthquake-induced landslides. If a project site is located in one of the landslide hazard areas, the City of Industry is required to prepare a geotechnical report defining and delineating landslide hazards in the project area. Based on the Baldwin Park 7.5-minute quadrangle map (CDC 1999), the proposed project site is not located in a mapped landslide hazard area and is not subject to landslide hazards. Moreover, the project site and surrounding land are virtually flat. Therefore, no impact related to landslide hazards would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Erosion is the movement of rock fragments and soil from one place to another. Precipitation, running water, waves, and wind are all agents of erosion. Significant erosion typically

[8] However, if the City finds that no undue hazard exists, based on previous studies conducted in the immediate vicinity of the project site, the preparation of the geotechnical report may be waived.

occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be accelerated dramatically by ground-disturbing activities if effective erosion control measures are not used. The project site and surrounding area are in a highly urbanized area that is virtually flat and contains minimal rises or changes in elevation. No major slopes or bluffs are on or adjacent to the site.

Project construction would entail grading activities that would temporarily disturb surface soils on-site and potentially result in the erosion of exposed areas of soil. Since the project site is greater than one acre, it would be subject to National Pollution Discharge Elimination System (NPDES) requirements. Under the NPDES, a Storm Water Pollution Prevention Plan (SWPPP) would be required, along with best management practices (BMPs) designed to prevent erosion and siltation during the project's construction phase. Categories of BMPs typically used in SWPPPs are described in Table 5.

The project applicant would also be required to adhere to the applicable provisions outlined in Chapter 13.16 (Storm Water and Urban Runoff Pollution Control) of the City of Industry's Municipal Code, which contains requirements to preserve water quality and prevent erosion during construction. In particular, Section 13.16.070(C) of the Municipal Code requires that stormwater runoff control measures during construction be adequate to accomplish the following:

- Retain on-site sediments generated on or brought to the project site using treatment control or BMPs
- Retain construction-related materials and wastes, spills, and residues at the project site and prevent discharges to the streets, municipal storm drain, receiving water, or adjacent properties
- Contain non-stormwater runoff from equipment and vehicle washing at the project site
- Control erosion from slopes and channels through the use of effective BMPs, such as limitation of grading during the wet season, inspection of graded areas during rain events, planting and maintenance of vegetation on slopes, and covering any slopes susceptible to erosion.

Table 6 Construction Best Management Practices

Category	Purpose	Examples
Water erosion controls	Cover and/or bind soil surfaces to prevent soil particles from being detached and transported by water.	Mulch, geotextiles, mats, hydroseeding, earth dikes, and swales.
Sediment controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basins; and cleaning measures such as street sweeping.
Wind erosion controls	The aims and methods of wind erosion control are similar to those of erosion control described above.	Same as water erosion controls above.
Tracking controls	Minimize the tracking of soil off-site by vehicles.	Stabilized construction roadways and construction entrances/exits; tire washing or brushing at entrances/exits.
Non-stormwater management controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations (e.g., paving, grinding, concrete curing and finishing, etc.) in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; and concrete finishing.
Waste management and	Management of materials and wastes to avoid	Spill prevention and control, stockpile

Table 6 Construction Best Management Practices

Category	Purpose	Examples
controls (i.e., good housekeeping practices)	contamination of stormwater.	management, and management of solid and hazardous wastes.

Source: CASQA 2003.

After project completion, the project site would be developed with a warehouse building, parking areas, a driveway, and landscape improvements, and would contain minimal exposed soil. Properly designed drainage systems, irrigation controls, and landscaping would minimize the opportunity for soil erosion and the loss of topsoil. Adherence to the NPDES requirements, SWPPP and related BMPs, and City's stormwater and urban runoff pollution regulations would result in a less than significant impact. No mitigation measures are necessary.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. Hazards related to liquefaction and landslides are addressed in Sections 3.6.a.iii and 3.6.a.iv, respectively. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The risk of lateral spreading at the project site is negligible due to the relatively flat terrain. Compliance with recommendations in the geotechnical investigation for minimizing liquefaction hazards would also reduce hazards from lateral spreading.

The major cause of ground subsidence is withdrawal of groundwater. Groundwater levels in the Main San Gabriel Groundwater Basin, which underlies the project site, are managed by the Main San Gabriel Basin Watermaster to avoid groundwater withdrawals exceeding recharges. The project would not require direct groundwater withdrawal, nor would it involve or allow significant groundwater recharge.

Collapsible soils shrink upon being wetted, being subject to a load, or under both conditions. The project geotechnical investigation would include recommendations for grading and preparation of soil so that it is suitable for construction, including soil classification, compaction density, and moisture content. Compliance with such recommendations would reduce hazards from collapsible soils. Based on the foregoing, impacts related to lateral spreading, subsidence, and collapsible soils would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils, with respect to engineering properties, are soils that upon wetting and drying will alternately expand and contract, causing problems for foundations of buildings and other structures. The proposed project would be subject to established engineering standards regarding soil compaction and would include testing of soil samples for expansion potential as part of the geotechnical evaluation. Any mitigation measures needed to minimize hazards from expansive soils would be implemented during construction. Impacts would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Development of the proposed project would not require the installation of a septic tank or alternative wastewater disposal system. The new building would be connected to an existing sewer in the adjacent roadway via one or more service lines. Therefore, no impact would occur.

3.9 GREENHOUSE GAS EMISSIONS

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. The SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emission thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 10,000 metric tons CO_2 equivalents ($MTCO_2e$) for industrial uses.

Construction: GHG emissions from the Project's construction equipment and worker vehicle emissions were calculated and are shown in Table 7. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated to be 8.93 $MTCO_2e$.

Operation: Operational or long-term emissions occur over the life of the project. The unmitigated operational emissions for the opening year of the Project are estimated to be 1,514.14 $MTCO_2e$ and are below the SCAQMD's threshold of 10,000 $MTCO_2e$ for industrial projects as shown in Table 7.

Table 7 Project-Related Greenhouse Gas Emissions[1]

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.01	0.01	0.00	0.00	0.01
Energy Usage[3]	0.00	178.49	178.49	0.01	0.00	179.21
Mobile Sources[4]	0.00	127.23	127.23	0.04	0.00	1,128.02
Solid Waste[5]	23.92	0.00	23.92	1.41	0.00	53.60
Water and Wastewater[6]	9.20	108.00	117.20	0.95	0.02	144.37
Construction[7]	0.00	8.90	8.90	0.00	0.00	8.93
Total Emissions	33.11	422.63	455.74	2.41	0.03	1,514.14
SCAQMD Threshold						10,000
Exceeds Threshold?						no

Notes:
[1] Source: CalEEMod Version 2013.2.2
[2] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
[3] Energy usage consist of GHG emissions from electricity and natural gas usage.
[4] Mobile sources consist of GHG emissions from vehicles.
[5] Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[6] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[7] Construction GHG emissions based on a 30 year amortization rate.

Although the project would generate greenhouse gas emissions, either directly or indirectly, these emissions are not considered to have a significant impact on the environment

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The City does not have a published climate action plan; therefore, the project and project-related GHG emissions have been compared to the goals of the CARB Scoping Plan.

The CARB approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

In May 2014, CARB released its First Update to the Climate Change Scoping Plan (CARB 2014). This Update identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

The 2008 Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 15 percent from today's (2010) levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

As shown in Table 7 above, the project's GHG emissions are well below the SCAQMD threshold of 10,000 $MTCO_2e$ for industrial uses. Therefore, the project is consistent with the goals and applicable strategies of the CARB Scoping Plan and would result in a less than significant impact.

Furthermore, the project would be subject to the policies and ordinances pertaining to air quality and climate change stated in the City's General Plan. The project-related greenhouse gas emissions are small and do not exceed the SCAQMD industrial threshold; therefore, the project is consistent with the City's General Plan land use development policies and regulations adopted for the purpose of reducing greenhouse gases.

3.10 HAZARDS AND HAZARDOUS MATERIALS

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. The public and environment could be exposed to hazardous materials during the construction and operational phases of the project, as discussed in the following sections.

3. Environmental Analysis

Construction Phase

Project-related construction activities would require the use of hazardous materials such as fuels, lubricants, and greases in construction equipment and coatings used in construction. On-site construction equipment might require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard or environmental threat. These activities would also be short term or one time in nature.

Additionally, the use, transport, and disposal of hazardous materials during the project construction phase (estimated seven months) would have to conform to the laws and regulations of several federal, state, and local agencies, including the United States Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), California Occupational Safety & Health Administration (Cal-OSHA), California Department of Transportation (Caltrans), and Los Angeles County Fire Department (LACFD). Compliance with applicable laws and regulations governing the use, storage, and transportation of hazardous materials would ensure that all potentially hazardous materials are handled in an appropriate manner, and would minimize the potential for safety or environmental impacts to occur. For example, spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material cleaned up in a prescribed manner. Any contaminated waste encountered during construction is required to be remediated so that it does not pose a risk to construction workers or future occupants of the site.

Operational Phase

Although the tenant and activities of the new industrial warehouse/office building have not been identified, warehouse operations typically involve the use of small amounts of hazardous materials in building and landscape maintenance (e.g., solvents, cleaning agents, paints, pesticides). When used correctly, these materials would not result in a significant hazard to surrounding uses. Additionally, depending on the nature of the warehouse operations, significant quantities of hazardous materials could be moved into and out of the warehouse and stored for various periods of time. Such activities would be governed by local, state, and federal laws and regulations of several agencies, including EPA, DTSC, Cal-OSHA, Caltrans, and LACFD to ensure that any such hazardous materials are used and handled in an appropriate manner. Businesses that store hazardous materials above minimum amounts are required to file a Business Plan with the LACFD,[9] which includes a materials inventory and an emergency response plan. Additionally, strict adherence to all emergency response plan requirements set forth by the City of Industry would be required during project operation. Routine use, transport, or storage of hazardous materials during project construction and operation would not cause significant hazards to the public or the environment, and no mitigation measures are necessary.

[9] The Los Angeles County Fire Department is the Certified Unified Program Agency (CUPA) for the City of Industry; the Certified Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.

b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. The use, storage, and disposal of hazardous materials by the project would comply with existing regulations of several agencies as described in the previous section. Project construction and operational workers would be trained on the proper use, storage, and disposal of hazardous materials. Construction projects and warehouse operations typically maintain supplies on-site for containing and cleaning small spills of hazardous materials. Project personnel would request assistance from the LACFD immediately in the event of a release of hazardous materials larger than on-site personnel were able to contain and clean up. Emergency response procedures would be outlined in the contingency plan of a Business Plan if hazardous materials above threshold quantities were stored in the building. With these safeguards in place, impacts would be less than significant and no mitigation measures are necessary.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. Potential impacts of toxic air emissions to sensitive receptors within one-quarter (0.25) mile of the site are evaluated in the Health Risk Assessment prepared for the proposed project (HRA; see Appendix C). The nearest school site is the Nelson Elementary School located at 330 North California Avenue, La Puente, CA 91744. The school is located approximately 200 feet northwest of the property in the adjacent city of La Puente. Warehouses typically do not handle hazardous materials, substances, or wastes of a nature or in quantities that would pose a health or safety threat to students and staff of these nearby schools. Based on the findings of the HRA, potential hazardous air emissions from project operations (i.e., diesel truck traffic) would not cause a significant health risk or hazard to occupants of the schools. Therefore, impacts to existing nearby schools would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. California Government Code Section 65962.5 specifies that the DTSC, California Department of Health Services, State Water Quality Control Board (SWRCB), and local enforcement agencies compile lists for various types of hazardous materials sites, including hazardous waste facilities subject to corrective action, designated border zone properties, hazardous waste discharges to public land, public drinking water wells containing detectable levels of organic contaminants, underground storage tanks with reported unauthorized releases, and solid waste disposal facilities from which hazardous waste has migrated. The project site is not included on a list of hazardous materials sites compiled pursuant to this legal requirement.

A Phase I Environmental Site Assessment (Phase I) was prepared for the site in February 2015 (Orswell & Kasman, 2015). The Phase I concluded that a review of regulatory and historical records, a visual inspection of the site and surrounding area, and an interview with the site manager did not identify any recognized environmental conditions, historical recognized environmental conditions, or controlled recognized environmental conditions which are likely to impact the property. Therefore, no impact would occur.

3. Environmental Analysis

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project site is not located within an area covered by an airport land use plan or within 2 miles of a public airport or public-use airport. The nearest public airport is El Monte Airport, approximately 5 miles northwest of the site (Airnav 2015). Therefore, project development would not cause aviation-related hazards for people working in the project area and no impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The Los Angeles County Sheriff's Department (150 Hudson Avenue) and the City of Industry Civic Financial Center (101 Hudson Avenue) operate heliports approximately 0.6 miles southeast of the project site (Airnav 2015). The site is currently zoned for industrial use and project development would not augment or alter existing safety hazards associated with current operations at either of these heliports. Over congested areas, helicopters must maintain an altitude of at least 1,000 feet above the highest obstacle within 2,000 feet of the aircraft, except as needed for takeoff and landing (Code of Federal Regulations Title 14, Section 91.119). Helicopter takeoffs and landings at nearby heliports occur infrequently and are at a sufficient distance from the site that they would not pose a hazard to on-site workers. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The existing emergency response plan in the County of Los Angeles is the Operational Area Emergency Response Plan (ERP) approved by the County Board of Supervisors in 1998. The ERP identifies county agencies and other entities that would be involved in emergency responses; threat summaries and assessments; and procedures for responding agencies as well as county agencies that would be involved in coordinating and managing responses. The ERP is focused on emergencies beyond the scope of the daily functions of public safety agencies, such as emergencies requiring multi-agency and/or multi-jurisdictional responses.

Further assessments of potential hazards and county resources available for responding to hazards are contained in the County of Los Angeles All-Hazard Mitigation Plan (AHMP) adopted by the County Board of Supervisors in June 2005. The AHMP includes a vulnerability analysis for many types of hazards including earthquakes, floods, fires, and manmade hazards including terrorism and civil unrest; goals and objectives for strategies for mitigating hazards; proposed strategies and actions for reducing vulnerability to identified hazards; and lists of facilities and equipment available for responding to disasters.

The proposed project would be required to provide the necessary on- and off-site access and circulation improvements for emergency vehicles and services during the construction and operational phases, subject to City of Industry and LACFD approval. The access and circulation features of the proposed development project would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles from Nelson Avenue. As shown on Figure 4, *Site Plan*, the eastern and western sides of the warehouse/office building would be accessible via a driveway along Nelson Avenue which would

provide fire truck access per LACFD standards. A new fire hydrant would be provided near the truck loading dock along the west side of the site.

The proposed project would be required to go through the City's Development Plan review and permitting process and would incorporate all applicable design and safety features set forth in City of Industry and LACFD regulations necessary to accommodate local emergency services (e.g., adequate access roads, emergency exits, fire hydrants, etc.). Furthermore, existing emergency access to surrounding properties would not be altered or disrupted under the proposed project and off-site roadway modifications would not be necessary. Finally, the proposed project would not require full road closures or otherwise impact the functionality of surrounding roads that are used as public safety access routes. Therefore, the project would not impair implementation of, or physically interfere with, the ERP and no impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The project site is in a highly urbanized and built-out area of the City of Industry. No fire hazard severity zones are mapped within or near the project site by the California Department of Forestry and Fire Prevention (CAL FIRE 2015). Therefore, no significant risk of loss, injury or death involving wildland fires would occur as a result of the proposed project.

3.11 HYDROLOGY AND WATER QUALITY

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Impacts to water quality could potentially occur during the construction and operational phases of the project, as discussed in the following sections.

Construction Phase

As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control direct stormwater discharges. The NPDES program regulates industrial pollutant discharges, which include construction activities. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. In the Los Angeles metropolitan area, where the City of Industry is located, the SWRCB is the permitting authority, while the Los Angeles Regional Water Quality Control Board (RWQCB) provides local oversight and permit enforcement. The project applicant would also be required to adhere to applicable provisions outlined in Chapter 13.16 (Storm Water and Urban Runoff Pollution Control) of the City of Industry's Municipal Code. For example, Section 13.16.070 (Construction Activity Storm Water Measures) contains construction activity stormwater requirements to preserve water quality and prevent erosion in the City.

Requirements for waste discharges potentially affecting stormwater from construction sites of one acre or more are set forth in the SWRCB's Construction General Permit, Order No. 2012-0006-DWQ, issued in 2012. The site is about 6.18 acres and, therefore, project construction would be subject to requirements of

the Construction General Permit. Projects obtain coverage under the Construction General Permit by filing a Notice of Intent with the SWRCB prior to grading activities, and preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Categories of BMPs typically used in SWPPPs are described in Table 5 in Section 3.6.b. Implementation and monitoring required under the SWPPP would control and reduce short-term intermittent impacts to water quality from construction activities to less than significant levels and no mitigation measures are necessary.

Operational Phase

The primary constituents of concern during the project operational phase would primarily be solids, oils and greases from parking areas, driveways, and truck loading bays that could be carried off-site. Project design features would address the anticipated and expected pollutants of concern during the project's operational phase. On-site landscaping, which comprises approximately 13.5 percent of the total project site, would assist in minimizing the amount of runoff from the site by providing permeable areas for water infiltration and decreasing runoff volume. Infiltration through landscaped areas would also serve a water treatment function. The project would include features such as curbs, gutters, and catch basins, including catch basins with sump pumps in each truck loading bay. The project would also include source control BMPs to properly manage stormwater flow and prevent stormwater pollution by reducing the potential for contamination at the source.

Requirements for waste discharges potentially affecting stormwater from project operations are set forth in the City of Industry's Ordinance No. 683, adopted on August 8, 2002, which implements the Los Angeles Countywide Standard Urban Stormwater Mitigation Plan (SUSMP) adopted by the Los Angeles Regional Water Quality Control Board (RWQCB) by Resolution No. R-00-02, as modified by the State Water Resources Control Board's (SWRCB's) Order WQ 2001-11 and RWQCB Order No. R4-01-182. Ordinance No. 683 is incorporated in its entirety as Chapter 13.17 (Standard Urban Stormwater Mitigation Plan Implementation) of the City of Industry Municipal Code. SUSMP requirements include minimizing stormwater pollutants and limiting peak post-project stormwater runoff rates to no greater than pre-development rates where increased runoff could increase downstream erosion.

Municipal Code Chapter 13.17 applies to new development involving parking lots of 5,000 square feet or more or having 25 or more parking spaces and potentially exposed to storm water runoff. As such, the proposed project would be subject to the Code requirements. As part of the permitting process, such facilities are required to comply with stormwater BMPs listed in the SUSMP or the "BMP Guidebook" prepared or recommended by the City Engineer. BMPs designed to protect against impacts to water quality would be incorporated in a project-specific SUSMP that is submitted to the City of Industry staff for review and approval as part of the Development Plan review process. The approved BMPs would be incorporated in the project grading and site plans; detail drawings and notes would provide specifications regarding size, capacity, and materials of construction. Table 7 summarizes some of the source control BMPs that are potentially applicable to this project.

BMPs for similar City of Industry warehouse development projects have included the incorporation of continuous deflection separation (CDS) units to screen and separate debris, oil, and other pollutants from stormwater runoff prior to discharge to the storm drain. Following construction, the City of Industry typically assumes responsibility for the operation and maintenance of the CDS through an agreement with the property owner. This provides assurance that the units are properly maintained and continue to function as designed. Proper maintenance of stormwater control systems would also be governed by the City's Municipal Code. For example, Section 13.16.060(A) requires that persons who operate parking lots with more than 25 spaces exposed to stormwater "use BMPs to reduce the discharge of pollutions to the maximum extent practicable. Such measures may include regular sweeping or other measures, if effective."

Through the Development Plan site review process, the City of Industry would ensure that the project complies with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from pollution by contaminated storm water runoff. Compliance with City Municipal Code Chapter 13.17 and BMPs approved by the City Engineer would ensure that water quality impacts from project operations are less than significant.

Table 8 Source Control Best Management Practices for Stormwater Runoff

Description	Comments/Basis
Catch basin inspection	Catch basins/CDS units would be inspected and accumulated debris and litter would be removed on a regular basis.
Landscape practices	Management of landscaped areas would include minimizing fertilizer and pesticide application, proper education and training for landscaping/maintenance workers, efficient irrigation design, and vegetation of slopes with native or drought tolerate species known to control erosion, in accordance with City code requirements (Section 13.17.070).
Roof runoff controls	Excess roof runoff would be directed to landscaped areas, as feasible.
Efficient irrigation	Irrigation to landscaped areas would be optimized so that excess runoff to the street and storm drain does not occur.
Storm drain signage	Newly constructed storm drains and catch basins would be stenciled in accordance with City code requirements (Section 13.17.080).
Trash storage areas and litter control	Trash storage areas would be isolated from contact with stormwater flows originating outside the storage area and surrounded with a barrier sufficient to prevent trash from being transported out of the storage area by stormwater flow in accordance with City code requirements (Section 13.17.100).
Loading docks	Loading docks would be provided with overhead covering that prevents the entry of stormwater or would divert stormwater away from the loading docks in accordance with City code requirements (Section 13.17.130).
Enclosed storage of hazardous materials	Hazardous materials, such as fertilizers and pesticides, would be stored indoors or under roof cover to prevent contact with rainwater. Materials that could leak or spill, such as oil, would be provided with secondary containment.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The project site is located above the Main San Gabriel Groundwater Basin. Groundwater levels in the Main San Gabriel Groundwater Basin are managed by the Main San Gabriel Basin

Watermaster to avoid groundwater withdrawals exceeding recharges. Suburban Water Systems (SWS) would provide water to the project development through its San Jose Hills District. About 80 percent of SWS's water supply comes from groundwater that is pumped from local wells in the San Gabriel and Central Basins; the remaining 20 percent comes from surface water (SWS 2014). SWS projects that the San Jose Hills District service area would use 19,294 acre-feet of water per year from the San Gabriel Basin in 2015 (The Planning Center|DC&E 2014). Water demand for the proposed project is estimated to be 4,981 gallons per day (see Section 3.17.b), or about 0.018 percent of the projected groundwater demand in 2015. This incremental additional water demand would not significantly impact groundwater supplies or levels and no mitigation measures are necessary.

The project site is not used for intentional groundwater recharge and the construction and operation of the warehouse/office building would have little impact on local groundwater recharge. The project development would increase the area devoted to landscaping from present conditions, and the site would be mostly covered with pavement and a building. The project landscaped areas could provide opportunities for minor amounts of local groundwater recharge via percolation, and site pavement would impede percolation, however, such changes would not affect regional groundwater levels or supplies.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

No Impact. At project completion, the entire site would be developed with a building, parking areas, a driveway, and landscaping. As such, there would be little opportunity for site drainage to result in substantial on-site or off-site erosion or siltation. During project construction, implementation of BMPs in accordance with the project SWPPP and compliance with City of Industry regulations for stormwater control would minimize the possibility for erosion from the site, as discussed in Section 3.9.a. The project would not result in the alteration of the watercourse nearest to the site. Therefore, no impact would occur.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. To ensure that the stormwater runoff anticipated from the site is properly controlled, the project applicant would be required to adhere to applicable provisions outlined in City of Industry Municipal Code Chapter 13.17, which implements the Los Angeles Countywide SUSMP, as explained in Section 3.9.a. As part of the permitting process, the project would be required to comply with stormwater BMPs listed in the SUSMP or the "BMP Guidebook" prepared or recommended by the City Engineer. BMPs designed to protect against flooding would be incorporated in a project-specific SUSMP that is submitted to the City of Industry staff for review and approval as part of the Development Plan review process. If necessary, the project-specific SUSMP would contain supporting hydrologic calculations and infiltration studies to demonstrate that that any increase in stormwater runoff from the site does not exceed the carrying capacity of the local storm drain system, consistent with City of Industry Municipal Code Section 13.17.120 (Design Standards for Best Management Practices). The approved BMPs would be

incorporated in the project grading and site plans; detail drawings and notes would provide specifications regarding size, capacity, and materials of construction.

Compliance with City Municipal Code Chapter 13.17 and BMPs approved by the City Engineer during the Development Plan review process would ensure that impacts related to stormwater runoff volumes and potential flooding are less than significant.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Project impacts related to stormwater control and management are addressed in Section 3.9.d and would be less than significant. Project impacts related to the quality of stormwater runoff are addressed in Section 3.9.a and would be less than significant.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. Project impacts related to water quality are addressed in Section 3.9.a and would be less than significant.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project does not involve construction of any housing units. Furthermore, a flood hazard map prepared by the Federal Emergency Management Agency (FEMA 2015) indicates that the project site is in Flood Zone X, which does not include designated 100-year and 500-year flood zones. Therefore, no impact would occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. As stated above, the project site is not within a 100-year or 500-year flood hazard area (FEMA 2015). Development of the proposed project would not impede or redirect flood flows, since there is no potential for flood flows to travel through or near the project site. Therefore, no impact would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. Four dams have been identified in the San Gabriel River Watershed upstream from the City of Industry -- Puddingstone Dam, Santa Fe Dam, Thompson Creek Dam, and Whittier Narrows Dam. The project site is not located in the flood inundation areas associated with the failure of any of these dams (The Planning Center|DC&E 2014). No impacts are associated with flooding as a result of the failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities, because inundation from a seiche can occur if the

wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. Although there are no large water tanks in the area that could impact the project site, there are dams in the region that could create flooding impacts. As noted above, the project site is not located in an identified flood inundation area due to dam failure and no impact would occur.

Tsunamis are a type of earthquake-induced flooding that is produced by large-scale sudden disturbances of the sea floor. Tsunamis interact with the shallow sea floor topography upon approaching a landmass, resulting in an increase in wave height and a destructive wave surge into low-lying coastal areas. The project site is approximately 20 miles inland from the Pacific Ocean and lies at an approximate elevation of 320 feet above mean sea level (msl); thus impacts from tsunamis are considered negligible and no impact would occur.

Mudflows are landslide events in which a mass of saturated soil flows downhill as a very thick liquid. The project site and surroundings are relatively flat and contain no abrupt changes in elevation. As indicated in Section 3.6.a.iv, the site is not located in a mapped landslide hazard area. Additionally, there are no substantial slopes on or in the immediate vicinity of the site with the potential to result in mudflow impacts. In the absence of slopes, the potential for mudslides to affect the proposed project is considered negligible and no impact would occur.

3.12 LAND USE AND PLANNING

a) Physically divide an established community?

No Impact. The project site is located within an existing industrial area of the City of Industry. Established commercial and industrial businesses, including similar warehouse buildings, surround the site on two sides; Nelson Avenue separates the site from a residential neighborhood on the north (see Figure 3, *Aerial Photograph*). Construction of the proposed industrial warehouse/office building would infill the area with a compatible land use development and would not physically divide or encroach upon the established residential community to the north. Therefore, no impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project site is zoned and designated for Industrial uses in the City of Industry General Plan. The proposed development of the site with an industrial warehouse/office building would be consistent with the General Plan and is allowed under the zoning designation. Project implementation would not change existing land uses or require a change of the existing land use designations or regulations. Due to the largely industrial character of the site's surroundings, the proposed project would not conflict, or be incompatible, with the existing character of the surrounding area. Because the project would not conflict with any applicable land use plan, policy, or regulation, no impact would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. As explained in Section 3.4.f, the project site is not within or near a Habitat Conservation Plan area (USFWS 2015b) or Natural Community Conservation Plan area (CDFW 2015). No impact would occur.

3.13 MINERAL RESOURCES

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. According to California Geologic Survey, there are no lands within the City of Industry designated by the State Mining and Geology Board as being of regional or statewide significance (City of Industry 2012). Project development would not cause a loss of availability of mineral resources of value to the region and residents of the state. No impact would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The project site is not designated as a mining site in the City of Industry General Plan (2012) and the project would not cause a loss of availability of a designated mining site. No impact would occur.

3.14 NOISE

A background discussion regarding the fundamentals of noise and vibration, along with the regulatory setting for noise impacts used for this Initial Study is presented in Appendix D.

Regulatory Framework

The proposed project site is within the City of Industry, but the city boundary is along Nelson Avenue; immediately to the north of the site. Beyond Nelson Avenue, within the City of La Puente, is a residential area and Nelson Elementary School. Both the City of Industry and the City of La Puente are in Los Angeles County. The pertinent county and city regulations regarding noise and vibration are discussed below.

County of Los Angeles Code

The County of Los Angeles regulates noise through the County Code, Title 12, Chapter 12.08 (Noise Control). Pursuant to the County Code, the county restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time.

County Exterior Noise Standards

The county applies the Noise Control Ordinance standards summarized in Table 9 to non-transportation fans, blowers, pumps, turbines, saws, engines, and other like machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property, as measured at the property line of the noise receptor. The county's noise ordinance is designed to protect people from objectionable non-transportation noise sources such as music,

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construction activity, machinery, pumps, and air conditioners. The noise standards in Table 9, *County of Los Angeles Exterior Noise Standards*, apply to all property within a designated noise zone; unless otherwise indicated.

Table 9 County of Los Angeles Exterior Noise Standards

Noise Zone	Time Period	Maximum Permissible Noise Level (dBA)[1,2]				
		Standard 1 (L_{50})	Standard 2 (L_{25})	Standard 3 (L_8)	Standard 4 (L_2)	Standard 5 (L_{max})
Noise-Sensitive Area	Anytime	45	50	55	60	65
Residential Properties	10 PM to 7 AM	45	50	55	60	65
	7 AM to 10 PM	50	55	60	65	70
Commercial Properties	10 PM to 7 AM	55	60	65	70	75
	7 AM to 10 PM	60	65	70	75	80
Industrial Properties	Anytime	70	75	80	85	90

Source: County of Los Angeles Municipal Code, Section 12.08.390.
Notes:
1 According to Section 12.08.390, if the ambient noise levels exceed the exterior noise standards above, then the ambient noise level becomes the noise standard. If the source of noise emits a pure tone or impulsive noise, the exterior noise levels limits shall be reduced by five decibels.
2 If the measurement location is on a boundary property between two different zones, the noise limit shall be the arithmetic mean of the maximum permissible noise level limits of the subject zones; except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable L_{50} noise level shown above; or, if the ambient L_{50} exceeds the foregoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable L_{50} noise level shown above plus 5dB; or, if the ambient L_{25} exceeds the foregoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable L_{50} noise level shown above plus 10dB; or, if the ambient L_8 exceeds the foregoing level, then the ambient L_8 becomes exterior noise level for Standard No. 3.

- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable L_{50} noise level shown above plus 15dB; or, if the ambient L_2 exceeds the foregoing level, then the ambient L_2 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable L_{50} noise level shown above plus 20dB; or, if the ambient L_0 exceeds the foregoing level then the ambient L_{max} becomes the exterior noise level for Standard No. 5.

County Construction Noise Standards

The county prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7 PM and 7 AM, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance. The county also sets maximum noise levels not to exceed the following maximum noise levels from mobile equipment (non-scheduled, intermittent, short-term operations for less than 30 days) as summarized in Table 10, County of Los Angeles Mobile Construction Equipment Noise Limits.

Table 10 County of Los Angeles Mobile Construction Equipment Noise Limits

	Single-Family Residential	***Multi-Family Residential***	***Semi-Residential/ Commercial***
Daily, except Sundays and legal holidays, 7 AM to 8 PM	75 dBA	80 dBA	85 dBA
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA

Source: County of Los Angeles Municipal Code, Section 12.08.440. For nonscheduled, intermittent, short-term operations for less than 30 days.

Maximum noise levels from stationary equipment (repetitively scheduled and relatively long-term operations of ten days or more) are summarized in Table 11, County of Los Angeles Stationary Construction Equipment Noise Limits.

Table 11 County of Los Angeles Stationary Construction Equipment Noise Limits

	Single-Family Residential	***Multi-Family Residential***	***Semi-residential/ Commercial***
Daily, except Sundays and legal holidays, 7 AM to 8 PM	60 dBA	65 dBA	70 dBA
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Source: County of Los Angeles Municipal Code, Section 12.08.440. For repetitively scheduled and relatively long-term operations of ten days or more.

County Vibration Standards

The County of Los Angeles Municipal Code, Section 12.08.560, prohibits the operation of any device that creates vibration that is above 0.01 in/sec at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This criterion will be utilized to evaluate vibration-annoyance impacts from industrial uses to nearby sensitive receptors.

City of Industry Standards

Industry Noise Standards

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the City of Industry addresses public nuisances under Chapter 1.30 (Public Nuisance) of the City's Municipal Code. The City of Industry has not adopted long-term noise and vibration criteria for land use compatibility consideration. The City of Industry uses the County of Los Angeles Noise Ordinance and Community Noise Guidelines for environmental noise assessments, and is included by reference in the City of Industry

Municipal Code. For the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) are used as significance thresholds for noise.

Industry Vibration Standards

The City of Industry does not have regulatory standards for construction or operational vibration sources. To evaluate project impacts for CEQA analyses, the City relies on the Los Angeles County Municipal Code to address vibration impacts from the operation of equipment to adjacent uses.

City of La Puente Standards

La Puente Noise Standards

The majority of residential uses that would potentially be impacted by operations of the proposed project are located within the City of La Puente; north of Nelson Avenue. The City of La Puente does not employ quantitative noise level limits as part of its noise code. Rather, the regulations are more in terms of disturbance and noise nuisances, which are discussed in Chapter 4.34 of the Municipal Code. The primary wording for the general noise standard is as follows:

4.34.010 Prohibited noises—General standard.

No person shall make, or cause or suffer, or permit to be made upon any premises owned, occupied or controlled by such person, any loud, raucous, jarring, unusual, unnecessary, excessive or other unreasonable noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time, or place as to cause or contribute to the unnecessary and unreasonable discomfort to any persons within the neighborhood surrounding the location from which said noises emanate or which unreasonably interfere with the peace and comfort of the residents of the surrounding neighborhood or their guests, or the operators or customers in places of business in the vicinity, or which detrimentally or adversely affect such residences or places of business. (Ord. 753 § 4 (part), 1997)

Subsequent sections of this chapter indicate that this general standard is aimed at controlling noise sources such as (private) radios, band rehearsals, engine repair, automobile testing, loading activities, animals, leaf blowers, and loud parties.

Since the City of La Puente has no numerical noise level standards, for the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) will be used herein as significance thresholds for noise.

Pertinent Federal Standards

Federal Vibration Standards

The United States Department of Transportation (DoT) through the Federal Transit Administration (FTA) provides criteria for acceptable levels of groundborne vibration for various types of special buildings that are sensitive to vibration. FTA provides criteria to evaluate potential structural damage associated with vibration, and these FTA criteria are used in this analysis. Structures amplify groundborne vibration and wood-frame

buildings, such as typical residential structures, are more affected by ground vibration than heavier buildings. The level at which groundborne vibration is strong enough to cause architectural damage has not been determined conclusively. The most conservative estimates to cause architectural damage at residential structures is a PPV of 0.2 in/sec.

Existing Noise Environment

The project site is located between California Avenue and Unruh Avenue at 15000 Nelson Avenue in the City of Industry, County of Los Angeles. The south side of Nelson Avenue is within the City of Industry and contains primarily warehouses, manufacturing facilities, and various commercial/light industrial businesses. The north side of Nelson Avenue is within the City of La Puente. Nelson Avenue is a two-lane collector road with street parking provided along its north side.

The project site is currently vacant, gravel-covered, undeveloped land surrounded by chain link fence (see Figure 3, *Aerial Photograph*). Single-family residences and Nelson Elementary School (both of which are on the north side of Nelson Avenue) are exposed to traffic along Nelson Avenue, as well as the nearby industrial activities (on the south side of Nelson Avenue in the City of Industry). The residences are approximately 220 feet from the façade of the proposed project's warehouse building, and Nelson Elementary School is approximately 275 feet away.

The major sources of noise in the vicinity of the project site are vehicular traffic on Nelson Avenue, traffic on Valley Boulevard (approximately 110 feet to the south), and rail traffic on the UPRR Los Angeles Subdivision Line (adjacent to the southern boundary of the project site). The railroad line is a major freight, double-track line that begins at the Los Angeles/Long Beach ports, traverses several cities (including the City of Industry), and continues to the City of Pomona. Beside the numerous freight trains, the Southern California Regional Rail Authority (SCRRA) currently operates the Riverside Line, running 12 daily passenger diesel-locomotive commuter (Metrolink) trains per weekday along the UPRR Los Angeles Subdivision Line.

Noise Impact Assessment

The generation of noise associated with the proposed project would occur over the short-term for site construction activities. In addition, noise would result from the long-term operation of the project. Both short-term and long-term noise impacts associated with the project are examined in the following analyses that correspond to the CEQA Guidelines.

Would the project result in

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. An impact could be significant if the project would site a sensitive land use in a location where noise levels would exceed the appropriate standards. The City of Industry Noise Element sets as a goal a community noise equivalent level (CNEL) of up to 75 decibels on the A-weighted scale (dBA) as "normally acceptable" and up to 80 dBA CNEL as "conditionally acceptable" for industrial land uses, including the proposed project site. The City sets a standard for both single-family and mobile home

dwellings of 50 to 60 dBA CNEL as "normally acceptable" and 55 to 70 dBA CNEL as "conditionally acceptable."

The County of Los Angeles Noise Ordinance (Section 12.08) establishes that the impact would be significant if project-related stationary noise exceeded any of the following:

The noise standard of 45 dBA between the hours of 10:00 PM and 7:00 AM and 50 dBA between the hours of 7:00 AM to 10:00 PM for a cumulative period of more than 30 minutes in any hour (i.e., the L_{50} noise level metric)

> The noise standards plus 5 dBA for a cumulative period of more than 15 minutes in any hour (i.e., the L_{25} noise level metric)
>
> The noise standards plus 10 dBA for a cumulative period of more than 5 minutes in any hour, (i.e., the L_{08} noise level metric)
>
> The noise standards plus 15 dBA for a cumulative period of more than 1 minute in any hour (i.e., the L_{02} noise level metric)
>
> The noise standards plus 20 dBA (i.e., the L_0 or L_{max} noise level metric) for any period of time (i.e., 65 dBA at night and 70 dBA during the day).

With respect to projected increases, noise impacts can be broken down into three categories. The first is "audible" impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in noise levels generally refer to a change of 3 dBA or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dBA. This range of noise levels was found to be noticeable to sensitive people in laboratory environments. The last category includes changes in noise level of less than 1 dBA that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dBA or more) are considered potentially significant.

On-Site Impacts

Land Use Compatibility

According to the General Plan EIR (PlaceWorks, 2012), the existing CNEL along the portion of Nelson Avenue pertinent to the proposed project is between 60 and 65 dBA CNEL. Thus, the project site has a noise environment that is less than the 75 dBA CNEL and the commercial/industrial land use is "normally acceptable" with the existing setting. Given this land use compatibility, the project is not subject to a significant impact.

On-Site Worker Noise Exposure

Workers involved with the proposed project would be subject to noise levels coming from material moving equipment and trucking operations. Noise in the work place is regulated by the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA regulations found at CCR Title 8, Article 105,

Control of Noise Exposure, sets limitations on worker exposure. Specifically, an employer must administer a continuing, effective hearing conservation program whenever employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) sound level of 85 dBA. This is known as the Action Level (AL). Furthermore, workers cannot be exposed to noise levels in excess of 90 dBA TWA over an 8-hour work shift. This is known as the Permissible Exposure Level (PEL). In calculating (or measuring) the 8-hour TWA exposure, higher noise levels carry shorter allowable duration periods and vice versa. In no case, though, may workers be exposed to peak noise levels in excess of 140 dBA. For any workers exposed to prolonged periods of excessive noise – i.e., above the Action Level – Cal/OSHA specifies a hearing conservation program, the use of hearing protectors, a training program, and record keeping requirements. By adhering to the requirements of the Cal/OSHA regulations, worker exposure to on-site noise levels would remain within compliance of the limits and this potential impact would be less than significant.

Off-Site Impacts

Stationary source impacts include noise generated from on-site mechanical equipment and, for the purposes of this analysis, trucking operations within the confines of the project property. These sources have the potential to create noise impacts in the adjoining community.

Project Mechanical Equipment

On-site heating, ventilation, and air conditioning (HVAC) units and associated equipment attached to the warehouse structure would be acoustically engineered with appropriate procurement specifications, sound enclosures, and parapet walls to minimize noise – all in accordance with City of Industry noise emissions requirements – to ensure that such equipment does not exceed allowable noise limits. Thus, through compliance with pertinent local noise regulations, noise levels from project mechanical equipment would be less than significant.

Passing Trucks

Trucks accessing the project site would leave Nelson Avenue at a reduced speed and would travel away from the closest sensitive receptors (i.e., the residences on the north side of Nelson Avenue in the City of La Puente). As the speed of these on-site trucks would be reduced (in comparison to their flow rate on Nelson Avenue) and since the trucks would be increasing the distance from the receptors, on-site truck pass-by noise would be well below the levels these residents currently experience from traffic flows on Nelson Avenue. Thus, noise levels from project-generated passing trucks would be less than significant.

Loading Bay Operations

On-site truck operations would be considered a stationary noise source subject to the City's noise regulation limitations (see Table 9 above). The end-user of the proposed project is currently unknown. Although it is not anticipated that the City of Industry would allow evening uses along Nelson Avenue, both 24 hour, and daytime business hours (here assumed to be 7 AM to 6 PM) scenarios were evaluated in this analysis.

Noise measurements taken for a variety of similar projects (e.g., Home Depot loading bays, Consolidated Volume Transport truck scales, Macy's truck transfer yard) have demonstrated that the noise produced by idling/maneuvering semi-trucks is typically on the order of 70 to 73 dBA L_{eq} as measured at a distance of 50 feet. The primary noise descriptor in the City and County ordinances are in terms of several L_n noise level

metrics (i.e., L_{50}, L_{25}, L_8, L_2, and L_0), not the L_{eq} metric. Therefore, for the purposes of this analysis, the following relationships between noise level metrics[10] will be used to evaluate compliance with City and County ordinances. (PlaceWorks, 2012):

- $L_{50} \approx Leq - 3$ dB
- $L_{25} \approx Leq$
- $L_8 \approx Leq + 3$ dB
- $L_2 \approx Leq + 7$ dB
- $L_0 \approx Leq + 10$ dB

Therefore, the following noise levels (as measured at a distance of 50 feet from the activity) are used in this impact assessment.

Table 12 Source Noise Levels for Complete Trucking Operations at Reference Distance of 50 feet[1]

L_{eq}[2]	L_{50}[2]	L_{25}[2]	$L_{8.3}$	$L_{1.6}$	L_0=L_{max}
73 dBA	70 dBA	73 dBA	76 dBA	80 dBA	83 dBA

1. Includes truck approach, maneuvering, backing, warning beeps, trailer coupling/de-coupling, idling, air brake discharge, and pull-away.
2. Greyed entries are not applicable for the proposed project operations (see text). This information is shown for completeness only.
Source: Caltrans, 2009 and PlaceWorks 2012 (measurements of truck operations for Parriott/Macy's Truck Yard Project).

For purposes of this impact assessment, the project is assumed to accept up to 95 trucks per day. By State law,[11] diesel trucks are prohibited from idling for more than five minutes at any one location. Additionally, it is assumed for this assessment that the maneuvering operation for any given truck would take no more than three to five minutes. Thus, the combination of maneuvering and parking and idling near or in the project's loading bay would take a maximum of ten minutes.

The loading bay area is located on the west side of the proposed warehouse building (see Figure 4 for the current site plan layout), approximately 470 feet from the nearest noise-sensitive receptors (Nelson Elementary School and single-family residences across Nelson Avenue). The school and nearest residences would experience 19 dB of sound reduction due to distance attenuation alone, and approximately an additional 10 dB of attenuation due to barrier effects provided by the project building and the existing industrial buildings west of Puente Creek.

24-hour Operations: If truck traffic were to be evenly distributed throughout 24-hour operations, 3.96 trucks (on average) would be in or around the loading bay on an hourly basis. Therefore, these 3.96 trucks with a maximum loading duration of 10 minutes each would have an effective, averaged period of 39.6 minutes (i.e., 3.96 trucks per hour times a 10-minute per-truck operations period). Given that the time-averaged duration would be greater than 50 percent of an hour and operations would occur 24 hours a day, all

[10] Noise level relationships established via reference measurements for a proposed trucking operation project in the City of Industry Data taken on 8/23/12 for Parriott/Macy's Trucking Project; PlaceWorks project IND-07.102.
[11] California Air Resources Board regulations, contained in CCR Title 13, Section 2485 and found at: http://www.arb.ca.gov/msprog/truck-idling/2485.pdf

of the percentile noise metrics (i.e., L_{50}, L_{25}, L_8, L_2, and L_0) in the standards would be applicable for both daytime and nighttime.

The calculated noise levels at the receptors and their relationship to the pertinent stationary noise level limits are shown in Table 13, *Compliance Assessment for Truck Maneuvering Activities for 24-hour Operations*.

Table 13 Compliance Assessment for Truck Maneuvering Activities for 24-Hour Operations

	L_{50} Sound Level	L_{25} Sound Level	$L_{8.3}$ Sound Level	$L_{1.6}$ Sound Level	L_0=L_{max} Sound Level
Limit: Daytime Residential (dBA)	50	55	60	65	70
Limit: Nighttime Residential (dBA)	45	50	55	60	65
Limit: Noise-sensitive Uses (any time) (dBA)	45	50	55	60	65
Calculated Project-Generated Noise Level (dBA)	41	44	47	51	54
Compliance	Complies with All Above	Complies with All Above	Complies with All Above	Complies with All Above	Complies with All Above

Notes: [1.] Includes truck approach, maneuvering, backing, warning beeps, trailer coupling/de-coupling, idling, air brake discharge, and pull-away.
Calculations included in Appendix D.
Source: PlaceWorks 2015.

As shown above in Table 13, noise levels from the expected number and duration of trucking activities near or in the loading bays of the proposed project would not exceed the noise level standards in the pertinent sound level metrics during either daytime or nighttime periods. Thus, 24-hour operations would not result in impacts at Nelson Elementary School or residences across Nelson Avenue.

Daytime-only Operations: If truck traffic were to be evenly distributed throughout a typical 11-hour daytime operations shift (i.e., 7 AM to 6 PM), 8.64 trucks (on average) would be in or around the loading bay on an hourly basis. Once again, the time-averaged duration would be greater than 50 percent of an hour (i.e., 8.64 trucks per hour times a 10-minute per-truck operations period is 86.4 truck-minutes per hour or 1.44 simultaneous truck operations). That is, there would be approximately 1½ trucks – on average – idling or maneuvering around the loading docks during any given daytime hour. The noise level produced by 1½ trucks operating simultaneously is approximately 2 dB higher (on a time-averaged basis) than the noise level produced by a single truck. As such, noise levels experienced at nearby receptors for daytime-only operations would be 2 dB higher than those in Table 4 for 24-hour operations. Given this operations scenario, all of the percentile noise metrics (i.e., L_{50}, L_{25}, L_8, L_2, and L_0) in the standards would be applicable. However, as operations would only occur during the daytime period, nighttime noise level restrictions would not be applicable.

The calculated noise levels at the receptors and their relationship to the pertinent stationary noise level limits are shown in Table 14, *Compliance Assessment for Truck Maneuvering Activities for 11-hour Operations*.

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Table 14 Compliance Assessment for Truck Maneuvering Activities for 11-Hour Operations

	L_{50} Sound Level	L_{25} Sound Level	$L_{8.3}$ Sound Level	$L_{1.6}$ Sound Level	L_0=L_{max} Sound Level
Limit: Daytime Residential (dBA)	50	55	60	65	70
Limit: Nighttime Residential (dBA)	Not Applicable since daytime-only operations				
Limit: Noise-sensitive Uses (any time) (dBA)	45	50	55	60	65
Calculated Project-Generated Noise Level (dBA)	41	44	47	51	54
Compliance	Complies with All Above	Complies with All Above	Complies with All Above	Complies with All Above	Complies with All Above

Notes: 1. Includes truck approach, maneuvering, backing, warning beeps, trailer coupling/de-coupling, idling, air brake discharge, and pull-away.
Calculations included in Appendix D.
Source: PlaceWorks 2015.

As shown above in Table 14, noise levels from the expected number and duration of trucking activities near or in the loading bays of the proposed project would not exceed the noise level standards in the pertinent sound level metrics during the daytime period. Thus, 11-hour workday operations would not result in impacts at Nelson Elementary School or residences across Nelson Avenue.

Noise from truck maneuvering and loading may also be experienced at the commercial/industrial properties to the south and industrial properties west of the site. It shall be noted, however, that these properties are not noise-sensitive and are already exposed to these types and levels of noise. Noise from truck maneuvering and loading would not cause substantial noise increases and would not interfere with the operation of these nearby uses.

In summary, noise levels from trucking activities near or in the loading bays of the proposed project would not exceed the noise level standards for noise-sensitive receptors, and would not disrupt operations at the adjacent commercial or industrial properties. Thus, noise impacts relative existing standards are less than significant.

However, to ensure that future trucking operations around the proposed loading docks do not cause undue noise annoyance at nearby sensitive receptors, the following Project Design Feature (PDF) is recommended.

Noise Reduction Project Design Feature

1 To ensure that other noise level standards for longer-duration activities (i.e., the L25 and L50 limits for activities occurring for 15 and 30 minutes per hour, respectively) are not breached by project trucking operations, on-site truck maneuvering should be restricted to a duration of no more than 10 minutes and on-site truck idling should be restricted to a duration of no more than 5 minutes, for a total duration of no more than 15 minutes for each truck trip. All maneuvering, including backing, should be conducted as far away from Nelson Avenue and as near the loading bay portion of the project building as practical. Signs with these operations procedures should be used to enforce this restriction and should be shown on the building submittal set.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during (a) demolition and grading phases of construction and/or (b) the operation of large trucks over uneven surfaces during project operations. The City of Industry does not set quantitative standards for vibration impacts. However, the County of Los Angeles Noise Ordinance, Section 12.08.560 (Vibration) prohibits operating or permitting the operation of any device that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way. The perception threshold is to be a motion velocity of 0.01 inch/second over the range of 1 to 100 Hertz (Hz).

Construction Activities

Construction activities can generate ground vibration that varies depending on the construction procedures, equipment used, and proximity to vibration-sensitive uses. Construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance. Such vibrations may have two types of potential impacts: (a) architectural damage to nearby buildings and (b) annoyance to vibration-sensitive receptors.

The project would construct a warehouse/office building on a currently vacant lot. The project site is generally level, so relatively little heavy earthwork would be required. Thus, there would be limited use of vibration-inducing construction equipment such as bulldozers, graders, jackhammers, and loaders/backhoes. Construction equipment would primarily employ items that would not generate substantial levels of vibration, including forklifts, cranes, and haul trucks. The use of high-vibration equipment, such as pile drivers or vibratory rollers, is not anticipated. Construction activities would start as early as October 2015 and would take approximately 7 months.

Table 15, Typical Vibration Levels Produced by Common Construction Equipment Items, shows the peak particle velocities of some common construction equipment and haul trucks (loaded trucks).

Table 15 Vibration Levels Produced by Common Construction Equipment

	Peak Particle Velocity in inches per second		
Equipment	at 25 ft.	at 50 ft.	at 150 ft.
Vibratory Roller	0.210	0.074	0.014
Large Bulldozer	0.089	0.031	0.006
Loaded Trucks	0.076	0.027	0.005
Jackhammer	0.035	0.012	0.002
Small Bulldozer	0.003	0.001	0.000

Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment, 2006.

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Vibration-induced Architectural Damage

The threshold at which there is a risk of architectural damage to typical wood-framed buildings is 0.2 in/sec (FTA 2006). Building damage is not normally a factor unless the project requires blasting and/or pile driving (FTA 2006). No blasting, pile driving, or hard rock ripping/crushing activities are anticipated for the proposed project. Small construction equipment generates vibration levels less than 0.1 PPV in/sec at 25 feet away.

The nearest structures to the warehouse construction are industrial buildings on the adjacent lots to the east and west, and single-family residences across Nelson Avenue to the north. All of these structures are at least 75 feet from the project boundary. Therefore, vibration levels at these structures would be well below thresholds.

Since no vibration-intensive activities would take place, the maximum construction-related vibration level would be below the 0.2 PPV in/sec criteria for vibration-induced architectural damage at the nearby structures, and architectural-damage vibration impacts from construction would be less than significant.

Vibration Annoyance

The threshold for vibration annoyance at vibration-sensitive uses is 78 VdB. Vibration is typically noticed nearby when objects in a building generate noise from rattling windows or picture frames. It is typically not perceptible outdoors, and therefore impacts are based on the distance to the nearest building (FTA 2006). The effect on buildings near a construction site depends on soil type, ground strata, and receptor building construction. Vibration can range from no perceptible effects at the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels.

Since vibration dissipates quickly with distance and the nearest residences are at least 75 feet from the construction zone, vibration levels would be below the 78 VdB threshold for vibration-induced annoyance; provided that vibratory rollers are not used. If vibratory rollers are employed during project construction, these nearest residences – those up to approximately 160 feet from activities – may occasionally experience vibration levels in excess of 78 VdB when vibratory rollers operate near the northern boundary of the warehouse construction. However, these episodes would be short-term and sporadic. Further, vibration levels would diminish rapidly with distance between the equipment and the residences; quickly falling below the annoyance threshold. Additionally, construction would take place during the least sensitive hours of the day when less people would be expected to be in the nearest residences.

Operational Impacts

The project site would serve as a warehousing facility with on-site truck and trailer movements (primarily near the loading bay in the southwest corner of the proposed building). Operation of the warehouse/office building would not involve any mechanical equipment that would induce significant groundborne vibration. The project would, however, involve the movements of heavy tractors and trailers.

Vibration from vehicles is dependent on vehicle speed and weight, plus the presence of surface discontinuities. Due to site constraints and road geometry, these truck movements would occur at very low

speeds (less than 15 miles per hour). Traffic flows, including heavy trucks traveling on a highway, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage; even with notable potholes or degraded railroad crossings (Caltrans, 2004). As vibration dissipates rapidly with distance and since trucks would be traveling at very low speeds and over freshly refurbished and smooth surfaces, vibration effects during project operation at the nearest homes and Nelson Elementary School would not be perceptible or result in any undue effects. Thus, vibration impacts during project operations would be less than significant.

In summary, both construction and operations activities would not create substantial groundborne vibration or groundborne noise. This impact would be less than significant and no mitigation measures are needed.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact.

Road Noise

Long-term impacts could be significant if the project creates activity or generates a volume of traffic that would substantially raise the ambient noise levels. As discussed in Item (a) above, a substantial increase in ambient noise is defined as 3 dBA CNEL.

In accordance with the transportation analysis presented in Section 3.16, the proposed project is estimated to generate 584 daily vehicle trips in passenger car equivalents (PCE) with the worst-case hourly distributions being 50 PCE trips in the morning peak, and 54 PCE trips in the evening peak. Using the information in the traffic assessment, this additional increment is much less than a 25 percent increase over existing conditions. Note that a 25 percent increase in traffic flows coincides with a 1 dB increase in the associated traffic noise (assuming the same speeds, vehicle mixes, and levels-of-service). Thus, the project-related traffic increases would be well below a 1 dB increase in roadway noise, which is also well below the 3 dBA threshold of significance. Thus permanent noise increases due to project-related traffic would be less than significant.

Stationary Source Noise

As previously discussed in Item (a) above, on-site mechanical equipment would be acoustically engineered with appropriate procurement specifications, sound enclosures, and parapet walls to minimize noise and to adhere to allowable noise limits. Since these types of equipment items would be consist with similar equipment at existing facilities in the area, no substantial noise level increases would occur due to the contributions of the proposed project. Thus, noise levels from project mechanical equipment would be less than significant.

As previously discussed in Item (a) above, on-site truck pass-by noise would be well below the levels currently experienced at the nearest residences and at Nelson Elementary School due to traffic flows on Nelson Avenue. Thus, project-generated passing truck noise would not substantially increase area noise levels (by 3 dB or more) and this permanent noise source would be less than significant.

3. Environmental Analysis

Given the similar warehousing and truck movement activities at existing facilities in the area, coupled with the relatively low hourly operations rates[12], conducting maneuvering/idling activities in the project loading bay area would not substantially increase area noise levels (by 3 dB or more) and this permanent noise source would be less than significant.

In summary, both project-generated road noise and stationary source noise would not increase area noise levels above the 3 dBA threshold and the impact would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Both the City of Industry and County of Los Angeles recognize that the control of construction noise is difficult at best and provide an exemption for this type of noise when the work is performed within the hours specified within the County of Los Angeles Noise Ordinance (i.e., 7:00 AM to 7:00 PM Monday through Saturday). The Noise Ordinance also lists the maximum acceptable noise levels at off-site receptor locations (i.e., 75 dBA during the above permitted hours of construction activity). Compliance with the Noise Ordinance is mandatory and, as such, does not constitute mitigation under CEQA.

Two types of noise impacts could occur during the project construction phase. First, the transport of workers and equipment to the construction site would incrementally increase noise levels along site access roadways. However, the number of construction-related vehicle trips, as with operations-related vehicle trips (discussed in item c) above) would be much less than a 25 percent increase in total daily vehicle flows along Nelson Avenue. As such, this would result in a noise level increase of much less than 1 dB (in the traffic-focused CNEL noise level metric) and would, therefore, have a less than significant impact on noise receptors along the truck routes. While individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (Lmax), these occurrences would be no different than the hundreds of similar truck pass-bys that currently occur along that portion of Nelson Avenue. As such, construction vehicle noise would be less than significant.

The second type of impact is related to noise generated by on-site construction, when local residents would be subject to elevated noise levels due to the operation of various types of construction equipment. Construction activities are typically carried out in discrete steps, each of which has a relatively distinct mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow noise ranges to be categorized by work phase. Table 16, Noise Levels Generated By Typical Construction Equipment, lists typical construction equipment noise levels recommended for noise impact assessment at a distance of 50 feet.

[12] Assumed operations for an average hourly rate of 8.64 trucks for the daytime-only (11-hour) operations or 3.96 trucks for the 24-hour operations.

Table 16 Noise Levels Generated By Typical Construction Equipment

Type of Equipment	Average Sound Levels Measured (dBA at 50 feet)
Pile Drivers	101
Rock Drills	98
Jack Hammers	88
Pneumatic Tools	85
Pumps	76
Dozers	80
Front-End Loaders	79
Hydraulic Backhoe	85
Hydraulic Excavators	82
Graders	85
Air Compressors	81
Trucks	91

Source: Bolt, Beranek and Newman, 1971.

Noise ranges have been found to be similar during all phases of construction, although the actual construction of the structures tends to be somewhat less than that from grading. The grading and site preparation phase tends to create the highest noise levels, because the noisiest construction equipment is found in the earth-moving equipment category. This category includes excavating machinery (e.g., back-fillers, bull-dozers, excavators, front loaders, etc.) and earth-moving and compacting equipment (e.g., compactors, scrapers, graders, etc.). Typical operating cycles may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Maximum noise levels at 50 feet from earth-moving equipment range from 73 to 96 dBA while Leq noise levels range up to about 89 dBA. The later construction of structures is somewhat reduced from this value and the physical presence of the structure may break up line-of-sight noise propagation.

Composite construction noise by phase has been characterized by Bolt, Beranek, and Newman (1971). In their study, construction noise for earthwork and finish-work related to industrial development is presented as 89 dBA Leq when measured at a distance of 50 feet from the construction effort. This value takes into account both the number of pieces and spacing of the heavy equipment used in the construction effort. Noise levels are typically reduced from this value and the physical structures further break up line of sight noise. However, as a worst-case scenario, the 89 dBA Leq value is used to assess the impact of construction.

The operation of such equipment would result in the generation of both steady and episodic noise significantly above the ambient levels currently experienced near the project site. The noise produced from construction decreases at a rate of approximately 6 dB per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and/or shielding/scattering effects). Therefore, at 100 feet, the source noise level would be about 6 dB less or 83 dBA Leq. Similarly, at 200 feet, the noise level would be about 12 dB less or 77 dBA Leq.

The project is to be placed in an industrial area, but there are proximate residential and educational uses across Nelson Avenue. Most construction would be performed more than 200 feet from existing sensitive receptors. However, the nearest single-family homes would be on the order of 75 feet from construction

activities along the site's northern border and may experience intermittent periods of construction activities with noise levels as high as 85 dBA Leq. These closest and worst-case levels would only occur for very limited times when construction is performed near the nearest site boundary on a worst-case workday. Still, these short-term and temporary construction noise levels may exceed the County's 75 dBA construction noise level limit, and would therefore present a potentially significant impact without mitigation.

In summary, in consideration that the project construction would be temporary over 7 months, and substantial construction noise (above the County standards) would be infrequent and short-lived throughout the least noise-sensitive portions of the day, and through implementation of the PDFs indicated below, construction-related noise impacts would be less than significant at the nearby residences.

To ensure that future trucking operations around the proposed loading docks do not cause undue noise annoyance at nearby sensitive receptors, the following PDFs would be included as conditions of project approval:

Construction-Related Noise Reduction Project Design Features

1. All internal combustion engine-driven equipment shall be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

2. Stationary, noise-generating equipment (e.g., generators and compressors) shall be located as far as possible from adjacent residential properties.

3. If stationary, noise-generating equipment must be located near existing residential properties, then such equipment shall have temporary acoustical enclosures, blanketing, or barriers to reduce the noise emissions.

4. The contractor shall utilize "quiet" air compressors and other stationary noise sources where technology exists.

5. The contractor shall reduce non-essential idling of construction equipment to no more than five minutes.

6. The contractor shall prepare a construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordinating with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

7. The construction contractor shall post a sign, clearly visible at the construction site, with a contact name and telephone number of the construction contractor to respond to in the event of a noise complaint. This designated contact person shall be responsible for responding to any complaints about construction noise. The contact person shall determine the cause of the noise complaint (e.g., bad muffler) and shall implement practical and reasonable measures to correct the problem.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within an area covered by an airport land use plan or within 2 miles of a public airport or public-use airport. The nearest public airport is El Monte Airport, approximately 5.4 miles northwest of the site (Airnav 2015; Google 2015). While light plane and other aircraft noise is occasionally noticeable in the project area, the project is well beyond any airport's 60 dBA CNEL zone. Therefore, the proposed project would not expose people to excessive aircraft noise levels and impacts would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Haddick's Heliport is the nearest private use facility to the project site, at approximately 1,400 feet to the southeast (Airnav 2015; Google 2015). Also nearby is the City of Industry Civic Financial Center Heliport, approximately 3,400 feet to the east of the project site. The project site is beyond either facility's 60-dBA CNEL noise contour. Further, helicopter take-offs and landings are infrequent and at sufficient distances from the project site that they would not expose workers employed in the industrial warehouse/office to excessive noise levels. Impacts would be less than significant.

3.15 POPULATION AND HOUSING

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed project involves the development of a new warehouse/-office building and does not include the construction of new homes or the extension of infrastructure such as roads or sewers. Therefore, it would not directly or indirectly induce population growth in the area. The project would generate temporary construction and operational employment. Projected employment densities for various land uses vary widely, depending on the location and actual business activities. In general, employment densities for warehouse use range from one employee per 1,000 to 7,500 square feet of building space, while office space job densities are more on the order of one employee per 150 to 500 square feet of building space. For Los Angeles County, estimates developed by the Southern California Association of Governments are approximately one employee for 1,500 square feet of warehouse space and one employee for 400 square feet of low-rise office space (The Natelson Company 2001). Using these values, a project warehouse space of 120,344 square feet and office space of 5,000 square feet yields an estimated 93 jobs for the developed project.[13]

The Southern California Association of Governments estimates that employment in the City of Industry will increase from 84,070 in 2008 to 88,404 in 2035, or 4,334 additional jobs (SCAG 2012a). The unemployment rate in Los Angeles County in December 2013 was estimated at 9.2 percent (EDD 2014). Thus, it is expected

[13] (34,360/1,500 = 23 warehouse jobs) + (5,000/400 = 13 office jobs) = 36 total jobs

that the project would absorb workers from the regional labor force and would not attract new workers into the region. Impacts would be less than significant and no mitigation measures are necessary.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site is currently an undeveloped lot and there are no residences on the site. Therefore, existing housing would not be involved and replacement housing would not be needed. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. Implementation of the proposed project would not displace people, nor would it require the construction of replacement housing. No impact would occur.

3.16 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less Than Significant Impact. The City of Industry contracts with the Los Angeles County Fire Department (LACFD) for fire protection services. The City is served by Division 8, Battalion 12 of the LACFD, which mans and operates six fire stations (Fire Station's #26, 43, 87, 91, 118, and 145). Battalion 12 also provides fire protection services to Roland Heights, La Puente, La Mirada, and Hacienda Heights. The nearest fire station to the project site is Fire Station #26 at 15336 Elliot Avenue, in the City of La Puente, about 0.85 miles northeast of the site.

The proposed project does not include housing or any new infrastructure that would substantially increase the area population or service area boundaries. Development of the project could result in a slight increase in calls for fire protection and emergency medical service. However, considering the existing firefighting resources available in and near the City of Industry, project impacts on fire protection are not expected to occur and the LACFD would continue to provide adequate service to the project area. Such small increases in demand would also not require the LACFD to build new or expanded stations, or to obtain additional staff or equipment.

The City involves the LACFD in the development review process in order to ensure that the necessary fire prevention and emergency response features are incorporated into development projects. As such, all site and building improvements proposed under the project would be subject to review and approval by LACFD prior to building permit and certificate of occupancy issuance. Furthermore, the City of Industry imposes standard conditions of approval during the Development Plan review process that require City Council review and

approval. As a standard condition of approval, the following standard condition would be imposed on the project: "The applicant shall construct adequate fire protection facilities to the satisfaction of LACFD." Therefore, impacts on fire protection services would be less than significant and no mitigation measures are necessary.

b) Police protection?

Less Than Significant Impact. The City of Industry contracts with the Los Angeles County Sheriff's Department (LASD) for law enforcement and crime prevention services. The LASD has a patrol station in the City of Industry at 150 Hudson Avenue, approximately 0.6 miles southeast of the project site. This station is responsible for providing police services to the cities of Industry, La Puente, and La Habra Heights, and the unincorporated Los Angeles County communities of East and West Valinda, Bassett/North Whittier, and Hacienda Heights.

Development of the proposed project could result in a slight increase in calls for police protection service. However, no new public safety issues would result from implementation of the proposed project. Development of the project is not expected to cause a need for new or expanded police facilities or additional officers. The LASD would continue to provide adequate service to the project area. Therefore, no significant increases in police protection services would occur and no mitigation measures are necessary.

c) Schools?

No Impact. The project site is in the Hacienda La Puente Unified School District. Demand for public services such as schools is generally based on population. The proposed industrial warehouse/office project does not involve residential development and would not induce population growth. Therefore, the project would not increase the demand on local schools and no impact would occur.

d) Parks?

No Impact. The proposed project does not involve park development or displacement. Demand for parks is determined by the population of the parks' service areas. The project would not add residences or cause an increase in the population of the surrounding community. Therefore, the project would not increase the demand for parks and no impact would occur.

e) Other public facilities

No Impact. The proposed project would not directly or indirectly lead to an increase in population in the project area. Additionally, the proposed project would not require the use or maintenance of other public facilities, such as libraries. Therefore, no impact to other public facilities would occur.

3.17 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The demand for parks is determined by changes in housing and population. The proposed project would not involve the development of any housing and would not directly or indirectly induce population or increase demand on parks and recreational resources. Therefore, no impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. The proposed project would not develop recreational facilities and would not require the development of such facilities. No impact would occur.

3.18 TRANSPORTATION/TRAFFIC

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. An analysis was conducted to evaluate the impacts of the proposed project on the study area circulation system. The results of the analysis are summarized in the following sections.

Construction Phase

Implementation of the project would require site preparation, building construction, and paving/landscaping of the completed site. Because the site is relatively flat, major grading that would require numerous truck trips for soil import or export would not be required. The anticipated level of construction would not result in a significant traffic impact because it would be temporary (i.e., 7 months) and relatively minor as compared to the existing daily traffic volumes of approximately 7,000 on Nelson Avenue in the vicinity of the project area. The staging area for construction equipment would be accommodated on-site. Project construction would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

Operational Phase

Nelson Avenue is a two-lane undivided collector road that forms the boundary between in the cities of Industry and La Puente (see Figure 2, *Local Vicinity*). It provides local access to several residences in the City of La Puente and several industrial uses along the south side of the road in the City of Industry. Continuous sidewalks are present on both sides of the road, and pedestrian crossings are available on the intersections at Nelson Avenue at California Avenue and at Unruth Avenue. No dedicated bike lanes are present on Nelson

Avenue. Nelson Avenue has a posted speed limit of 35 miles per hour east of the site, becoming 25 miles per hour to the west as is approaches the Nelson Elementary school, which is located approximately 300 feet of the site boundary. The school zone starts at the western boundary of the site, school signs and school yellow pedestrian crosswalks and pedestrian crossing sign push buttons are located at the intersection of California Avenue at Nelson Avenue. The school driveways are located in the northwestern corner of the intersection. Parking is allowed on portions of the north side of the street along the residents in La Puente, no parking is allowed in the south side in the City of Industry.

Once operational, the proposed project would result in an increase in traffic volumes on the roadways that provide access to the project site. The study area roadway that would be most directly affected by this traffic is Nelson Avenue. To evaluate project impacts on local traffic, trip generation rates attributable to the project were determined for daily and peak hour traffic flows. Morning peak hour traffic is assumed to occur between the hours of 7:00 AM and 9:00 AM, while evening peak hour traffic occurs between the hours of 4:00 PM to 6:00 PM.

The proposed project's trip generation was based on trip generation rates established for the warehousing land use category in the Institute of Transportation Engineers' Trip Generation Manual (ITE 2012). Because the project is in an industrial use, passenger car equivalent (PCE) factors were applied. Truck volumes were converted to PCE volumes to reflect the fact that trucks take up more room on the road than automobiles and are typically slower during acceleration and deceleration. Based on San Bernardino County Congestion Management Program (CMP) guidelines,[14] the following PCE factors were applied:

- 2 axle trucks = 1.5
- 3 axle trucks = 2.0
- 4+ axle trucks = 3.0.

To apply the PCE factors, the proposed project's vehicle mix was estimated based on the City of Fontana Truck Trip Generation Study (City of Fontana 2005). The vehicle mix assumed for warehousing uses are:

- Automobiles = 78.6 percent
- 2 axle trucks = 8.0 percent
- 3 axle trucks = 3.9 percent
- 4+ axle trucks = 9.5 percent.

As shown in Table 17, the project is estimated to generate a total of 446 daily vehicle trips, of which 95 would be truck trips[15] and the remainder would be passenger car trips. This total number of vehicle trips converts to 584 PCE trips using the factors identified above. Of this total, 50 PCE trips would occur during the morning weekday peak hour and 54 PCE trips would occur during the evening weekday peak hour.

[14] San Bernardino County CMP guidelines were used for PCE factors in the absence of relevant Los Angeles County or City of Industry guidelines. Such practice is standard for the preparation of traffic studies in Southern California, including those previously prepared for the City of Industry.
[15] Using the assumptions stated in the text, truck trips are assumed to comprise 21.4 percent of project vehicle trips, resulting in an estimated 30 truck trips per day (0.214 x 446 = 95).

3. Environmental Analysis

Table 17 Project Trip Generation

Category	Daily Traffic	AM Peak Hour Traffic			PM Peak Hour Traffic		
		Total Traffic	Trips In	Trips Out	Total Traffic	Trips In	Trips Out
TRIP GENERATION RATES[1]							
Warehousing (ITE Code 150)	3.56	0.30	0.24	0.06	0.32	0.08	0.24
GENERATED TRAFFIC VOLUMES							
Project Trips (vehicles)[2]	446	38	30	8	40	10	30
Project Trips (PCE)[3]	584	50	40	10	54	14	40

PCE = Passenger car equivalent
[1] Trip generation rates based on ITE Trip Generation Manual, 9th Edition (2012). Rate units are trips per 1,000 square feet of building space.
[2] Assumes a project warehouse size of 125,344 square feet. Vehicle trips are then calculated as trip generation rates x (125,344 ÷ 1,000).
[3] PCE trips calculated using the assumptions outlined above.

The Congestion Management Program for the County of Los Angeles states that the minimum project-added traffic that is needed before an intersection has to be studied is 50 two-way trips in either the morning or evening weekday peak hour. This is consistent with most local jurisdictions that require traffic impact studies for projects that generate more than 50 peak hour trips. Mainline freeway monitoring locations must also be analyzed for projects that would add 150 or more trips during either the morning or evening weekday peak hour. The project generates a maximum of 54 trips during weekday peak hours (i.e., an average of 1 trip for every minute) that would be distributed along the circulation system. As the project trips would split east-west on Nelson Avenue, and assuming a 50% split, the project would add less than 30 trips at each nearby intersection and would not meet the minimum 50 peak hour trip threshold.

Traffic counts were taken in the segment of Nelson Avenue between Cadbrook Drive and California Avenue on Thursday June 6, 2015. The daily traffic volume on the roadway segment is 6,517, which 613 occurred in the AM peak hour and 587 in the PM peak hour. The percentage of heavy trucks with more than 3 axles observed is 2.1%, and 2-axle medium trucks 4.4%. With the project, the total volume on Nelson Avenue would be 6,963, 651 in the AM peak hour and 627 in the PM peak hour. According to the traffic study for the City of Industry General Plan (LLG 2011) the roadway capacity for a collector street is 700 vehicles per hour per lane. For the 2-lane road, the capacity would be 1,400 vehicles per hour. Therefore the project would result in small increases of less than 10 percent over the existing, and the anticipated volumes would be well below the roadway capacity. No significant impact would occur at study area roadways and intersections and no mitigation measures are necessary.

Non-motorized Transportation and Transit

The project may generate a demand for non-motorized travel as the proposed warehouse may result in additional pedestrians and bicycles in the project area. Most of the streets in the project vicinity have sidewalks along the sides of the street where development has occurred and the nearest signalized intersections at Nelson Avenue at Unruh Avenue and Nelson Avenue at California Avenue are equipped with painted crosswalks, pedestrian signals, and pedestrian push buttons to activate the signals. With regard to public transit, the Los Angeles Metropolitan Transit Authority (Metro) operates Line 194 along Valley Boulevard and the nearest bus stop is located approximately 1,000 feet from the project site. The proposed project would not adversely affect the performance of these transit or non-motorized transportation facilities and would not conflict with any plans or policies relative to these transportation modes.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The Los Angeles County Congestion Management Program (CMP) was issued by Metro in December 2010 (Metro 2010). All freeways and selected arterial roadways are designated elements of the CMP Highway System. The CMP requires that individual development projects of potentially regional significance undergo a traffic impact analysis. Per the CMP Transportation Impact Analysis (TIA) guidelines, a significant impact may result and a traffic impact analysis is required under the conditions listed on the following page.

- At CMP arterial monitoring intersections where the proposed project would add 50 or more vehicle trips during either morning or evening weekday peak hours.
- At CMP mainline freeway monitoring locations where the proposed project would add 150 or more vehicle trips, in either direction, during either morning or evening weekday peak hours.

The nearest freeway to the project site is the Pomona Freeway (SR 60) approximately 1.2 miles to the south. The nearest CMP arterial roadway to the site is Azusa Avenue approximately 3 miles to the east, and the nearest CMP intersection is Azusa Avenue at Main Street in La Puente. As indicated above, the proposed project would result in an increase of 50 morning peak hour trips and 54 evening peak hour trips. As these total numbers of trips would be distributed among local roadways, they would not add 50 or more trips to a CMP intersection or 150 or more trips to a mainline freeway. Therefore, the proposed project does not meet the intersection/freeway criteria and the analysis of traffic impacts to CMP roadways is not required. Impacts are less than significant and no mitigation measures are necessary.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project is an industrial/warehouse building with a height of less than 50 feet, which would not result in a change in air traffic patterns or an increase in air traffic levels. There are no airports in the immediate project vicinity and the proposed project would not create any structures that could interfere with air travel or air safety. The project would not increase or alter air traffic and no impact would occur.

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

Less Than Significant Impact: Access to the site would be provided by a single full-access driveway on Nelson Avenue with a width of 40 feet. Nelson Avenue is a 2-lane road with a width of 36 feet and a dashed yellow centerline to allow double left turn movements. Several industrial/warehousing projects in the vicinity of the project currently take access from Nelson Avenue. No parking is allowed on the south side of the road around the project access driveway. Sight distance is the continuous length of roadway visible to the user. A substantially clear line of sight shall be maintained between the driver of a vehicle waiting at the crossroad

and the driver of an approaching vehicle. A preliminary sight distance evaluation prepared for the proposed driveway was based on criteria and procedures from the Caltrans in the State's Highway Design Manual (HDM). Table 201.1 "Sight Distance Standards" of the HDM relates minimum sight distance values to a range of design speeds. For this analysis, a design speed of a roadway of 35 mph has been utilized. Based on the design speed of 35 mph, the minimum sight distance from the access driveway on Nelson Avenue would be 250 feet. The nearest signalized intersection is located approximately 600 feet from the project site driveway. The road is straight and maintains a constant grade in each direction. In addition, there are no major obstructions in the sidewalk and no parking is allowed on the project site's side of the road providing an unobstructed view of the driveway and of Nelson Avenue. Google street views and observations at the project site also indicate that the sight distance exceeds these standards at the existing driveway location. Since the site would be easily accessible from Nelson Avenue and the minimum peripheral visibility would be maintained per the Caltrans HDM, no mitigation measures would be necessary in regards to site access.

The increased levels of traffic, pedestrians, and vehicular turning movements at the site access driveways and nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant as the roadways, site access driveways, and traffic control features would be consistent with applicable City of Industry standards as well as the California Department of Transportation's California Manual on Uniform Traffic Control Devices (Caltrans 2014). The project, therefore, would not substantially increase hazards due to a design feature or incompatible uses.

e) Result in inadequate emergency access?

No Impact. The access and circulation features at the proposed development project would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. Emergency vehicles would enter the project site using the driveway entrance on Nelson Avenue. As shown on Figure 4, *Site Plan*, the project site would be accessible via the 40-foot wide driveway entrance that becomes a circular driveway with a minimum width of 28 feet that loops around the site. These driveways would provide fire access striped per LACFD standards to all sides of the building. All emergency access features are subject to, and must satisfy, the City of Industry design requirements and be approved by the LACFD. No impacts would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. The proposed development project would be consistent with policies supporting public transit, bicycle, and pedestrian facilities. The sidewalks in front of the building along Nelson Avenue would remain accessible to pedestrians and pedestrian crosswalks and signals are available in the project vicinity. Six bike racks would be installed near the site entrance for employee and visitor use. The proposed office would provide a bulletin board, display, or kiosk displaying:

- current maps, routes and schedules for public transit routes serving the site

- telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operators
- ridesharing promotional material supplied by commuter-oriented organizations
- bicycle route and facility information, including regional/local bicycle maps and bicycle safety information
- a listing of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.

The proposed project would not conflict with policies, plans, or programs regarding transit, bicycle, or pedestrian facilities, and the project would not decrease the performance or safety of such facilities. No impact would occur.

3.19 UTILITIES AND SERVICE SYSTEMS

a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The project would not develop a land use that requires on-site wastewater treatment separate from the treatment provided by the Los Angeles County Sanitation Districts (LACSD). Relatively small volumes of wastewater from restrooms, office kitchens, and cleaning activities would be sewered and directed to the nearest LACSD treatment plant for routine treatment prior to discharge. Wastewater treatment requirements for discharges to stormwater from project construction are discussed in Section 3.6.b. The project would prepare and implement a SWPPP in compliance with the General Construction Permit. Wastewater treatment requirements for discharges to stormwater from project operations are discussed in Section 3.9.a. The project would comply with City of Industry Municipal Code requirements governing wastewater discharges and no impact would occur.

b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The project site is currently an unused parking lot that does not contain any buildings or facilities that generate wastewater or demand supplied water. As shown in Table 10, the proposed project would generate an estimated 4,009 gallons per day (gpd) of wastewater and demand an estimated 4,981 gpd of water. An analysis of the impacts of these demands on water and wastewater treatment facilities is presented in the discussions that follow the table.

3. Environmental Analysis

Table 18 Forecast Project Wastewater Generation and Water Demand

Proposed Project Use	Area in Square Feet	Wastewater Generation, Gallons Per Day		Water Demand, Gallons Per Day	
		Per 1,000 Square Feet[1]	Total	Per 1,000 Square Feet[2]	Total
Warehouse	120,344	25	3,009	31	3,731
Office	5,000	200	1,000	250	1,250
Total	125,344	—	4,009	—	4,981

1 LACSD 2007.
2 Estimated as 125 percent of wastewater generation.

Water Demand

Suburban Water Systems (SWS) would provide water to the project development through its San Jose Hills District. About 80 percent of SWS's water supply comes from groundwater that is pumped from local wells in the San Gabriel and Central Basins; the remaining 20 percent comes from surface water (SWS 2014). SWS owns eleven water production wells in the San Gabriel Basin that serve the San Jose Hills District, some of which are out of service due to groundwater contamination (Kennedy/Jenks 2011). The Metropolitan Water District of Southern California is the largest provider of the surface water, which it obtains via aqueducts from Northern California and the Colorado River. Other sources of surface water include the Covina Irrigating Company and the California Domestic Water Company. In addition, SWS purchases water from several other water agencies that include the City of Covina, City of Glendora, Rowland Water District, Valencia Heights Water District, and Walnut Valley Water District (Kennedy/Jenks 2011).

As shown in Table 18, the proposed project is forecast to demand 4,981 gallons of potable water per day. The water demand would be associated with employee activities (i.e., bathroom and kitchen facilities), maintenance/cleaning activities, and landscape irrigation. The proposed project would be required to conform to Chapter 13.18 (Water Efficient Landscapes) of the City of Industry Municipal Code and with the City's Water Efficient Landscape Guidelines. For example, one of the City's water efficiency measures states that water usage should be minimized through the planting of native and low-water species and the utilization of water-efficient and drip irrigation systems.

By 2020, the SWS San Jose Hills District's total water supply from groundwater, imported water purchases, and recycled water is projected to be 37,136 acre-feet per year (about 12.1 billion gallons), compared to a projected water demand of 31,840 acre-feet per year (Kennedy/Jenks 2011). The project's water demand of 4,981 gpd[16] would constitute approximately 0.018 percent of this total demand. SWS expects to have adequate water supplies to meet demands in its service area for the next 20 years under average, single, and multiple dry years (Kennedy/Jenks 2011). The project applicant would be required to obtain a "will-serve" letter from SWS to ensure that sufficient water supply is available to serve the project. Given the relatively small project water demand, SWS would not be required to build new or expand existing water treatment facilities to meet the project's incremental increase in water demand and no impact would occur.

[16] 4,981 gallons/day x 365 days/year ÷ 325,760 gallons/acre-foot = 5.6 acre-feet/year.

Wastewater Treatment Demand

Wastewater treatment for the City of Industry, including the project site, is provided though the Los Angeles County Sanitation Districts (LACSD), whose purpose is to construct, operate, and maintain facilities that collect, treat, recycle, and dispose of domestic and industrial wastewater. Individual districts operate and maintain their own portions of the collection system. There are 24 independent districts serving Los Angeles County; the City of Industry is located in portions of Districts 15, 18, and 21. Cities are responsible for collection of wastewater through local lines, which feed to major trunk lines that vary from 8 inches to 144 inches in diameter. The San Jose Creek Water Reclamation Plant (WRP), with a treatment capacity of 100 million gallons per day (mgd), serves the City of Industry (LACSD 2014a). It provides primary, secondary, and tertiary treatment that yields approximately 42 mgd of reclaimed water for use in groundwater recharge and irrigation; the remainder is discharged to the San Gabriel River.

As shown in Table 16, the proposed project is forecast to generate approximately 4,009 gpd of wastewater. Wastewater effluent generated by the project would be primarily associated with the sanitary needs (i.e., bathroom and lunchroom) of the on-site facility employees. With a wastewater treatment capacity of 100 mgd, the San Jose Creek WRP has sufficient capacity to manage this incremental volume. Additionally, the City of Industry imposes standard conditions of approval on Development Plans that require City Council review and approval. As a standard condition of approval, the following condition would be imposed on the proposed project: "The applicant shall supply sanitary sewer facilities to serve all buildings to the satisfaction of the City Engineer prior to the final approval of the development and hookup of utilities." Therefore, project implementation would not result in the need for the construction or expansion of new wastewater treatment facilities and impacts would be less than significant. No mitigation measures are necessary.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project would not require the construction or expansion of facilities to manage stormwater flow; the existing curb and gutter collection system and storm drains have sufficient capacity to manage current and projected runoff from the site (see Section 3.9.d). No impact would occur.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. An estimate of the project water demand is provided in Section 3.17.b. The project applicant would be required to obtain a "will-serve" letter from the SWS to ensure that sufficient water is available to serve the project. Receipt of such a letter would confirm that water supplies are adequate and impacts would be less than significant. No mitigation measures are necessary.

e) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. An estimate of the project wastewater treatment demand is provided in Section 3.17.b. The existing LACSD wastewater treatment facility has sufficient capacity to meet the

incremental wastewater volume expected to be generated by the project. Impacts would be less than significant and no mitigation measures are necessary.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The LACSD provides solid waste disposal services to the City of Industry, including the project site. Solid waste generated by the proposed project would be processed by one or more facilities that currently serve the waste management needs of the community, including the Puente Hills Materials Recovery Facility, Downey Area Recycling and Transfer Facility, South Gate Transfer Station, and Commerce Refuse-to-Energy Facility. Despite the recent closure of the local Puente Hills Landfill in October 2013, the LACSD has indicated that the network of existing waste management facilities is adequate to meet the region's needs in the short-term. Long-term waste disposal needs would be met by exporting solid waste to the Mesquite Regional Landfill in Imperial County by rail via the Puente Hills Intermodal Facility, which is nearing completion in the City of Industry. The Puente Hills Intermodal Facility would be able to handle up to 8,000 tons per day of solid waste, while the Mesquite Regional Landfill, with a 100-year capacity, would be permitted to accept 20,000 tons per day (LACSD 2014b).

Solid waste would be generated during both the construction and operational phases of the proposed project. The volume of solid waste generated during construction would be relatively minor, since project development would not require the demolition of existing buildings or infrastructure. The project applicant estimates that approximately 200 cubic yards of asphalt pavement and concrete debris would be generated in preparing the site for construction (see Appendix A). Arrangements have already been made with Valley Vista Services to collect and recycle this debris. Once operational, the project would generate solid waste at a rate typical of warehouse/office operations, as summarized in Table 19.

Table 19 Forecast Project Solid Waste Generation

Proposed Project Use	Estimated Number of Employees[1]	Solid Waste Generation Pounds Per Day	
		Pounds Per Employee Per Day[2]	Total
Warehouse	80	13.82	1,106
Office	13	1.24	16
Total	96	—	1,122

1 See Section 3.13.a.
2 CalRecycle 2011.

As indicated in Table 19, the proposed project is forecast to generate approximately 1,122 pounds per day (lb/day) of solid waste. The project would be required to adhere to the City of Industry's waste reduction measures. For example, as outlined in Section 17.36.060.Z (Recycling Bin Enclosures) of the City of Industry Municipal Code, all industrial buildings are required to provide a recycling bin enclosed storage area. The project includes a trash enclosure and recycling area along the west side of the warehouse/office building, as shown on Figure 5, *Site Plan*. The design of the trash enclosure would be subject to City review and approval as part of the Development Plan review process. Additionally, the proposed project would be required to comply with the provisions of the 2013 Green Building Standards Code (California Code of Regulations

Title 24, Part 11), which outlines requirements for construction waste reduction, material selection, and natural resource conservation.

The LACSD's existing and proposed solid waste disposal capacity is adequate to accommodate the incremental volume of solid waste that would be generated by the proposed project and would not require the development of additional landfill capacity beyond that which is already planned. Therefore, project impacts would be less than significant and no mitigation measures are necessary.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The United States Environmental Protection Agency administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal. In the State of California, Assembly Bill (AB) 939 -- the Integrated Solid Waste Management Act of 1989, Public Resources Code 40050 et seq. -- required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. AB 939 also requires California counties to show 15 years disposal capacity for all jurisdictions within the county, or provide a plan to transform or divert its waste. AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991, requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects.

The proposed project would be required to comply with all applicable laws and regulations governing solid waste management and disposal, including those listed above. More specifically, the proposed project would not affect the City of Industry's ability to continue to meet the required AB 939 waste diversion requirements as it has in the past (CalRecycle 2012). For example, the proposed project would help the City achieve its source reduction, recycling, and waste stream diversion goals for solid waste through the provision and use of an on-site recycling bin, as noted in Section 3.17.f. Therefore, no impact would occur.

3.20 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. Project approval would allow the development of a warehouse/office building to replace undeveloped land in a fully urbanized area of the City of Industry. The project site has been previously disturbed and no wildlife habitats are present on the site. Additionally, the surrounding area is built out with commercial, industrial, and residential uses and there are no undeveloped areas in the vicinity of the project site. Natural communities and populations of rare or threatened plant or animal species do not exist on or near the project site and would therefore not be impacted. Additionally, the site does not meet the criteria to be considered historically significant, and there is no indication of sensitivity for cultural resources. The proposed project would not degrade any natural environment or cultural resources and a less than significant impact would occur.

3. Environmental Analysis

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact. Project approval would allow the development of a warehouse/office building to replace a paved parking lot in a fully urbanized area of the City of Industry. The proposed project would be consistent with the long-term goals of developing the project site with industrial uses in accordance with the City's General Plan. Therefore, the project would not weigh short-term goals above the long-term environmental goals of the City. Additionally, the environmental issues relevant to the project are very localized and confined to the immediate project area. Project development would not result in impacts that are individually limited but cumulatively considerable, as defined above. Therefore, no significant cumulatively considerable impacts are anticipated to result from the proposed project and no mitigation measures are necessary.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. This Initial Study reviewed the proposed project's potential impacts to aesthetics, air quality, noise, traffic, public health and safety, and other environmental issues. Assuming that applicable laws, regulations, PDFs, and standard conditions are followed, the proposed project would not result in substantial adverse effects on human beings, either directly or indirectly.

4. Consultant Recommendation

Based on the information and environmental analysis contained in this Initial Study, we recommend that the City of Industry adopt a Negative Declaration for this project. We find that with the project design features and mitigation measures, the project would not have a significant effect on the environment. We recommend that the first category be selected for the City's determination (See Section 5, *Lead Agency Determination*).

Date	Dwayne Mears, AICP, for PlaceWorks

4. Consultant Recommendation

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5. Lead Agency Determination

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	*Date*
Printed Name	*For*

5. Lead Agency Determination

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Appendix A Development Plan Application

Appendix

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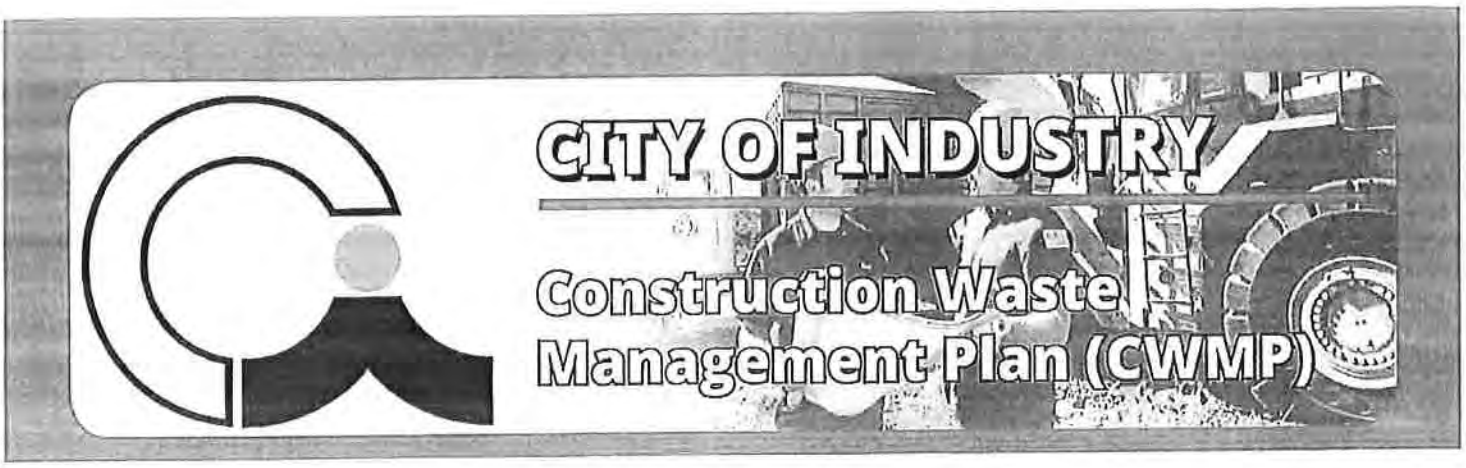

This form must be completed for all 1) new construction (including tenant improvement), 2) demolition projects, and 3) additions/alterations to existing structures.

All debris and waste generated on-site MUST be hauled by the City of Industry franchise hauler, Valley Vista Services, Inc. The only exception is single-stream, source-separated recyclable materials(s), which MUST be hauled by a recycler with a valid City of Industry collectors permit.

- *Prior to receiving approval of a **Development Plan** by the City of Industry, the project contractor(s) must submit this construction and demolition waste management plan (CWMP).*
- *Prior to receiving a **Building Permit Final**, the contractor MUST demonstrate compliance with the City of Industry Integrated Waste Management Plan Ordinance (IMC Chapter 8.20) by providing documentation for all materials re-used and/or recycled either on or off-site of the project.*

PROJECT CONTACT INFORMATION

Project Name: 15000 Nelson Ave Address: 15000 Nelson Ave, City of Industry

Contractor: Donlon Builders Contact Person: Desmond Donnellan

Phone: 714-528-0800 Email: desmond@donlonbuilders.com

Mailing Address: 2681 Saturn St. City: Brea Zip: 92821

1. Project Type: (check one) ☒ New Construction ☐ Demolition ☐ Addition/Alteration/T.I.
2. Building Square Footage: 125,344 sf Project Valuation: $5,000,000
3. Estimated Start Date: 10-1-2015 Estimated Completion Date: 4-30-2016
4. Brief Project Description: New concrete tilt up building 125,344 SF with 18 dock positions and 1 ground level overhead door. Property is currently unimproved and vacant.

For City Use Only: Project #:_____ Submitted: ___/___/___

Received by WST: ___/___/___ Plan Reviewer:_____

☐ Exempt ☐ CWMP Approved ☐ CWMP Denied Date: ___/___/___

☐ **Project Diversion Report** Approved Date: ___/___/___ By:_____

☐ Approved for **Building Permit Final** Date: ___/___/___ By:_____

CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP)

The contractor(s) are required to divert at least 50% of all solid waste generated by project activities.
Please complete steps 1 and 2 for this CWMP submittal.
Step 3 will be required prior to issuance of a Building Permit Final.

Step 1: Check all that apply

- ☒ Contractor requests that the franchise hauler, Valley Vista Services, process all or a portion of the project generated material through mixed C&D processing.
- ☐ Contractor chooses to conduct certain onsite re-use practices to meet all or part of the 50% diversion requirement.
- ☐ Contractor chooses to conduct certain off-site recycling practices to meet all or part of the 50% diversion requirement.

Step 2: Indicate method(s) of project diversion

100 % Percentage of project-generated materials to be **mixed C&D processing** through the City's franchise hauler.

_____ % Percentage of project-generated materials to be recycled **on-site** through "re-use."

_____ % Percentage of project-generated materials to be recycled **off-site** through a permitted 3rd party recycler (must be a City of Industry permitted recycler).

Step 3: Submit project diversion report

Prior to the issuance of a **Building Permit Final**, the contractor must complete and submit a project diversion report to the recycling coordinator. This report MUST demonstrate the contractors' successful implementation of the approved CWMP (Steps 1 and 2). Contractor MUST provide copies of all weight tickets with the diversion report submittal. See sample project diversion report below:

SAMPLE PROJECT DIVERSION REPORT

	Total Tons C&D Processing	Total Tons On-Site Re-Use	Total Tons Off-Site Recycling	Total Tons Total Tons Generated
Mixed Debris	80	0	5	85
Inert Debris	0	100	0	100
Totals	**80**	**100**	**5**	**185**

John Smith
Name

John Smith
Signature

9/14/2020
Date

For assistance in completing this report, please contact the program consultant:
Waste Systems Technology, Inc. • Jeff Duhamel • (562) 432-3700 • JD@WasteSystemsTech.com

Printed on recycled paper with soy-based inks.

CITY OF INDUSTRY

APPLICATION FOR CONSTRUCTION/DEMOLITION WASTE & RECYCLING SERVICES

Applications will not be accepted without this form signed by Valley Vista Visa Services and attached to the application. City of Industry Municipal Code requires every business to arrange for appropriate solid waste collection service with the City approved collector. The requirement applies to any permanent or temporary businesses operating in the City of Industry.

Valley Vista Services - (800) 442-6454
17445 RAILROAD STREET
CITY OF INDUSTRY, CA 91745

BUSINESS INFORMATION (please type or print clearly)

Business Name/DBA: Donlon Builders Phone:

Service Address: 15000 E Nelson Ave Industry 91744
Street Zip

CONTRACTOR/PROJECT INFORMATION

Project Start Date: 12/2014 Project Completion Date: TBD Contact Person: Desmond Donnellan

Lead Contractor: Donlon Builders Contact Phone Number: (714) 528-0800

Contractor Address (Billing): 26081 Saturn Street Brea Ca. 92821

Estimate Material Types for Collection: Concrete + Misc Construction and Demo Waste

Payment of a deposit based on a waste flow projection is required before receiving a signature on this application. The waste flow projection will be based on the actual waste generation (volume) estimated during the course of the project. No Deposit shall be returned if self-hauling or unauthorized haulers are used on Project.

All delinquent charges and penalties imposed are deemed to be civil debts owed to the City by the customer and property owner, and may be collected by any available means, including the filing of a civil action.

Payment for service is the joint obligation of the customer and the property owner (if separate from the customer). In the case of non-payment by the customer, the owner of the property may be held responsible for payment and no new service may be established and no property related permit, approval or entitlement may be issued by the City until all delinquent amounts are paid.

BILLING DISPUTE PROCEDURES - Any customer who has been billed for service and desires to contest the extent, degree or reasonableness of the charges billed, must file a written statement of such protest with the collector and the City Manager's office within 30 days of the mailing of the disputed bill. The City Manager will review the accounts of customers who dispute collection charges within 30 days after receiving a written request for review. If an error is found after such review, the City or collector will promptly correct the error and, if required and at the City's sole discretion, the City or collector will either credit the customer's account or give the customer a refund.

OFFICE USE ONLY

Recycling and solid waste collection services have been reviewed and/or arranged for by the above business.

Project Description: Commercial Tilt-up Building

Scope of Services/Comments: Misc. Concrete Removal During Grading
New Construction Waste

Approved by: Tanya Moale Date: 4/22/15

Account#: 08758 Deposit Amount: $7578.56

→ 4-10yd Concrete Containers $2825.84

→ 7-45yd Boxes For Misc C&D-$4752.72

CITY OF INDUSTRY
APPLICATION FOR COMMERCIAL/INDUSTRIAL WASTE SERVICE

Applications will not be accepted without this form signed by Valley Vista Visa Services and attached to the application. City of Industry Municipal Code requires every business to arrange for appropriate solid waste collection service with the City approved collector. The requirement applies to any permanent or temporary businesses operating in the City of Industry.

(800) 442-6454
Valley Vista Services
17445 RAILROAD STREET
CITY OF INDUSTRY, CA 91745

BUSINESS INFORMATION **(please type or print clearly)**

Business Name/DBA: Donlon Builders Phone: 714-528-0800

Service Address: 15000 Nelson Ave. 91744
Street *Zip*

Billing Address: 2681 Saturn Street Brea, CA 92821
Street *City/State* *Zip*

Requested by: Desmond Donnellan Title: President

SIGNATURE OF CUSTOMER *DATE*

**Payment of a deposit based on a waste flow projection is required for any refuse collection service ordered in any case where the owner of the affected property is not ordering the service.

PLEASE COMPLETE ALL SECTIONS – ESTIMATE WHERE APPLICABLE

Project Start Date: 10-1-2015 Project Completion Date: 4-30-2016 Contact Person: Desmond Donnellan

Lead Contractor: Donlon Builders Contact Phone Number: 714-528-0800

Collection Type Needed: ☐Bin ☒Roll-Off ☐Trucks ☐Other

Estimate Material Types for Collection: Misc. Construction Debris

OFFICE USE ONLY

Recycling and solid waste collection services have been reviewed and/or arranged for by the above business as required by City Ordinance.

Type of Request: ☐New ☐Temporary ☐Pre-Existing ☐Not Applicable (explain)

Description (*type and frequency*): _____

Approximate Start Date: _____

Comments: _____

Refused Service (state reason): _____

C: Code Enforcement and Sheriff's Department re: code violation/prosecution

Approved by _____ Date _____

Account# _____ Deposit Amount _____

Environmental Information Form

The Environmental Information Form is intended to provide the basic information necessary for the evaluation of your project to determine its potential environmental impacts. This review provides the basis for determining whether the project may have a significant impact on the environment, as required by state law, or more specifically, the California Environmental Quality Act (CEQA). After this information has been evaluated by the Planning Department, a determination will be made regarding the appropriate environmental documentation for your project, in accordance with the CEQA Guidelines.

If no significant environmental impacts are anticipated, or if impacts can be mitigated or avoided by a change or specific requirement in the project's design or operation, a Negative Declaration or Mitigated Negative Declaration will be prepared. If potential significant environmental impacts are identified, an Environmental Impact Report must be prepared, which focuses on the areas of concern identified by the Initial Study.

The City of Industry, as Lead Agency, is required to comply with CEQA. In order to assist us in completing this required environmental review, please provide us with the information outlined below. Please note that upon review of the submitted information, City staff may request additional supporting documentation to assist in the environmental analysis of your project to ensure compliance with CEQA.

This Environmental Information Form works in concert with the other applications. Both need to be completed in order for your application to be accepted as complete. If you need assistance in completing the Environmental Information Form, or have questions regarding the environmental review procedures, please contact the Planning Department at (626) 333-2211.

General Information

1. Name developer, agent, or project sponsor: Donlon Builders Phone Number: 714-528-0800

   Address: 2681 Saturn Street, Brea, CA 92821
   Street *City* *Zip*

2. Project name: 15000 Nelson Assessor's Parcel Number: 8208-011-902

   Address: 15000 E Nelson Ave, City of Industry 91744
   Street *Zip*

Environmental Setting (Attach additional sheets and photos as necessary)

1. Describe the project site as it exists before the project, including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects:

   Undeveloped flat vacant dirt. Site has a small amount of asphalt and concrete.

2. Provide photographs of the site and describe any existing structures onsite and the use of the structures:

   No Structures exist on site.

3. Describe the surrounding properties (north, east, south, and west of the project site), including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (industrial, commercial, etc.), intensity of land use (warehousing, shops, department stores, etc.), and scale of development (height, frontage, setback, rear yard, etc.).:

North: Nelson Ave St. - across the street is a parking lot for low density apartment units set back off the street and at an angle.

East: mostly unimproved land used for exterior storage and truck yard.

South: Railroad tracks, then Valley Blvd. to the south of those. No access from Valley Blvd to our site.

West: Puente Creek drainage structure runs along entire west property line.

4. Provide photographs of the surrounding uses and adjoining properties.

Project Description (attach additional sheets as necessary)

1. List and describe any other permits and approvals required for project implementation, including those required by local, regional, state, and/or federal agencies:

Building Permit for the 125,344 SF Building from County of Los Angeles.

2. List any other development proposals associated with the project and its relationship to a larger project or series of projects, if any:

none

3. Demolition proposed: No: X Yes: ___ Square feet: ___

4. Tentative development schedule including start and completion dates, and phasing if proposed:

October 2015 through April 2016 - all 1 phase.

5. If commercial or office, indicate the type, whether neighborhood, city or regionally oriented, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, and location of loading facilities and anticipated hours of loading/delivery operations:

N/A

6. If industrial, manufacturing or warehouse, indicate the type and major function, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, and location of loading facilities and anticipated hours of loading/delivery operations:

Spec. Major Function: warehousing. Anticipated hours of operation: 7am - 6pm Monday through Friday. Employees Per Shift: 15

Loading Doors will face the West and not be visible from the street. Spec anticipated loading hours between 7am - 6pm

Monday through Friday.

7. If institutional, indicate the type and major function, square footage, anticipated hours of operation, estimated employees per shift and number of shifts, location of loading facilities and anticipated hours of loading/delivery operations, and community benefits to be derived from project:

N/A

8. If the project involves an exception, conditional use permit, or re-zoning application, state this and indicate clearly why the application is required:

Requesting a landscape exception of approx 2.5% due to the long/irregular shape and narrow entrance. We propose to focus the landscape heavily toward the publicly visible areas of the property. Primarily toward front of the property where the most impact from the landscape will be able to be viewed from the public ROW

Potential Environmental Impacts

If any of the following items are applicable to your project please discuss (use a separate sheet as necessary).

	Yes	No
1. Change in existing features of any drainage ways or hills, or substantial alteration of any ground contours.		X
2. Change in scenic views or vistas from existing residential areas or public lands or roads.		X
3. Change in pattern, scale, or character of the general area of the project.		X
4. Result in significant amounts of solid waste or debris.		X
5. Change in or introduction of air emissions (e.g., dust, ash, smoke, fumes) or odors in the vicinity during grading and/or construction phases.		X
6. Change in surface water (e.g., channel, stream) or ground water quality or quantity.		X
7. Substantial alteration of existing drainage patterns that could lead to flooding on- or offsite.		X
8. Substantial change in noise or vibration levels in the project vicinity during grading and/or construction phases.		X
9. Substantial change in traffic patterns and circulation in the project vicinity.		X
10. Substantial change in topography of project site and/or vicinity.		X
11. Site located on filled land or on slopes of 10 percent or more.		X
12. Use or disposal of potentially hazardous materials, such as toxic substances, flammables, or explosives.		X
13. Substantial change in demand for public services and utilities and service systems (police, fire, water, wastewater, solid waste, electricity, gas, etc.)		X
14. Substantial increase in fossil fuel consumption (electricity, oil, natural gas, etc.)		X

What studies have been prepared for this site that might assist the City in reviewing the potential environmental impacts of the project? Some examples of such studies include environmental site assessment, soils and geology study, biological resources study, cultural resources study, hydrology study, etc. These studies may have been prepared for this project or some earlier development project. Supporting documentation or studies may answer questions and facilitate the processing of your application.

Certification

I am the legal owner of the property that is the subject of this application or have been authorized by the owner to act on his/her behalf regarding this application. I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. I further acknowledge that any false statements or information presented herein may result in the revocation of any approval or permit granted on the basis of this information.

Name of preparer: Desmond Donnellan Preparer's signature: _____

Date: _____

Appendix B Air Quality and Greenhouse Gas Background and Modeling Data

Appendix

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Nelson Ave Industrial Building JN 6179

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.34	1000sqft	2.88	125,344.00	0
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Other Non-Asphalt Surfaces	29.07	1000sqft	0.67	29,074.00	0
Parking Lot	159.00	Space	1.43	63,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - - Project will construct 125.344TSF warehouse, 159 parking spaces, ~1.2 acres onsite road, and landscape 29.074TSF on 6.18AC.

Construction Phase - Construction starts 10/2015 ends 4/2016 per developer

Off-road Equipment -

Off-road Equipment -

Grading - Site is 6.18 acres

Architectural Coating - - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Vehicle Trips - Trip rate adjusted to 3.56 per TIA. C-W increased to 40 miles per SCAQMD recommendations. Trip mix changed to 20% C-W and 80% for C-NW for office/warehouse.

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Woodstoves -

Area Coating - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Sequestration -

Construction Off-road Equipment Mitigation - - SCAQMD Rule 403 - Fugitive Dust

Mobile Land Use Mitigation -

Area Mitigation - - SCAQMD Rule 1113 limits paint to 50 g/L.

Energy Mitigation - - 2013 Title 24 commercial standards are 30% more efficient than 2008 Title 24 standards

Water Mitigation - - Per CalGreen requirements the project will implement an indoor water reduction strategy to reduce water by 20%

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	104,299.00	66,488.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	312,897.00	188,016.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_Nonresidential_Interior	312897	188016

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstructionPhase	NumDays	230.00	92.00
tblGrading	AcresOfGrading	10.00	6.18
tblLandUse	LandUseSquareFeet	125,340.00	125,344.00
tblLandUse	LandUseSquareFeet	29,070.00	29,074.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MDV	0.13	0.11

tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CNW_TTP	41.00	80.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	20.00
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	4.6426	40.5091	32.3463	0.0531	6.5175	2.3300	8.8475	3.3901	2.1436	5.5337	0.0000	5,118.5201	5,118.5201	0.9450	0.0000	5,138.3657
2016	29.9616	32.9958	30.8882	0.0531	1.5487	2.0396	3.5883	0.4160	1.9149	2.3309	0.0000	5,039.3414	5,039.3414	0.7454	0.0000	5,054.9950
Total	**34.6041**	**73.5048**	**63.2345**	**0.1061**	**8.0661**	**4.3697**	**12.4358**	**3.8061**	**4.0585**	**7.8646**	**0.0000**	**10,157.8615**	**10,157.8615**	**1.6904**	**0.0000**	**10,193.3607**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	4.6426	40.5091	32.3463	0.0531	2.6441	2.3300	4.9741	1.3493	2.1436	3.4929	0.0000	5,118.5201	5,118.5201	0.9450	0.0000	5,138.3657
2016	29.9616	32.9958	30.8882	0.0531	1.5487	2.0396	3.5883	0.4160	1.9149	2.3309	0.0000	5,039.3414	5,039.3414	0.7454	0.0000	5,054.9950
Total	**34.6041**	**73.5048**	**63.2345**	**0.1061**	**4.1927**	**4.3697**	**8.5624**	**1.7653**	**4.0585**	**5.8238**	**0.0000**	**10,157.8615**	**10,157.8615**	**1.6904**	**0.0000**	**10,193.3607**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.02**	**0.00**	**31.15**	**53.62**	**0.00**	**25.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Energy	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886
Mobile	2.2776	12.4356	29.9331	0.0768	4.3812	0.1852	4.5664	1.1728	0.1703	1.3431		6,999.5687	6,999.5687	0.2293		7,004.3830
Total	**8.2990**	**12.4665**	**29.9918**	**0.0770**	**4.3812**	**0.1877**	**4.5689**	**1.1728**	**0.1728**	**1.3455**		**7,036.4024**	**7,036.4024**	**0.2302**	**6.7000e-004**	**7,041.4446**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Energy	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
Mobile	2.2776	12.4356	29.9331	0.0768	4.3812	0.1852	4.5664	1.1728	0.1703	1.3431		6,999.5687	6,999.5687	0.2293		7,004.3830
Total	**8.2980**	**12.4576**	**29.9844**	**0.0770**	**4.3812**	**0.1870**	**4.5682**	**1.1728**	**0.1721**	**1.3448**		**7,025.7365**	**7,025.7365**	**0.2300**	**4.8000e-004**	**7,030.7138**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.01**	**0.07**	**0.02**	**0.06**	**0.00**	**0.36**	**0.01**	**0.00**	**0.39**	**0.05**	**0.00**	**0.15**	**0.15**	**0.09**	**28.36**	**0.15**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	10/1/2015	10/28/2015	5	20	
2	Building Construction	Building Construction	10/29/2015	3/4/2016	5	92	
3	Paving	Paving	3/5/2016	4/1/2016	5	20	
4	Architectural Coating	Architectural Coating	4/2/2016	4/29/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.18

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,016; Non-Residential Outdoor: 66,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	44.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3498	0.0000	6.3498	3.3456	0.0000	3.3456			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.3498**	**2.3284**	**8.6781**	**3.3456**	**2.1421**	**5.4877**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

3.2 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4764	0.0000	2.4764	1.3048	0.0000	1.3048			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**2.4764**	**2.3284**	**4.8048**	**1.3048**	**2.1421**	**3.4469**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0930	1.1469	2.1800e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		190.7132	190.7132	0.0109		190.9418
Total	**0.0740**	**0.0930**	**1.1469**	**2.1800e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**190.7132**	**190.7132**	**0.0109**		**190.9418**

3.3 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4213	4.3507	4.8851	9.6800e-003	0.2743	0.0729	0.3472	0.0780	0.0671	0.1451		979.5225	979.5225	7.8600e-003		979.6877
Worker	0.5622	0.7067	8.7166	0.0166	1.2743	0.0127	1.2870	0.3379	0.0117	0.3496		1,449.4205	1,449.4205	0.0827		1,451.1576
Total	**0.9835**	**5.0575**	**13.6018**	**0.0263**	**1.5485**	**0.0857**	**1.6342**	**0.4160**	**0.0787**	**0.4947**		**2,428.9430**	**2,428.9430**	**0.0906**		**2,430.8453**

3.3 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4213	4.3507	4.8851	9.6800e-003	0.2743	0.0729	0.3472	0.0780	0.0671	0.1451		979.5225	979.5225	7.8600e-003		979.6877
Worker	0.5622	0.7067	8.7166	0.0166	1.2743	0.0127	1.2870	0.3379	0.0117	0.3496		1,449.4205	1,449.4205	0.0827		1,451.1576
Total	**0.9835**	**5.0575**	**13.6018**	**0.0263**	**1.5485**	**0.0857**	**1.6342**	**0.4160**	**0.0787**	**0.4947**		**2,428.9430**	**2,428.9430**	**0.0906**		**2,430.8453**

3.3 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3707	3.8504	4.4734	9.6700e-003	0.2744	0.0602	0.3346	0.0781	0.0554	0.1334		968.9707	968.9707	7.1100e-003		969.1201
Worker	0.5077	0.6390	7.9081	0.0166	1.2743	0.0121	1.2863	0.3379	0.0111	0.3490		1,401.0843	1,401.0843	0.0763		1,402.6860
Total	**0.8785**	**4.4894**	**12.3815**	**0.0263**	**1.5487**	**0.0722**	**1.6209**	**0.4160**	**0.0664**	**0.4824**		**2,370.0550**	**2,370.0550**	**0.0834**		**2,371.8060**

3.3 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3707	3.8504	4.4734	9.6700e-003	0.2744	0.0602	0.3346	0.0781	0.0554	0.1334		968.9707	968.9707	7.1100e-003		969.1201
Worker	0.5077	0.6390	7.9081	0.0166	1.2743	0.0121	1.2863	0.3379	0.0111	0.3490		1,401.0843	1,401.0843	0.0763		1,402.6860
Total	**0.8785**	**4.4894**	**12.3815**	**0.0263**	**1.5487**	**0.0722**	**1.6209**	**0.4160**	**0.0664**	**0.4824**		**2,370.0550**	**2,370.0550**	**0.0834**		**2,371.8060**

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4343**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

3.4 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4343**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0668	0.0841	1.0406	2.1800e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		184.3532	184.3532	0.0100		184.5639
Total	**0.0668**	**0.0841**	**1.0406**	**2.1800e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**184.3532**	**184.3532**	**0.0100**		**184.5639**

3.5 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**29.8591**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1024	0.1289	1.5955	3.3400e-003	0.2571	2.4300e-003	0.2595	0.0682	2.2300e-003	0.0704		282.6749	282.6749	0.0154		282.9980
Total	**0.1024**	**0.1289**	**1.5955**	**3.3400e-003**	**0.2571**	**2.4300e-003**	**0.2595**	**0.0682**	**2.2300e-003**	**0.0704**		**282.6749**	**282.6749**	**0.0154**		**282.9980**

3.5 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**29.8591**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1024	0.1289	1.5955	3.3400e-003	0.2571	2.4300e-003	0.2595	0.0682	2.2300e-003	0.0704		282.6749	282.6749	0.0154		282.9980
Total	**0.1024**	**0.1289**	**1.5955**	**3.3400e-003**	**0.2571**	**2.4300e-003**	**0.2595**	**0.0682**	**2.2300e-003**	**0.0704**		**282.6749**	**282.6749**	**0.0154**		**282.9980**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2776	12.4356	29.9331	0.0768	4.3812	0.1852	4.5664	1.1728	0.1703	1.3431		6,999.5687	6,999.5687	0.2293		7,004.3830
Unmitigated	2.2776	12.4356	29.9331	0.0768	4.3812	0.1852	4.5664	1.1728	0.1703	1.3431		6,999.5687	6,999.5687	0.2293		7,004.3830

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	446.21	446.21	446.21	2,048,189	2,048,189
Total	446.21	446.21	446.21	2,048,189	2,048,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	20.00	0.00	80.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.466281	0.051062	0.155757	0.109674	0.068886	0.011114	0.039000	0.095000	0.000000	0.000000	0.003225	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
NaturalGas Unmitigated	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	312.501	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886
Total		**3.3700e-003**	**0.0306**	**0.0257**	**1.8000e-004**		**2.3300e-003**	**2.3300e-003**		**2.3300e-003**	**2.3300e-003**		**36.7649**	**36.7649**	**7.0000e-004**	**6.7000e-004**	**36.9886**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.221842	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.3900e-003**	**0.0218**	**0.0183**	**1.3000e-004**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**		**26.0990**	**26.0990**	**5.0000e-004**	**4.8000e-004**	**26.2579**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Unmitigated	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3517					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2100e-003	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Total	**6.0181**	**3.2000e-004**	**0.0330**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0689**	**0.0689**	**1.9000e-004**		**0.0730**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3517					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2100e-003	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Total	**6.0181**	**3.2000e-004**	**0.0330**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0689**	**0.0689**	**1.9000e-004**		**0.0730**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Nelson Ave Industrial Building JN 6179

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.34	1000sqft	2.88	125,344.00	0
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Other Non-Asphalt Surfaces	29.07	1000sqft	0.67	29,074.00	0
Parking Lot	159.00	Space	1.43	63,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - - Project will construct 125.344TSF warehouse, 159 parking spaces, ~1.2 acres onsite road, and landscape 29.074TSF on 6.18AC.

Construction Phase - Construction starts 10/2015 ends 4/2016 per developer

Off-road Equipment -

Off-road Equipment -

Grading - Site is 6.18 acres

Architectural Coating - - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Vehicle Trips - Trip rate adjusted to 3.56 per TIA. C-W increased to 40 miles per SCAQMD recommendations. Trip mix changed to 20% C-W and 80% for C-NW for office/warehouse.

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Woodstoves -

Area Coating - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Sequestration -

Construction Off-road Equipment Mitigation - - SCAQMD Rule 403 - Fugitive Dust

Mobile Land Use Mitigation -

Area Mitigation - - SCAQMD Rule 1113 limits paint to 50 g/L.

Energy Mitigation - - 2013 Title 24 commercial standards are 30% more efficient than 2008 Title 24 standards

Water Mitigation - - Per CalGreen requirements the project will implement an indoor water reduction strategy to reduce water by 20%

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	104,299.00	66,488.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	312,897.00	188,016.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_Nonresidential_Interior	312897	188016

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstructionPhase	NumDays	230.00	92.00
tblGrading	AcresOfGrading	10.00	6.18
tblLandUse	LandUseSquareFeet	125,340.00	125,344.00
tblLandUse	LandUseSquareFeet	29,070.00	29,074.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MDV	0.13	0.11

tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CNW_TTP	41.00	80.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	20.00
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	4.7113	40.5192	32.8275	0.0521	6.5175	2.3300	8.8475	3.3901	2.1436	5.5337	0.0000	5,029.1247	5,029.1247	0.9450	0.0000	5,048.9703
2016	29.9657	33.1620	31.3787	0.0521	1.5487	2.0403	3.5889	0.4160	1.9155	2.3315	0.0000	4,952.6471	4,952.6471	0.7456	0.0000	4,968.3051
Total	**34.6769**	**73.6812**	**64.2062**	**0.1041**	**8.0661**	**4.3703**	**12.4364**	**3.8061**	**4.0591**	**7.8652**	**0.0000**	**9,981.7719**	**9,981.7719**	**1.6907**	**0.0000**	**10,017.2754**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	4.7113	40.5192	32.8275	0.0521	2.6441	2.3300	4.9741	1.3493	2.1436	3.4929	0.0000	5,029.1247	5,029.1247	0.9450	0.0000	5,048.9703
2016	29.9657	33.1620	31.3787	0.0521	1.5487	2.0403	3.5889	0.4160	1.9155	2.3315	0.0000	4,952.6471	4,952.6471	0.7456	0.0000	4,968.3051
Total	**34.6769**	**73.6812**	**64.2062**	**0.1041**	**4.1927**	**4.3703**	**8.5630**	**1.7653**	**4.0591**	**5.8244**	**0.0000**	**9,981.7719**	**9,981.7719**	**1.6907**	**0.0000**	**10,017.2754**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.02**	**0.00**	**31.15**	**53.62**	**0.00**	**25.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Energy	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886
Mobile	2.3899	12.9882	30.5415	0.0742	4.3812	0.1860	4.5672	1.1728	0.1710	1.3438		6,769.9517	6,769.9517	0.2296		6,774.7732
Total	**8.4113**	**13.0192**	**30.6002**	**0.0743**	**4.3812**	**0.1884**	**4.5696**	**1.1728**	**0.1735**	**1.3462**		**6,806.7854**	**6,806.7854**	**0.2305**	**6.7000e-004**	**6,811.8347**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Energy	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
Mobile	2.3899	12.9882	30.5415	0.0742	4.3812	0.1860	4.5672	1.1728	0.1710	1.3438		6,769.9517	6,769.9517	0.2296		6,774.7732
Total	**8.4103**	**13.0103**	**30.5927**	**0.0743**	**4.3812**	**0.1877**	**4.5689**	**1.1728**	**0.1728**	**1.3455**		**6,796.1196**	**6,796.1196**	**0.2303**	**4.8000e-004**	**6,801.1040**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.01**	**0.07**	**0.02**	**0.07**	**0.00**	**0.36**	**0.01**	**0.00**	**0.39**	**0.05**	**0.00**	**0.16**	**0.16**	**0.09**	**28.36**	**0.16**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	10/1/2015	10/28/2015	5	20	
2	Building Construction	Building Construction	10/29/2015	3/4/2016	5	92	
3	Paving	Paving	3/5/2016	4/1/2016	5	20	
4	Architectural Coating	Architectural Coating	4/2/2016	4/29/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.18

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,016; Non-Residential Outdoor: 66,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	44.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3498	0.0000	6.3498	3.3456	0.0000	3.3456			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.3498**	**2.3284**	**8.6781**	**3.3456**	**2.1421**	**5.4877**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

3.2 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4764	0.0000	2.4764	1.3048	0.0000	1.3048			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**2.4764**	**2.3284**	**4.8048**	**1.3048**	**2.1421**	**3.4469**	**0.0000**	**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0771	0.1031	1.0807	2.0600e-003	0.1677	1.6800e-003	0.1693	0.0445	1.5300e-003	0.0460		180.0161	180.0161	0.0109		180.2447
Total	**0.0771**	**0.1031**	**1.0807**	**2.0600e-003**	**0.1677**	**1.6800e-003**	**0.1693**	**0.0445**	**1.5300e-003**	**0.0460**		**180.0161**	**180.0161**	**0.0109**		**180.2447**

3.3 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4663	4.4629	5.8697	9.6100e-003	0.2743	0.0738	0.3481	0.0780	0.0679	0.1459		971.4250	971.4250	8.0800e-003		971.5947
Worker	0.5859	0.7837	8.2133	0.0156	1.2743	0.0127	1.2870	0.3379	0.0117	0.3496		1,368.1226	1,368.1226	0.0827		1,369.8597
Total	**1.0522**	**5.2466**	**14.0830**	**0.0253**	**1.5485**	**0.0866**	**1.6351**	**0.4160**	**0.0796**	**0.4955**		**2,339.5476**	**2,339.5476**	**0.0908**		**2,341.4544**

3.3 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4663	4.4629	5.8697	9.6100e-003	0.2743	0.0738	0.3481	0.0780	0.0679	0.1459		971.4250	971.4250	8.0800e-003		971.5947
Worker	0.5859	0.7837	8.2133	0.0156	1.2743	0.0127	1.2870	0.3379	0.0117	0.3496		1,368.1226	1,368.1226	0.0827		1,369.8597
Total	**1.0522**	**5.2466**	**14.0830**	**0.0253**	**1.5485**	**0.0866**	**1.6351**	**0.4160**	**0.0796**	**0.4955**		**2,339.5476**	**2,339.5476**	**0.0908**		**2,341.4544**

3.3 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4090	3.9471	5.4464	9.6000e-003	0.2744	0.0608	0.3352	0.0781	0.0559	0.1340		960.9253	960.9253	7.3200e-003		961.0789
Worker	0.5282	0.7086	7.4257	0.0156	1.2743	0.0121	1.2863	0.3379	0.0111	0.3490		1,322.4355	1,322.4355	0.0763		1,324.0372
Total	**0.9372**	**4.6557**	**12.8721**	**0.0252**	**1.5487**	**0.0729**	**1.6215**	**0.4160**	**0.0670**	**0.4830**		**2,283.3607**	**2,283.3607**	**0.0836**		**2,285.1161**

3.3 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4090	3.9471	5.4464	9.6000e-003	0.2744	0.0608	0.3352	0.0781	0.0559	0.1340		960.9253	960.9253	7.3200e-003		961.0789
Worker	0.5282	0.7086	7.4257	0.0156	1.2743	0.0121	1.2863	0.3379	0.0111	0.3490		1,322.4355	1,322.4355	0.0763		1,324.0372
Total	**0.9372**	**4.6557**	**12.8721**	**0.0252**	**1.5487**	**0.0729**	**1.6215**	**0.4160**	**0.0670**	**0.4830**		**2,283.3607**	**2,283.3607**	**0.0836**		**2,285.1161**

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4343**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.4 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.3445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4343**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0695	0.0932	0.9771	2.0600e-003	0.1677	1.5900e-003	0.1693	0.0445	1.4600e-003	0.0459		174.0047	174.0047	0.0100		174.2154
Total	**0.0695**	**0.0932**	**0.9771**	**2.0600e-003**	**0.1677**	**1.5900e-003**	**0.1693**	**0.0445**	**1.4600e-003**	**0.0459**		**174.0047**	**174.0047**	**0.0100**		**174.2154**

3.5 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**29.8591**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.1430	1.4982	3.1500e-003	0.2571	2.4300e-003	0.2595	0.0682	2.2300e-003	0.0704		266.8072	266.8072	0.0154		267.1303
Total	**0.1066**	**0.1430**	**1.4982**	**3.1500e-003**	**0.2571**	**2.4300e-003**	**0.2595**	**0.0682**	**2.2300e-003**	**0.0704**		**266.8072**	**266.8072**	**0.0154**		**267.1303**

3.5 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.4907					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**29.8591**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.1430	1.4982	3.1500e-003	0.2571	2.4300e-003	0.2595	0.0682	2.2300e-003	0.0704		266.8072	266.8072	0.0154		267.1303
Total	**0.1066**	**0.1430**	**1.4982**	**3.1500e-003**	**0.2571**	**2.4300e-003**	**0.2595**	**0.0682**	**2.2300e-003**	**0.0704**		**266.8072**	**266.8072**	**0.0154**		**267.1303**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3899	12.9882	30.5415	0.0742	4.3812	0.1860	4.5672	1.1728	0.1710	1.3438		6,769.9517	6,769.9517	0.2296		6,774.7732
Unmitigated	2.3899	12.9882	30.5415	0.0742	4.3812	0.1860	4.5672	1.1728	0.1710	1.3438		6,769.9517	6,769.9517	0.2296		6,774.7732

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	446.21	446.21	446.21	2,048,189	2,048,189
Total	446.21	446.21	446.21	2,048,189	2,048,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	20.00	0.00	80.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.466281	0.051062	0.155757	0.109674	0.068886	0.011114	0.039000	0.095000	0.000000	0.000000	0.003225	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
NaturalGas Unmitigated	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	312.501	3.3700e-003	0.0306	0.0257	1.8000e-004		2.3300e-003	2.3300e-003		2.3300e-003	2.3300e-003		36.7649	36.7649	7.0000e-004	6.7000e-004	36.9886
Total		**3.3700e-003**	**0.0306**	**0.0257**	**1.8000e-004**		**2.3300e-003**	**2.3300e-003**		**2.3300e-003**	**2.3300e-003**		**36.7649**	**36.7649**	**7.0000e-004**	**6.7000e-004**	**36.9886**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.221842	2.3900e-003	0.0218	0.0183	1.3000e-004		1.6500e-003	1.6500e-003		1.6500e-003	1.6500e-003		26.0990	26.0990	5.0000e-004	4.8000e-004	26.2579
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.3900e-003**	**0.0218**	**0.0183**	**1.3000e-004**		**1.6500e-003**	**1.6500e-003**		**1.6500e-003**	**1.6500e-003**		**26.0990**	**26.0990**	**5.0000e-004**	**4.8000e-004**	**26.2579**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Unmitigated	6.0181	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3517					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2100e-003	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Total	**6.0181**	**3.2000e-004**	**0.0330**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0689**	**0.0689**	**1.9000e-004**		**0.0730**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6631					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3517					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.2100e-003	3.2000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0689	0.0689	1.9000e-004		0.0730
Total	**6.0181**	**3.2000e-004**	**0.0330**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0689**	**0.0689**	**1.9000e-004**		**0.0730**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Nelson Ave Industrial Building JN 6179

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	125.34	1000sqft	2.88	125,344.00	0
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Other Non-Asphalt Surfaces	29.07	1000sqft	0.67	29,074.00	0
Parking Lot	159.00	Space	1.43	63,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - - Project will construct 125.344TSF warehouse, 159 parking spaces, ~1.2 acres onsite road, and landscape 29.074TSF on 6.18AC.

Construction Phase - Construction starts 10/2015 ends 4/2016 per developer

Off-road Equipment -

Off-road Equipment -

Grading - Site is 6.18 acres

Architectural Coating - - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Vehicle Trips - Trip rate adjusted to 3.56 per TIA. C-W increased to 40 miles per SCAQMD recommendations. Trip mix changed to 20% C-W and 80% for C-NW for office/warehouse.

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Vechicle Emission Factors - - Fleet mix changed per TIA

Woodstoves -

Area Coating - SCAQMD Rule 1113 limits paint to 50 g/L. Interior to be painted = 188,016 SF, exterior (including 6% parking lot) = 66,488 SF

Sequestration -

Construction Off-road Equipment Mitigation - - SCAQMD Rule 403 - Fugitive Dust

Mobile Land Use Mitigation -

Area Mitigation - - SCAQMD Rule 1113 limits paint to 50 g/L.

Energy Mitigation - - 2013 Title 24 commercial standards are 30% more efficient than 2008 Title 24 standards

Water Mitigation - - Per CalGreen requirements the project will implement an indoor water reduction strategy to reduce water by 20%

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	104,299.00	66,488.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	312,897.00	188,016.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_Nonresidential_Interior	312897	188016

tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	50
tblConstructionPhase	NumDays	230.00	92.00
tblGrading	AcresOfGrading	10.00	6.18
tblLandUse	LandUseSquareFeet	125,340.00	125,344.00
tblLandUse	LandUseSquareFeet	29,070.00	29,074.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LDT2	0.18	0.16
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD1	0.04	0.07
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	LHD2	6.2830e-003	0.01
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MCY	3.6910e-003	3.2250e-003
tblVehicleEF	MDV	0.13	0.11

tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MDV	0.13	0.11
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CNW_TTP	41.00	80.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	20.00
tblVehicleTrips	ST_TR	2.59	3.56
tblVehicleTrips	SU_TR	2.59	3.56
tblVehicleTrips	WD_TR	2.59	3.56

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.1463	1.2191	1.0316	1.5200e-003	0.1001	0.0740	0.1740	0.0433	0.0690	0.1123	0.0000	135.5357	135.5357	0.0246	0.0000	136.0512
2016	0.4235	1.0150	0.9126	1.5100e-003	0.0391	0.0615	0.1006	0.0105	0.0577	0.0682	0.0000	131.5095	131.5095	0.0224	0.0000	131.9804
Total	**0.5698**	**2.2341**	**1.9442**	**3.0300e-003**	**0.1392**	**0.1355**	**0.2747**	**0.0538**	**0.1267**	**0.1805**	**0.0000**	**267.0452**	**267.0452**	**0.0470**	**0.0000**	**268.0316**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.1463	1.2191	1.0316	1.5200e-003	0.0613	0.0740	0.1353	0.0229	0.0690	0.0919	0.0000	135.5356	135.5356	0.0246	0.0000	136.0511
2016	0.4235	1.0150	0.9126	1.5100e-003	0.0391	0.0615	0.1006	0.0105	0.0577	0.0682	0.0000	131.5094	131.5094	0.0224	0.0000	131.9803
Total	**0.5698**	**2.2341**	**1.9442**	**3.0300e-003**	**0.1004**	**0.1355**	**0.2360**	**0.0334**	**0.1267**	**0.1601**	**0.0000**	**267.0450**	**267.0450**	**0.0470**	**0.0000**	**268.0314**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**27.83**	**0.00**	**14.10**	**37.94**	**0.00**	**11.31**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0981	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003
Energy	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	178.4932	178.4932	8.0400e-003	1.7500e-003	179.2050
Mobile	0.4184	2.4072	5.5527	0.0136	0.7821	0.0337	0.8158	0.2097	0.0310	0.2407	0.0000	1,127.2265	1,127.2265	0.0378	0.0000	1,128.0210
Waste						0.0000	0.0000		0.0000	0.0000	23.9164	0.0000	23.9164	1.4134	0.0000	53.5982
Water						0.0000	0.0000		0.0000	0.0000	9.1956	108.0028	117.1984	0.9494	0.0233	144.3683
Total	**1.5171**	**2.4128**	**5.5615**	**0.0137**	**0.7821**	**0.0342**	**0.8162**	**0.2097**	**0.0314**	**0.2411**	**33.1120**	**1,413.7304**	**1,446.8423**	**2.4088**	**0.0251**	**1,505.2007**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0981	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003
Energy	4.4000e-004	3.9700e-003	3.3300e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	168.2263	168.2263	7.6200e-003	1.6400e-003	168.8941
Mobile	0.4184	2.4072	5.5527	0.0136	0.7821	0.0337	0.8158	0.2097	0.0310	0.2407	0.0000	1,127.2265	1,127.2265	0.0378	0.0000	1,128.0210
Waste						0.0000	0.0000		0.0000	0.0000	23.9164	0.0000	23.9164	1.4134	0.0000	53.5982
Water						0.0000	0.0000		0.0000	0.0000	7.3565	83.4034	90.7598	0.7594	0.0186	112.4840
Total	**1.5169**	**2.4112**	**5.5602**	**0.0136**	**0.7821**	**0.0340**	**0.8161**	**0.2097**	**0.0313**	**0.2410**	**31.2729**	**1,378.8640**	**1,410.1369**	**2.2183**	**0.0203**	**1,463.0055**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.01**	**0.07**	**0.02**	**0.07**	**0.00**	**0.35**	**0.01**	**0.00**	**0.38**	**0.05**	**5.55**	**2.47**	**2.54**	**7.91**	**19.18**	**2.80**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	10/1/2015	10/28/2015	5	20	
2	Building Construction	Building Construction	10/29/2015	3/4/2016	5	92	
3	Paving	Paving	3/5/2016	4/1/2016	5	20	
4	Architectural Coating	Architectural Coating	4/2/2016	4/29/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.18

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 188,016; Non-Residential Outdoor: 66,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	44.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0635	0.0000	0.0635	0.0335	0.0000	0.0335	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3860	28.3860	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0635**	**0.0233**	**0.0868**	**0.0335**	**0.0214**	**0.0549**	**0.0000**	**28.3860**	**28.3860**	**8.4700e-003**	**0.0000**	**28.5639**

3.2 Grading - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0248	0.0000	0.0248	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3859	28.3859	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0248**	**0.0233**	**0.0480**	**0.0131**	**0.0214**	**0.0345**	**0.0000**	**28.3859**	**28.3859**	**8.4700e-003**	**0.0000**	**28.5639**

3.2 Grading - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3000e-004	1.0600e-003	0.0110	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	2.0000e-005	4.5000e-004	0.0000	1.6593	1.6593	1.0000e-004	0.0000	1.6614
Total	**7.3000e-004**	**1.0600e-003**	**0.0110**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**2.0000e-005**	**4.5000e-004**	**0.0000**	**1.6593**	**1.6593**	**1.0000e-004**	**0.0000**	**1.6614**

3.3 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0842	0.6907	0.4311	6.2000e-004		0.0487	0.0487		0.0458	0.0458	0.0000	56.1187	56.1187	0.0141	0.0000	56.4144
Total	**0.0842**	**0.6907**	**0.4311**	**6.2000e-004**		**0.0487**	**0.0487**		**0.0458**	**0.0458**	**0.0000**	**56.1187**	**56.1187**	**0.0141**	**0.0000**	**56.4144**

3.3 Building Construction - 2015

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.1047	0.1300	2.2000e-004	6.2000e-003	1.6900e-003	7.8900e-003	1.7700e-003	1.5500e-003	3.3200e-003	0.0000	20.3670	20.3670	1.7000e-004	0.0000	20.3705
Worker	0.0127	0.0185	0.1927	3.7000e-004	0.0287	2.9000e-004	0.0290	7.6300e-003	2.7000e-004	7.9000e-003	0.0000	29.0047	29.0047	1.7300e-003	0.0000	29.0410
Total	**0.0231**	**0.1232**	**0.3227**	**5.9000e-004**	**0.0349**	**1.9800e-003**	**0.0369**	**9.4000e-003**	**1.8200e-003**	**0.0112**	**0.0000**	**49.3717**	**49.3717**	**1.9000e-003**	**0.0000**	**49.4115**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0842	0.6907	0.4311	6.2000e-004		0.0487	0.0487		0.0458	0.0458	0.0000	56.1186	56.1186	0.0141	0.0000	56.4143
Total	**0.0842**	**0.6907**	**0.4311**	**6.2000e-004**		**0.0487**	**0.0487**		**0.0458**	**0.0458**	**0.0000**	**56.1186**	**56.1186**	**0.0141**	**0.0000**	**56.4143**

3.3 Building Construction - 2015

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.1047	0.1300	2.2000e-004	6.2000e-003	1.6900e-003	7.8900e-003	1.7700e-003	1.5500e-003	3.3200e-003	0.0000	20.3670	20.3670	1.7000e-004	0.0000	20.3705
Worker	0.0127	0.0185	0.1927	3.7000e-004	0.0287	2.9000e-004	0.0290	7.6300e-003	2.7000e-004	7.9000e-003	0.0000	29.0047	29.0047	1.7300e-003	0.0000	29.0410
Total	**0.0231**	**0.1232**	**0.3227**	**5.9000e-004**	**0.0349**	**1.9800e-003**	**0.0369**	**9.4000e-003**	**1.8200e-003**	**0.0112**	**0.0000**	**49.3717**	**49.3717**	**1.9000e-003**	**0.0000**	**49.4115**

3.3 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0783	0.6557	0.4257	6.2000e-004		0.0453	0.0453		0.0425	0.0425	0.0000	55.6953	55.6953	0.0138	0.0000	55.9854
Total	**0.0783**	**0.6557**	**0.4257**	**6.2000e-004**		**0.0453**	**0.0453**		**0.0425**	**0.0425**	**0.0000**	**55.6953**	**55.6953**	**0.0138**	**0.0000**	**55.9854**

3.3 Building Construction - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1000e-003	0.0926	0.1203	2.2000e-004	6.2100e-003	1.3900e-003	7.6000e-003	1.7700e-003	1.2800e-003	3.0500e-003	0.0000	20.1473	20.1473	1.5000e-004	0.0000	20.1505
Worker	0.0115	0.0167	0.1744	3.7000e-004	0.0287	2.8000e-004	0.0290	7.6300e-003	2.5000e-004	7.8900e-003	0.0000	28.0365	28.0365	1.5900e-003	0.0000	28.0699
Total	**0.0206**	**0.1093**	**0.2947**	**5.9000e-004**	**0.0349**	**1.6700e-003**	**0.0366**	**9.4000e-003**	**1.5300e-003**	**0.0109**	**0.0000**	**48.1838**	**48.1838**	**1.7400e-003**	**0.0000**	**48.2204**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0783	0.6556	0.4257	6.2000e-004		0.0453	0.0453		0.0425	0.0425	0.0000	55.6953	55.6953	0.0138	0.0000	55.9853
Total	**0.0783**	**0.6556**	**0.4257**	**6.2000e-004**		**0.0453**	**0.0453**		**0.0425**	**0.0425**	**0.0000**	**55.6953**	**55.6953**	**0.0138**	**0.0000**	**55.9853**

3.3 Building Construction - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.1000e-003	0.0926	0.1203	2.2000e-004	6.2100e-003	1.3900e-003	7.6000e-003	1.7700e-003	1.2800e-003	3.0500e-003	0.0000	20.1473	20.1473	1.5000e-004	0.0000	20.1505
Worker	0.0115	0.0167	0.1744	3.7000e-004	0.0287	2.8000e-004	0.0290	7.6300e-003	2.5000e-004	7.8900e-003	0.0000	28.0365	28.0365	1.5900e-003	0.0000	28.0699
Total	**0.0206**	**0.1093**	**0.2947**	**5.9000e-004**	**0.0349**	**1.6700e-003**	**0.0366**	**9.4000e-003**	**1.5300e-003**	**0.0109**	**0.0000**	**48.1838**	**48.1838**	**1.7400e-003**	**0.0000**	**48.2204**

3.4 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	3.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0244**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.4 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	3.4500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0244**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

3.4 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	9.6000e-004	9.9800e-003	2.0000e-005	1.6400e-003	2.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.6039	1.6039	9.0000e-005	0.0000	1.6058
Total	**6.6000e-004**	**9.6000e-004**	**9.9800e-003**	**2.0000e-005**	**1.6400e-003**	**2.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.6039**	**1.6039**	**9.0000e-005**	**0.0000**	**1.6058**

3.5 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.2986**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.5 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	1.4700e-003	0.0153	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4593	2.4593	1.4000e-004	0.0000	2.4623
Total	**1.0000e-003**	**1.4700e-003**	**0.0153**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5400e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4593**	**2.4593**	**1.4000e-004**	**0.0000**	**2.4623**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2949					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.2986**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

3.5 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-003	1.4700e-003	0.0153	3.0000e-005	2.5200e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4593	2.4593	1.4000e-004	0.0000	2.4623
Total	**1.0000e-003**	**1.4700e-003**	**0.0153**	**3.0000e-005**	**2.5200e-003**	**2.0000e-005**	**2.5400e-003**	**6.7000e-004**	**2.0000e-005**	**6.9000e-004**	**0.0000**	**2.4593**	**2.4593**	**1.4000e-004**	**0.0000**	**2.4623**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4184	2.4072	5.5527	0.0136	0.7821	0.0337	0.8158	0.2097	0.0310	0.2407	0.0000	1,127.2265	1,127.2265	0.0378	0.0000	1,128.0210
Unmitigated	0.4184	2.4072	5.5527	0.0136	0.7821	0.0337	0.8158	0.2097	0.0310	0.2407	0.0000	1,127.2265	1,127.2265	0.0378	0.0000	1,128.0210

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	446.21	446.21	446.21	2,048,189	2,048,189
Total	446.21	446.21	446.21	2,048,189	2,048,189

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	20.00	0.00	80.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.466281	0.051062	0.155757	0.109674	0.068886	0.011114	0.039000	0.095000	0.000000	0.000000	0.003225	0.000000	0.000000

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	163.9053	163.9053	7.5300e-003	1.5600e-003	164.5468
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	172.4064	172.4064	7.9200e-003	1.6400e-003	173.0811
NaturalGas Mitigated	4.4000e-004	3.9700e-003	3.3300e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.3210	4.3210	8.0000e-005	8.0000e-005	4.3473
NaturalGas Unmitigated	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0868	6.0868	1.2000e-004	1.1000e-004	6.1239

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	114063	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	6.0868	6.0868	1.2000e-004	1.1000e-004	6.1239
Total		**6.2000e-004**	**5.5900e-003**	**4.7000e-003**	**3.0000e-005**		**4.2000e-004**	**4.2000e-004**		**4.2000e-004**	**4.2000e-004**	**0.0000**	**6.0868**	**6.0868**	**1.2000e-004**	**1.1000e-004**	**6.1239**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	80972.2	4.4000e-004	3.9700e-003	3.3300e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	4.3210	4.3210	8.0000e-005	8.0000e-005	4.3473
Total		**4.4000e-004**	**3.9700e-003**	**3.3300e-003**	**2.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**4.3210**	**4.3210**	**8.0000e-005**	**8.0000e-005**	**4.3473**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	55968	16.0162	7.4000e-004	1.5000e-004	16.0789
Unrefrigerated Warehouse-No Rail	546500	156.3902	7.1900e-003	1.4900e-003	157.0022
Total		**172.4064**	**7.9300e-003**	**1.6400e-003**	**173.0811**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	55968	16.0162	7.4000e-004	1.5000e-004	16.0789
Unrefrigerated Warehouse-No Rail	516793	147.8891	6.8000e-003	1.4100e-003	148.4679
Total		**163.9053**	**7.5400e-003**	**1.5600e-003**	**164.5468**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0981	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003
Unmitigated	1.0981	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-004	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003
Total	**1.0981**	**4.0000e-005**	**4.1200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8100e-003**	**7.8100e-003**	**2.0000e-005**	**0.0000**	**8.2700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-004	4.0000e-005	4.1200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8100e-003	7.8100e-003	2.0000e-005	0.0000	8.2700e-003
Total	**1.0981**	**4.0000e-005**	**4.1200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8100e-003**	**7.8100e-003**	**2.0000e-005**	**0.0000**	**8.2700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	90.7598	0.7594	0.0186	112.4840
Unmitigated	117.1984	0.9494	0.0233	144.3683

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	28.9849 / 0	117.1984	0.9494	0.0233	144.3683
Total		**117.1984**	**0.9494**	**0.0233**	**144.3683**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.1879 / 0	90.7598	0.7594	0.0186	112.4840
Total		**90.7598**	**0.7594**	**0.0186**	**112.4840**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.9164	1.4134	0.0000	53.5982
Unmitigated	23.9164	1.4134	0.0000	53.5982

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	117.82	23.9164	1.4134	0.0000	53.5982
Total		**23.9164**	**1.4134**	**0.0000**	**53.5982**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	117.82	23.9164	1.4134	0.0000	53.5982
Total		**23.9164**	**1.4134**	**0.0000**	**53.5982**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix C Health Risk Assessment

Appendix

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Emission Assumptions **DPM-SR** Emissions
Donlon

Facility Operations

Buildout year: 2016

Emission Factors

1) Onsite Vehicle Emissions

a) Truck

(1) EMFAC2011

(a) Annual Meteorology

Temperature: 62.1 degF

Relative Humidity: 50%

(b) Calculations for LA County

(c) Truck Mix

4+ axle heavy-heavy duty diesel trucks (HHDT)

4 axle diesel trucks (MHDT)

2 axle diesel trucks (LHDT2)

(d) Onsite Truck Travel Speed: 10 mph

(e) Off-site Truck Travel Speed: 35 mph

(f) Idle speed: 0 mph

(g) Truck Idle time: 15 minutes per truck per day

2) Other Parameters

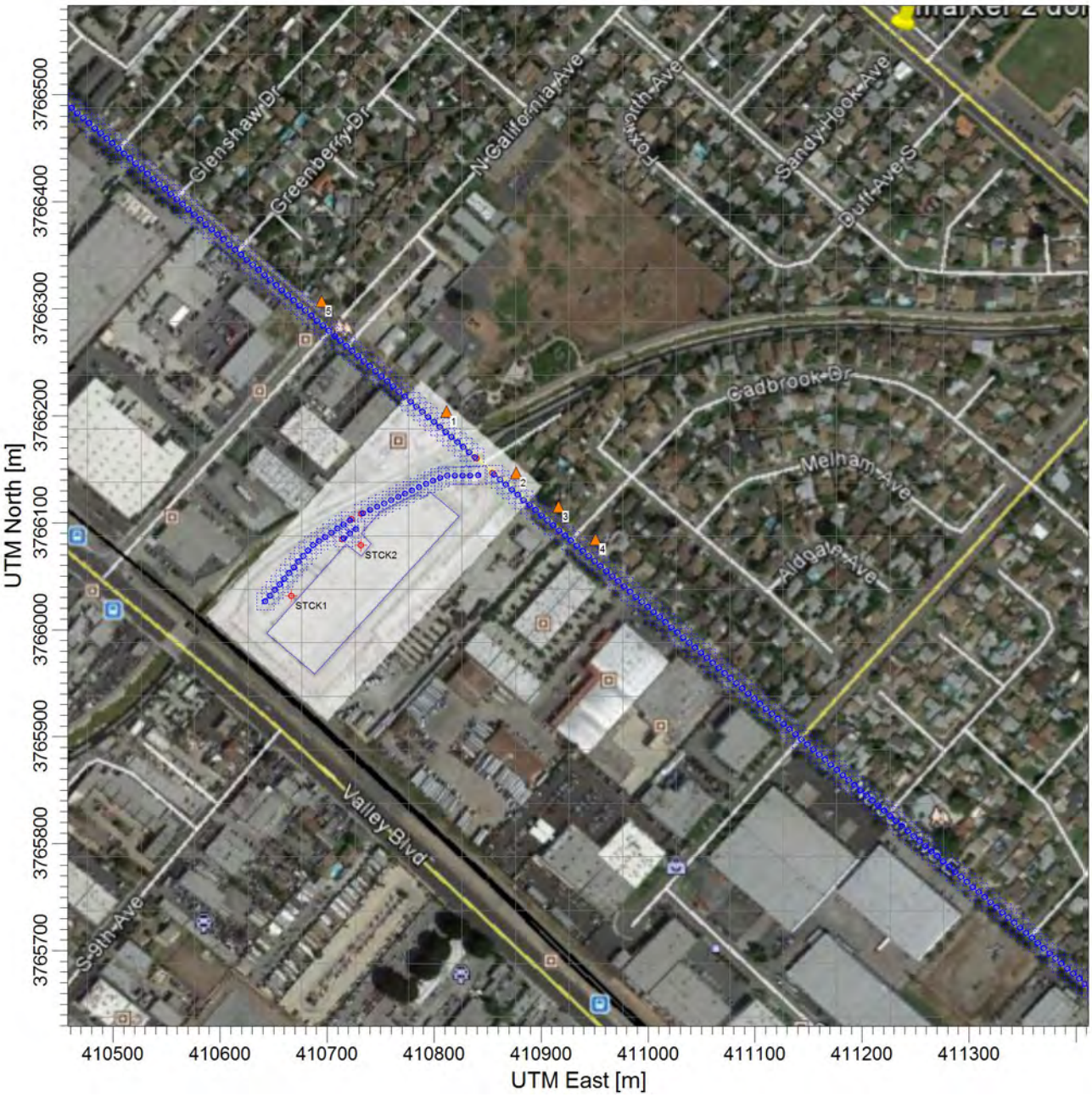
(a) Width of Plume: 12 feet

(b) Truck Operational Schedule 24 hours/day

Donlon		**Emission:**	**DPM-SR**									
Processes Modeled		**Build-out:**	**2016**									
Onsite delivery traffic												
Truck idling												
Offsite delivery traffic												
Facilities in Operation												
Location	**Truck type**	**Daily trucks**										
SW side of building	HHDT	42										
SW side of building	MHDT	17										
SW side of building	LHDT	36										
Total		**95**										
Delivery Schedule:												
SW side of building	24	**hrs/day, 52weeks/year**										
Emission Factors	**Onsite**	**Offsite**										
	Exhaust	**Exhaust**	**Idle**									
Vehicle Class	**(g/mi)**	**(g/mi)**	**(g/hr)**									
HHDT	0.0761	0.0594	0.1100									
MHDT	0.0421	0.0311	0.0980									
LHDT	0.0519	0.0204	0.0994									
Onsite Roadway Links Modeled												
Link	**Truck Type**	**Emission Factor (g/mi)**	**Trips per day (in and out)**	**Length (m)**	**Length (mi)**	**Daily Emissions Over the Link (g/day)**	**Emissions Over the Link (g/sec)**	**Max Hourly Emissions Over Link (lb/hr)**	**Daily Emissions (lbs/day)**	**Annual Avg Emissions Over Link (tons/yr)**	**Total Daily Emissions for all Vehicles (g/sec)**	
Adjacent to 14 loading docks	HHDT	0.0761	42	113.9	0.07	2.26E-01	2.62E-06	1.79E+00	4.98E-04	9.09E-05		
Adjacent to 14 loading docks	MHDT	0.0421	17	113.9	0.07	5.06E-02	5.86E-07	4.01E-01	1.12E-04	2.04E-05	4.73E-06	**77% of trucks**
Adjacent to 14 loading docks	LHDT	0.0519	36	113.9	0.07	1.32E-01	1.53E-06	1.05E+00	2.91E-04	5.32E-05	**14 docks**	**3.64E-06**
Adjacent to 4 loading docks	HHDT	0.0761	42	17.8	0.01	3.53E-02	4.09E-07	2.80E-01	7.78E-05	1.42E-05		
Adjacent to 4 loading docks	MHDT	0.0421	17	17.8	0.01	7.91E-03	9.16E-08	6.27E-02	1.74E-05	3.18E-06	7.40E-07	**22% of trucks**
Adjacent to 4 loading docks	LHDT	0.0519	36	17.8	0.01	2.07E-02	2.39E-07	1.64E-01	4.55E-05	8.31E-06	**4 docks**	**1.63E-07**
From gate to docks	HHDT	0.0761	42	118.6	0.07	2.35E-01	2.72E-06	1.87E+00	5.18E-04	9.46E-05		
From gate to docks	MHDT	0.0421	17	118.6	0.07	5.27E-02	6.10E-07	4.18E-01	1.16E-04	2.12E-05	**4.93E-06**	**100% of trucks**
From gate to docks	LHDT	0.0519	36	118.6	0.07	1.38E-01	1.59E-06	1.09E+00	3.03E-04	5.54E-05		
Truck Idling	Idle time	15	minutes									
Building/Location	**Truck Type**	**Emission Factor (g/idle-hour)**	**Idling Time (min)**	**Daily Trucks**	**Total Emissions (g/day)**	**Max Hourly Emissions (g/sec)**	**Max Hourly Emissions (lb/hr)**	**Total Daily Emissions (lbs/day)**	**Total Emissions (tons/yr)**	**Total Emissions (tons/yr)**		
Adjacent to loading docks	HHDT	0.1100	15	42	1.16	1.34E-05	1.06E-04	2.54E-03	4.64E-04			
Adjacent to loading docks	MHDT	0.0980	15	17	0.42	4.82E-06	3.82E-05	9.17E-04	1.67E-04		1.43E-05	
Adjacent to loading docks	LHDT	0.0994	15	36	0.89	1.04E-05	8.21E-05	1.97E-03	3.60E-04	**14 docks**	**1.10E-05**	**77% of trucks**
										4 docks	**3.14E-06**	**22% of trucks**
Offsite Roadway Links Modeled												
Link	**Truck Type**	**Emission Factor (g/mi)**	**Trips per day**	**Length (m)**	**Length (mi)**	**Daily Emissions Over the Link (g/day)**	**Emissions Over the Link (g/sec)**	**Max Hourly Emissions Over Link (lb/hr)**	**Daily Emissions (lbs/day)**	**Annual Avg Emissions Over Link (tons/yr)**		
Nelson Ave to Sunset Ave	HHDT	0.0594	42	596.5	0.37	9.25E-01	1.07E-05	7.33E+00	2.04E-03	3.72E-04		**50% of trucks**
Nelson Ave to Sunset Ave	MHDT	0.0311	17	596.5	0.37	1.96E-01	2.27E-06	1.56E+00	4.32E-04	7.88E-05	1.61E-05	**8.06E-06**
Nelson Ave to Sunset Ave	LHDT	0.0204	36	596.5	0.37	2.72E-01	3.15E-06	2.16E+00	5.99E-04	1.09E-04		
Nelson Ave to Hacienda Blvd	HHDT	0.0594	42	820.3	0.51	1.27E+00	1.47E-05	1.01E+01	2.80E-03	5.11E-04		**50% of trucks**
Nelson Ave to Hacienda Blvd	MHDT	0.0311	17	820.3	0.51	2.70E-01	3.12E-06	2.14E+00	5.94E-04	1.08E-04	2.22E-05	**1.11E-05**
Nelson Ave to Hacienda Blvd	LHDT	0.0204	36	820.3	0.51	3.74E-01	4.33E-06	2.97E+00	8.24E-04	1.50E-04		

PROJECT TITLE:

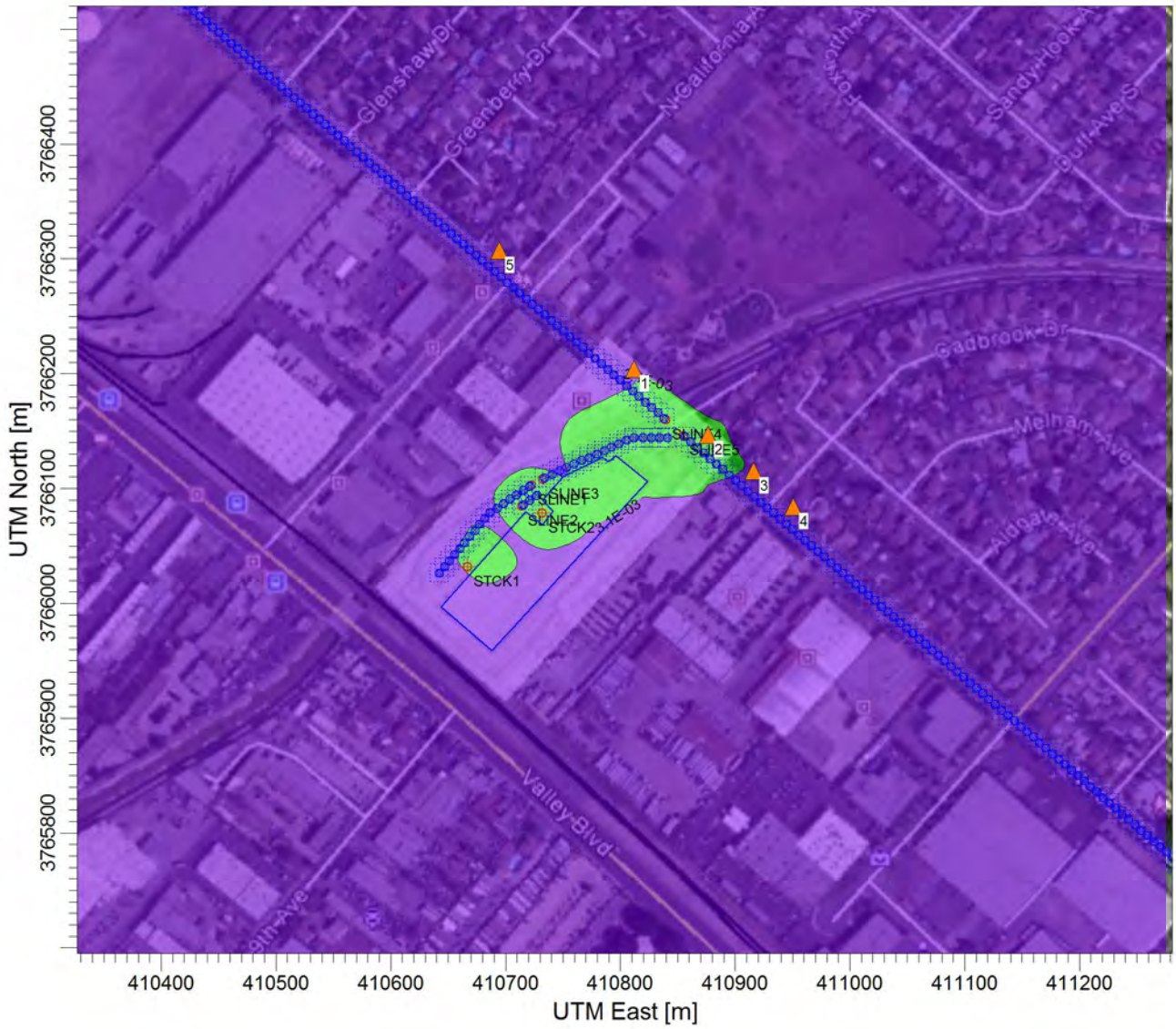
Nelson avenue Industrial Building
Source and receptor locations



COMMENTS:	SOURCES:		
Orange triangles = discrete sensitive receptors Blue lines = on-site and off-site truck travel paths Red dots = idling locations Grey grid = uniform cartesian receptor grid	**7**		
	RECEPTORS: **446**		
		SCALE: 1:6,000 0 0.2 km	
		DATE: **6/24/2015**	PROJECT NO.: **JN 6179**

PROJECT TITLE:

Nelson avenue Industrial Building
DPM concentration contours and corresponding cancer risk



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 5.5E-03 [ug/m^3] at (410826.18, 3766137.88)

1.6E-04 | 3.1E-03 | 6.3E-03 | 1.6E-02

COMMENTS:	SOURCES:		
Cancer Risk Red = 5 in 1 million Yellow = 2 in 1 million Green = 1 in 1 million Purple = 0.5 in 1 million	**7**		
	RECEPTORS: **446**		
	OUTPUT TYPE: **Concentration**	SCALE: 1:6,000 0 0.2 km	
	MAX: **5.5E-03 ug/m^3**	DATE: **6/24/2015**	PROJECT NO.: **JN 6179**

```
** Lakes Environmental AERMOD MPI
**
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** AERMOD Input Produced by:
** AERMOD View Ver. 8.9.0
** Lakes Environmental Software Inc.
** Date: 6/24/2015
** File: C:\Lakes\AERMOD View\6179 Donlon\6179 Donlon.ADI
**
****************************************
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**
****************************************
** AERMOD Control Pathway
****************************************
**
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CO STARTING
   TITLEONE C:\Lakes\AERMOD View\6179 Donlon\6179 Donlon.isc
   TITLETWO DPM emissions
   MODELOPT CONC  FASTALL
   AVERTIME ANNUAL
   URBANOPT 39816 City_of_La_Puente
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL "6179 Donlon.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION STCK1        POINT      410666.510  3766031.890       93.050
** DESCRSRC idling at 14 loading docks
   LOCATION STCK2        POINT      410731.692  3766078.865       94.060
** DESCRSRC idling at 4 loading docks
** ---------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC On-site travel to 14 loading docks
** PREFIX
** Length of Side = 3.66
** Configuration = Separated
** Emission Rate = 3.64E-06
** Elevated
** Building Height = 10.67
```

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** SZINIT = 4.96
** Nodes = 3
** 410722.602, 3766103.202, 94.73, 0.00, 3.20
** 410685.637, 3766078.455, 94.73, 0.00, 3.20
** 410641.135, 3766025.186, 93.00, 0.00, 3.20
** ---------------------------------------------------------------------
   LOCATION L0000722     VOLUME   410721.082 3766102.185 94.30
   LOCATION L0000723     VOLUME   410715.357 3766098.352 94.49
   LOCATION L0000724     VOLUME   410709.632 3766094.519 94.68
   LOCATION L0000725     VOLUME   410703.906 3766090.686 94.87
   LOCATION L0000726     VOLUME   410698.181 3766086.853 94.95
   LOCATION L0000727     VOLUME   410692.456 3766083.020 94.77
   LOCATION L0000728     VOLUME   410686.730 3766079.187 94.53
   LOCATION L0000729     VOLUME   410682.063 3766074.177 94.21
   LOCATION L0000730     VOLUME   410677.646 3766068.890 93.88
   LOCATION L0000731     VOLUME   410673.229 3766063.602 93.56
   LOCATION L0000732     VOLUME   410668.811 3766058.315 93.31
   LOCATION L0000733     VOLUME   410664.394 3766053.027 93.27
   LOCATION L0000734     VOLUME   410659.977 3766047.739 93.31
   LOCATION L0000735     VOLUME   410655.560 3766042.452 93.36
   LOCATION L0000736     VOLUME   410651.142 3766037.164 93.36
   LOCATION L0000737     VOLUME   410646.725 3766031.877 93.31
   LOCATION L0000738     VOLUME   410642.308 3766026.589 93.20
** End of LINE VOLUME Source ID = SLINE1
** ---------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC Onsite travel to 4 loading docks
** PREFIX
** Length of Side = 3.66
** Configuration = Separated
** Emission Rate = 1.63E-07
** Elevated
** Building Height = 10.67
** SZINIT = 4.96
** Nodes = 2
** 410714.046, 3766084.764, 94.91, 0.00, 3.30
** 410728.565, 3766095.134, 94.26, 0.00, 3.30
** ---------------------------------------------------------------------
   LOCATION L0001343     VOLUME   410715.534 3766085.826 94.48
   LOCATION L0001344     VOLUME   410721.305 3766089.949 94.29
   LOCATION L0001345     VOLUME   410727.077 3766094.071 94.10
** End of LINE VOLUME Source ID = SLINE2
** ---------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = SLINE3
** DESCRSRC Onsite travel gate to docks
** PREFIX
** Length of Side = 3.66
** Configuration = Separated
** Emission Rate = 4.93E-06
```

```
** Elevated
** Building Height = 10.67
** SZINIT = 4.96
** Nodes = 3
** 410732.074, 3766108.348, 94.14, 0.00, 3.34
** 410809.315, 3766144.034, 93.94, 0.00, 3.34
** 410842.787, 3766144.347, 94.01, 0.00, 3.34
** ---------------------------------------------------------------------
   LOCATION L0000790     VOLUME   410733.734 3766109.115 94.00
   LOCATION L0000791     VOLUME   410740.253 3766112.127 94.00
   LOCATION L0000792     VOLUME   410746.773 3766115.139 94.00
   LOCATION L0000793     VOLUME   410753.292 3766118.151 94.00
   LOCATION L0000794     VOLUME   410759.811 3766121.163 94.00
   LOCATION L0000795     VOLUME   410766.330 3766124.175 94.00
   LOCATION L0000796     VOLUME   410772.850 3766127.186 94.00
   LOCATION L0000797     VOLUME   410779.369 3766130.198 94.00
   LOCATION L0000798     VOLUME   410785.888 3766133.210 94.00
   LOCATION L0000799     VOLUME   410792.407 3766136.222 93.99
   LOCATION L0000800     VOLUME   410798.926 3766139.234 93.99
   LOCATION L0000801     VOLUME   410805.446 3766142.246 94.04
   LOCATION L0000802     VOLUME   410812.234 3766144.061 94.04
   LOCATION L0000803     VOLUME   410819.415 3766144.128 94.00
   LOCATION L0000804     VOLUME   410826.596 3766144.195 94.22
   LOCATION L0000805     VOLUME   410833.777 3766144.263 94.46
   LOCATION L0000806     VOLUME   410840.958 3766144.330 94.70
** End of LINE VOLUME Source ID = SLINE3
** ---------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = SLINE4
** DESCRSRC Off-site travel Nelson to Sunset
** PREFIX
** Length of Side = 3.66
** Configuration = Separated
** Emission Rate = 8.06E-06
** Elevated
** Vertical Dimension = 3.66
** SZINIT = 0.85
** Nodes = 2
** 410839.494, 3766160.059, 93.92, 0.00, 3.36
** 410388.569, 3766550.541, 91.08, 0.00, 3.36
** ---------------------------------------------------------------------
   LOCATION L0000564     VOLUME   410838.112 3766161.256 94.60
   LOCATION L0000565     VOLUME   410832.646 3766165.989 94.42
   LOCATION L0000566     VOLUME   410827.181 3766170.722 94.21
   LOCATION L0000567     VOLUME   410821.715 3766175.455 93.86
   LOCATION L0000568     VOLUME   410816.250 3766180.187 93.79
   LOCATION L0000569     VOLUME   410810.785 3766184.920 93.81
   LOCATION L0000570     VOLUME   410805.319 3766189.653 93.83
   LOCATION L0000571     VOLUME   410799.854 3766194.386 93.86
   LOCATION L0000572     VOLUME   410794.389 3766199.119 93.88
   LOCATION L0000573     VOLUME   410788.923 3766203.851 94.16
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LOCATION	L0000574	VOLUME	410783.458	3766208.584	94.44
LOCATION	L0000575	VOLUME	410777.993	3766213.317	94.67
LOCATION	L0000576	VOLUME	410772.527	3766218.050	94.83
LOCATION	L0000577	VOLUME	410767.062	3766222.783	94.94
LOCATION	L0000578	VOLUME	410761.596	3766227.515	95.00
LOCATION	L0000579	VOLUME	410756.131	3766232.248	95.05
LOCATION	L0000580	VOLUME	410750.666	3766236.981	95.08
LOCATION	L0000581	VOLUME	410745.200	3766241.714	95.10
LOCATION	L0000582	VOLUME	410739.735	3766246.446	95.13
LOCATION	L0000583	VOLUME	410734.270	3766251.179	95.15
LOCATION	L0000584	VOLUME	410728.804	3766255.912	95.18
LOCATION	L0000585	VOLUME	410723.339	3766260.645	95.20
LOCATION	L0000586	VOLUME	410717.874	3766265.378	95.22
LOCATION	L0000587	VOLUME	410712.408	3766270.110	95.25
LOCATION	L0000588	VOLUME	410706.943	3766274.843	95.27
LOCATION	L0000589	VOLUME	410701.477	3766279.576	95.30
LOCATION	L0000590	VOLUME	410696.012	3766284.309	95.21
LOCATION	L0000591	VOLUME	410690.547	3766289.041	95.04
LOCATION	L0000592	VOLUME	410685.081	3766293.774	94.94
LOCATION	L0000593	VOLUME	410679.616	3766298.507	94.81
LOCATION	L0000594	VOLUME	410674.151	3766303.240	94.62
LOCATION	L0000595	VOLUME	410668.685	3766307.973	94.44
LOCATION	L0000596	VOLUME	410663.220	3766312.705	94.47
LOCATION	L0000597	VOLUME	410657.755	3766317.438	94.49
LOCATION	L0000598	VOLUME	410652.289	3766322.171	94.66
LOCATION	L0000599	VOLUME	410646.824	3766326.904	95.00
LOCATION	L0000600	VOLUME	410641.358	3766331.636	95.34
LOCATION	L0000601	VOLUME	410635.893	3766336.369	95.55
LOCATION	L0000602	VOLUME	410630.428	3766341.102	95.70
LOCATION	L0000603	VOLUME	410624.962	3766345.835	95.86
LOCATION	L0000604	VOLUME	410619.497	3766350.568	96.01
LOCATION	L0000605	VOLUME	410614.032	3766355.300	96.15
LOCATION	L0000606	VOLUME	410608.566	3766360.033	96.32
LOCATION	L0000607	VOLUME	410603.101	3766364.766	96.38
LOCATION	L0000608	VOLUME	410597.636	3766369.499	96.38
LOCATION	L0000609	VOLUME	410592.170	3766374.231	96.33
LOCATION	L0000610	VOLUME	410586.705	3766378.964	96.22
LOCATION	L0000611	VOLUME	410581.239	3766383.697	96.04
LOCATION	L0000612	VOLUME	410575.774	3766388.430	95.96
LOCATION	L0000613	VOLUME	410570.309	3766393.163	95.86
LOCATION	L0000614	VOLUME	410564.843	3766397.895	95.70
LOCATION	L0000615	VOLUME	410559.378	3766402.628	95.48
LOCATION	L0000616	VOLUME	410553.913	3766407.361	95.21
LOCATION	L0000617	VOLUME	410548.447	3766412.094	94.97
LOCATION	L0000618	VOLUME	410542.982	3766416.826	94.90
LOCATION	L0000619	VOLUME	410537.517	3766421.559	94.71
LOCATION	L0000620	VOLUME	410532.051	3766426.292	94.41
LOCATION	L0000621	VOLUME	410526.586	3766431.025	93.99
LOCATION	L0000622	VOLUME	410521.120	3766435.758	93.45
LOCATION	L0000623	VOLUME	410515.655	3766440.490	93.13
LOCATION	L0000624	VOLUME	410510.190	3766445.223	93.15

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   LOCATION L0000625     VOLUME   410504.724 3766449.956 93.18
   LOCATION L0000626     VOLUME   410499.259 3766454.689 93.20
   LOCATION L0000627     VOLUME   410493.794 3766459.421 93.23
   LOCATION L0000628     VOLUME   410488.328 3766464.154 93.21
   LOCATION L0000629     VOLUME   410482.863 3766468.887 93.05
   LOCATION L0000630     VOLUME   410477.398 3766473.620 92.95
   LOCATION L0000631     VOLUME   410471.932 3766478.353 92.83
   LOCATION L0000632     VOLUME   410466.467 3766483.085 92.66
   LOCATION L0000633     VOLUME   410461.001 3766487.818 92.43
   LOCATION L0000634     VOLUME   410455.536 3766492.551 92.36
   LOCATION L0000635     VOLUME   410450.071 3766497.284 92.39
   LOCATION L0000636     VOLUME   410444.605 3766502.016 92.55
   LOCATION L0000637     VOLUME   410439.140 3766506.749 92.76
   LOCATION L0000638     VOLUME   410433.675 3766511.482 92.92
   LOCATION L0000639     VOLUME   410428.209 3766516.215 93.09
   LOCATION L0000640     VOLUME   410422.744 3766520.948 93.31
   LOCATION L0000641     VOLUME   410417.279 3766525.680 93.49
   LOCATION L0000642     VOLUME   410411.813 3766530.413 93.58
   LOCATION L0000643     VOLUME   410406.348 3766535.146 93.38
   LOCATION L0000644     VOLUME   410400.882 3766539.879 93.01
   LOCATION L0000645     VOLUME   410395.417 3766544.611 92.61
   LOCATION L0000646     VOLUME   410389.952 3766549.344 92.28
** End of LINE VOLUME Source ID = SLINE4
** ---------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources
** LINE VOLUME Source ID = SLINE5
** DESCRSRC Off-site travel Nelson to Hacienda
** PREFIX
** Length of Side = 3.66
** Configuration = Separated
** Emission Rate = 0.0000111
** Elevated
** Vertical Dimension = 3.66
** SZINIT = 0.85
** Nodes = 2
** 410854.620, 3766146.417, 94.77, 0.00, 3.39
** 411475.999, 3765610.859, 99.84, 0.00, 3.39
** ---------------------------------------------------------------------
   LOCATION L0000891     VOLUME   410856.005 3766145.223 95.20
   LOCATION L0000892     VOLUME   410861.528 3766140.462 95.38
   LOCATION L0000893     VOLUME   410867.051 3766135.702 95.43
   LOCATION L0000894     VOLUME   410872.575 3766130.941 95.45
   LOCATION L0000895     VOLUME   410878.098 3766126.181 95.48
   LOCATION L0000896     VOLUME   410883.621 3766121.421 95.46
   LOCATION L0000897     VOLUME   410889.145 3766116.660 95.46
   LOCATION L0000898     VOLUME   410894.668 3766111.900 95.52
   LOCATION L0000899     VOLUME   410900.191 3766107.139 95.74
   LOCATION L0000900     VOLUME   410905.714 3766102.379 96.07
   LOCATION L0000901     VOLUME   410911.238 3766097.618 96.45
   LOCATION L0000902     VOLUME   410916.761 3766092.858 96.80
   LOCATION L0000903     VOLUME   410922.284 3766088.097 97.14
```

LOCATION	L0000904	VOLUME	410927.808	3766083.337	97.48
LOCATION	L0000905	VOLUME	410933.331	3766078.577	97.86
LOCATION	L0000906	VOLUME	410938.854	3766073.816	98.37
LOCATION	L0000907	VOLUME	410944.378	3766069.056	98.82
LOCATION	L0000908	VOLUME	410949.901	3766064.295	99.20
LOCATION	L0000909	VOLUME	410955.424	3766059.535	99.53
LOCATION	L0000910	VOLUME	410960.947	3766054.774	99.79
LOCATION	L0000911	VOLUME	410966.471	3766050.014	100.00
LOCATION	L0000912	VOLUME	410971.994	3766045.253	99.92
LOCATION	L0000913	VOLUME	410977.517	3766040.493	99.67
LOCATION	L0000914	VOLUME	410983.041	3766035.733	99.36
LOCATION	L0000915	VOLUME	410988.564	3766030.972	98.99
LOCATION	L0000916	VOLUME	410994.087	3766026.212	98.56
LOCATION	L0000917	VOLUME	410999.611	3766021.451	98.07
LOCATION	L0000918	VOLUME	411005.134	3766016.691	97.66
LOCATION	L0000919	VOLUME	411010.657	3766011.930	97.29
LOCATION	L0000920	VOLUME	411016.180	3766007.170	96.92
LOCATION	L0000921	VOLUME	411021.704	3766002.409	96.55
LOCATION	L0000922	VOLUME	411027.227	3765997.649	96.18
LOCATION	L0000923	VOLUME	411032.750	3765992.889	96.08
LOCATION	L0000924	VOLUME	411038.274	3765988.128	96.34
LOCATION	L0000925	VOLUME	411043.797	3765983.368	96.68
LOCATION	L0000926	VOLUME	411049.320	3765978.607	97.02
LOCATION	L0000927	VOLUME	411054.843	3765973.847	97.37
LOCATION	L0000928	VOLUME	411060.367	3765969.086	97.72
LOCATION	L0000929	VOLUME	411065.890	3765964.326	98.25
LOCATION	L0000930	VOLUME	411071.413	3765959.565	98.76
LOCATION	L0000931	VOLUME	411076.937	3765954.805	99.03
LOCATION	L0000932	VOLUME	411082.460	3765950.045	99.25
LOCATION	L0000933	VOLUME	411087.983	3765945.284	99.41
LOCATION	L0000934	VOLUME	411093.507	3765940.524	99.35
LOCATION	L0000935	VOLUME	411099.030	3765935.763	99.19
LOCATION	L0000936	VOLUME	411104.553	3765931.003	99.03
LOCATION	L0000937	VOLUME	411110.076	3765926.242	98.79
LOCATION	L0000938	VOLUME	411115.600	3765921.482	98.47
LOCATION	L0000939	VOLUME	411121.123	3765916.721	98.06
LOCATION	L0000940	VOLUME	411126.646	3765911.961	97.49
LOCATION	L0000941	VOLUME	411132.170	3765907.201	96.98
LOCATION	L0000942	VOLUME	411137.693	3765902.440	96.52
LOCATION	L0000943	VOLUME	411143.216	3765897.680	96.21
LOCATION	L0000944	VOLUME	411148.740	3765892.919	96.03
LOCATION	L0000945	VOLUME	411154.263	3765888.159	96.14
LOCATION	L0000946	VOLUME	411159.786	3765883.398	96.33
LOCATION	L0000947	VOLUME	411165.309	3765878.638	96.51
LOCATION	L0000948	VOLUME	411170.833	3765873.877	96.69
LOCATION	L0000949	VOLUME	411176.356	3765869.117	96.93
LOCATION	L0000950	VOLUME	411181.879	3765864.357	97.50
LOCATION	L0000951	VOLUME	411187.403	3765859.596	98.19
LOCATION	L0000952	VOLUME	411192.926	3765854.836	98.87
LOCATION	L0000953	VOLUME	411198.449	3765850.075	99.56
LOCATION	L0000954	VOLUME	411203.973	3765845.315	100.24

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   LOCATION L0000955     VOLUME   411209.496 3765840.554 100.93
   LOCATION L0000956     VOLUME   411215.019 3765835.794 101.26
   LOCATION L0000957     VOLUME   411220.542 3765831.033 101.44
   LOCATION L0000958     VOLUME   411226.066 3765826.273 101.50
   LOCATION L0000959     VOLUME   411231.589 3765821.513 101.45
   LOCATION L0000960     VOLUME   411237.112 3765816.752 101.28
   LOCATION L0000961     VOLUME   411242.636 3765811.992 101.07
   LOCATION L0000962     VOLUME   411248.159 3765807.231 100.75
   LOCATION L0000963     VOLUME   411253.682 3765802.471 100.36
   LOCATION L0000964     VOLUME   411259.205 3765797.710 100.03
   LOCATION L0000965     VOLUME   411264.729 3765792.950 99.76
   LOCATION L0000966     VOLUME   411270.252 3765788.189 99.56
   LOCATION L0000967     VOLUME   411275.775 3765783.429 99.55
   LOCATION L0000968     VOLUME   411281.299 3765778.669 99.72
   LOCATION L0000969     VOLUME   411286.822 3765773.908 99.89
   LOCATION L0000970     VOLUME   411292.345 3765769.148 99.95
   LOCATION L0000971     VOLUME   411297.869 3765764.387 99.89
   LOCATION L0000972     VOLUME   411303.392 3765759.627 99.49
   LOCATION L0000973     VOLUME   411308.915 3765754.866 98.98
   LOCATION L0000974     VOLUME   411314.438 3765750.106 98.52
   LOCATION L0000975     VOLUME   411319.962 3765745.345 98.33
   LOCATION L0000976     VOLUME   411325.485 3765740.585 98.15
   LOCATION L0000977     VOLUME   411331.008 3765735.825 98.03
   LOCATION L0000978     VOLUME   411336.532 3765731.064 98.22
   LOCATION L0000979     VOLUME   411342.055 3765726.304 98.40
   LOCATION L0000980     VOLUME   411347.578 3765721.543 98.59
   LOCATION L0000981     VOLUME   411353.102 3765716.783 98.77
   LOCATION L0000982     VOLUME   411358.625 3765712.022 98.95
   LOCATION L0000983     VOLUME   411364.148 3765707.262 99.14
   LOCATION L0000984     VOLUME   411369.671 3765702.501 99.32
   LOCATION L0000985     VOLUME   411375.195 3765697.741 99.51
   LOCATION L0000986     VOLUME   411380.718 3765692.981 99.69
   LOCATION L0000987     VOLUME   411386.241 3765688.220 99.82
   LOCATION L0000988     VOLUME   411391.765 3765683.460 99.85
   LOCATION L0000989     VOLUME   411397.288 3765678.699 99.96
   LOCATION L0000990     VOLUME   411402.811 3765673.939 100.12
   LOCATION L0000991     VOLUME   411408.334 3765669.178 100.34
   LOCATION L0000992     VOLUME   411413.858 3765664.418 100.62
   LOCATION L0000993     VOLUME   411419.381 3765659.657 100.94
   LOCATION L0000994     VOLUME   411424.904 3765654.897 100.82
   LOCATION L0000995     VOLUME   411430.428 3765650.136 100.69
   LOCATION L0000996     VOLUME   411435.951 3765645.376 100.56
   LOCATION L0000997     VOLUME   411441.474 3765640.616 100.42
   LOCATION L0000998     VOLUME   411446.998 3765635.855 100.29
   LOCATION L0000999     VOLUME   411452.521 3765631.095 100.07
   LOCATION L0001000     VOLUME   411458.044 3765626.334 99.97
   LOCATION L0001001     VOLUME   411463.567 3765621.574 99.87
   LOCATION L0001002     VOLUME   411469.091 3765616.813 99.72
   LOCATION L0001003     VOLUME   411474.614 3765612.053 99.51
** End of LINE VOLUME Source ID = SLINE5
** Source Parameters **
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   SRCPARAM STCK1         0.000011     3.658   366.000  51.81600     0.091
   SRCPARAM STCK2         3.14E-06     3.658   366.000  51.81600     0.091
** LINE VOLUME Source ID = SLINE1
   SRCPARAM L0000722     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000723     0.0000002141      0.00      3.20      4.96
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   SRCPARAM L0000725     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000726     0.0000002141      0.00      3.20      4.96
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   SRCPARAM L0000728     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000729     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000730     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000731     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000732     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000733     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000734     0.0000002141      0.00      3.20      4.96
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   SRCPARAM L0000736     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000737     0.0000002141      0.00      3.20      4.96
   SRCPARAM L0000738     0.0000002141      0.00      3.20      4.96
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   SRCPARAM L0001343     0.00000005433      0.00      3.30      4.96
   SRCPARAM L0001344     0.00000005433      0.00      3.30      4.96
   SRCPARAM L0001345     0.00000005433      0.00      3.30      4.96
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   SRCPARAM L0000790     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000791     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000792     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000793     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000794     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000795     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000796     0.00000029      0.00      3.34      4.96
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   SRCPARAM L0000798     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000799     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000800     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000801     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000802     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000803     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000804     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000805     0.00000029      0.00      3.34      4.96
   SRCPARAM L0000806     0.00000029      0.00      3.34      4.96
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   SRCPARAM L0000565     0.00000009711      0.00      3.36      0.85
   SRCPARAM L0000566     0.00000009711      0.00      3.36      0.85
   SRCPARAM L0000567     0.00000009711      0.00      3.36      0.85
   SRCPARAM L0000568     0.00000009711      0.00      3.36      0.85
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SRCPARAM	L0000572	0.00000009711	0.00	3.36	0.85
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SRCPARAM	L0000581	0.00000009711	0.00	3.36	0.85
SRCPARAM	L0000582	0.00000009711	0.00	3.36	0.85
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SRCPARAM	L0000619	0.00000009711	0.00	3.36	0.85

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SRCPARAM	L0000937	0.00000009823	0.00	3.39	0.85
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SRCPARAM	L0000956	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000957	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000958	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000959	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000960	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000961	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000962	0.00000009823	0.00	3.39	0.85
SRCPARAM	L0000963	0.00000009823	0.00	3.39	0.85

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   SRCPARAM L0000964     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000965     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000966     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000967     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000968     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000969     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000970     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000971     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000972     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000973     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000974     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000975     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000976     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000977     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000978     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000979     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000980     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000981     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000982     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000983     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000984     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000985     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000986     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000987     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000988     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000989     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000990     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000991     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000992     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000993     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000994     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000995     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000996     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000997     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000998     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0000999     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0001000     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0001001     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0001002     0.00000009823      0.00      3.39      0.85
   SRCPARAM L0001003     0.00000009823      0.00      3.39      0.85
** ----------------------------------------------------------------------

** Building Downwash **
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67
   BUILDHGT STCK1           10.67    10.67    10.67    10.67    10.67    10.67

   BUILDHGT STCK2           10.67    10.67    10.67    10.67    10.67    10.67
```

BUILDHGT	STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT	STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT	STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT	STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT	STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDWID	STCK1	158.05	131.52	101.00	67.40	76.36	100.34
BUILDWID	STCK1	125.47	149.19	169.95	186.14	196.68	201.24
BUILDWID	STCK1	199.97	208.03	210.39	206.35	196.04	179.78
BUILDWID	STCK1	158.05	131.52	101.00	67.40	76.36	100.34
BUILDWID	STCK1	125.47	149.19	169.95	186.14	196.68	201.24
BUILDWID	STCK1	199.97	208.03	210.39	206.35	196.04	179.78
BUILDWID	STCK2	158.05	131.52	101.00	67.40	76.36	100.34
BUILDWID	STCK2	125.47	149.19	169.95	186.14	196.68	201.24
BUILDWID	STCK2	199.97	208.03	210.39	206.35	196.04	179.78
BUILDWID	STCK2	158.05	131.52	101.00	67.40	76.36	100.34
BUILDWID	STCK2	125.47	149.19	169.95	186.14	196.68	201.24
BUILDWID	STCK2	199.97	208.03	210.39	206.35	196.04	179.78
BUILDLEN	STCK1	186.14	196.68	201.24	199.97	208.03	210.39
BUILDLEN	STCK1	206.35	196.04	179.78	158.05	131.52	101.00
BUILDLEN	STCK1	67.40	76.36	100.34	125.47	149.19	169.95
BUILDLEN	STCK1	186.14	196.68	201.24	199.97	208.03	210.39
BUILDLEN	STCK1	206.35	196.04	179.78	158.05	131.52	101.00
BUILDLEN	STCK1	67.40	76.36	100.34	125.47	149.19	169.95
BUILDLEN	STCK2	186.14	196.68	201.24	199.97	208.03	210.39
BUILDLEN	STCK2	206.35	196.04	179.78	158.05	131.52	101.00
BUILDLEN	STCK2	67.40	76.36	100.34	125.47	149.19	169.95
BUILDLEN	STCK2	186.14	196.68	201.24	199.97	208.03	210.39
BUILDLEN	STCK2	206.35	196.04	179.78	158.05	131.52	101.00
BUILDLEN	STCK2	67.40	76.36	100.34	125.47	149.19	169.95
XBADJ	STCK1	-68.34	-61.39	-52.59	-42.18	-40.04	-37.30
XBADJ	STCK1	-33.43	-28.54	-22.78	-16.33	-9.38	-2.15
XBADJ	STCK1	5.14	-6.39	-26.14	-49.29	-73.34	-96.75
XBADJ	STCK1	-117.81	-135.29	-148.65	-157.79	-167.99	-173.09
XBADJ	STCK1	-172.92	-167.51	-157.00	-141.72	-122.14	-98.85
XBADJ	STCK1	-72.55	-69.97	-74.20	-76.18	-75.84	-73.20
XBADJ	STCK2	-125.91	-127.82	-125.86	-120.06	-120.17	-117.24
XBADJ	STCK2	-110.74	-100.88	-87.96	-72.36	-54.57	-35.12
XBADJ	STCK2	-14.60	-12.31	-18.05	-27.45	-38.41	-49.78
XBADJ	STCK2	-60.23	-68.86	-75.39	-79.91	-87.87	-93.15
XBADJ	STCK2	-95.61	-95.16	-91.82	-85.69	-76.96	-65.88
XBADJ	STCK2	-52.81	-64.05	-82.29	-98.02	-110.78	-120.17
YBADJ	STCK1	-62.70	-56.38	-48.35	-38.85	-31.79	-24.03
YBADJ	STCK1	-13.44	-1.25	11.78	24.74	36.95	48.03
YBADJ	STCK1	57.80	63.97	67.89	69.75	69.48	67.11

```
   YBADJ    STCK1           62.70    56.38    48.35    38.85    31.79    24.03
   YBADJ    STCK1           13.44     1.25   -11.78   -24.74   -36.95   -48.03
   YBADJ    STCK1          -57.80   -63.97   -67.89   -69.75   -69.48   -67.11

   YBADJ    STCK2           -6.66   -11.19   -15.38   -19.11   -25.87   -32.12
   YBADJ    STCK2          -35.29   -36.19   -35.20   -32.84   -29.48   -25.23
   YBADJ    STCK2          -20.08   -16.15   -12.04    -7.57    -2.86     1.93
   YBADJ    STCK2            6.66    11.19    15.38    19.11    25.87    32.12
   YBADJ    STCK2           35.29    36.19    35.19    32.84    29.48    25.23
   YBADJ    STCK2           20.08    16.15    12.04     7.57     2.86    -1.93

   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED "6179 Donlon.rou"
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE "C:\Users\Kate Wilson\Desktop\Met data\azus8.sfc"
   PROFFILE "C:\Users\Kate Wilson\Desktop\Met data\azus8.PFL"
   SURFDATA 0 2008
   UAIRDATA 3190 2008
   SITEDATA 99999 2008
   PROFBASE 182.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
** Auto-Generated Plotfiles
   PLOTFILE ANNUAL ALL "6179 Donlon.AD\AN00GALL.PLT" 31
   SUMMFILE "6179 Donlon.sum"
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***
```

```
 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            2 Warning Message(s)
A Total of            0 Informational Message(s)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
SO W320     357  PPARM:Input Parameter May Be Out-of-Range for Parameter            VS
SO W320     358  PPARM:Input Parameter May Be Out-of-Range for Parameter            VS

***********************************
*** SETUP Finishes Successfully ***
***********************************


*** AERMOD - VERSION  12345 ***   *** C:\Lakes\AERMOD View\6179 Donlon\6179 Donlon.isc                     ***        06/24/15
                                  *** DPM emissions                                                        ***        12:11:52
                                                                                                                      PAGE   1
**MODELOPTs:  NonDFAULT CONC                                             ELEV                                     FASTALL


                                           ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

  --  DEPOSITION LOGIC  --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for   235 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =     39816.0 ;  Urban Roughness Length =  1.000 m

**Model Allows User-Specified Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Used.

**Other Options Specified:
```

```
        FASTALL  - Use effective sigma-y to optimize meander for
                   POINT and VOLUME sources, and hybrid approach
                   to optimize AREA sources (formerly TOXICS option)

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates ANNUAL Averages Only

**This Run Includes:    235 Source(s);       1 Source Group(s); and     446 Receptor(s)

**The Model Assumes A Pollutant Type of:  DPM

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   182.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      4.0 MB of RAM.

**Detailed Error/Message File:   6179 Donlon.err
**File for Summary of Results:   6179 Donlon.sum

*** AERMOD - VERSION  12345 ***   *** C:\Lakes\AERMOD View\6179 Donlon\6179 Donlon.isc                     ***        06/24/15
                                  *** DPM emissions                                                       ***        12:11:52
                                                                                                                     PAGE   2
**MODELOPTs:  NonDFAULT CONC                                          ELEV                                     FASTALL


                                          *** POINT SOURCE DATA ***

              NUMBER EMISSION RATE                    BASE     STACK   STACK    STACK     STACK    BLDG   URBAN  CAP/  EMIS RATE
  SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.    HEIGHT  TEMP.   EXIT VEL. DIAMETER  EXISTS SOURCE HOR   SCALAR
    ID         CATS.               (METERS) (METERS) (METERS) (METERS) (DEG.K)  (M/SEC)  (METERS)                      VARY BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

STCK1            0   0.11000E-04  410666.5 3766031.9    93.0     3.66   366.00    51.82     0.09    YES     YES   NO
STCK2            0   0.31400E-05  410731.7 3766078.9    94.1     3.66   366.00    51.82     0.09    YES     YES   NO

*** AERMOD - VERSION  12345 ***   *** C:\Lakes\AERMOD View\6179 Donlon\6179 Donlon.isc                     ***        06/24/15
                                  *** DPM emissions                                                       ***        12:11:52
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000722	0	0.21410E-06	410721.1	3766102.2	94.3	0.00	3.20	4.96	YES	
L0000723	0	0.21410E-06	410715.4	3766098.4	94.5	0.00	3.20	4.96	YES	
L0000724	0	0.21410E-06	410709.6	3766094.5	94.7	0.00	3.20	4.96	YES	
L0000725	0	0.21410E-06	410703.9	3766090.7	94.9	0.00	3.20	4.96	YES	
L0000726	0	0.21410E-06	410698.2	3766086.9	95.0	0.00	3.20	4.96	YES	
L0000727	0	0.21410E-06	410692.5	3766083.0	94.8	0.00	3.20	4.96	YES	
L0000728	0	0.21410E-06	410686.7	3766079.2	94.5	0.00	3.20	4.96	YES	
L0000729	0	0.21410E-06	410682.1	3766074.2	94.2	0.00	3.20	4.96	YES	
L0000730	0	0.21410E-06	410677.6	3766068.9	93.9	0.00	3.20	4.96	YES	
L0000731	0	0.21410E-06	410673.2	3766063.6	93.6	0.00	3.20	4.96	YES	
L0000732	0	0.21410E-06	410668.8	3766058.3	93.3	0.00	3.20	4.96	YES	
L0000733	0	0.21410E-06	410664.4	3766053.0	93.3	0.00	3.20	4.96	YES	
L0000734	0	0.21410E-06	410660.0	3766047.7	93.3	0.00	3.20	4.96	YES	
L0000735	0	0.21410E-06	410655.6	3766042.5	93.4	0.00	3.20	4.96	YES	
L0000736	0	0.21410E-06	410651.1	3766037.2	93.4	0.00	3.20	4.96	YES	
L0000737	0	0.21410E-06	410646.7	3766031.9	93.3	0.00	3.20	4.96	YES	
L0000738	0	0.21410E-06	410642.3	3766026.6	93.2	0.00	3.20	4.96	YES	
L0001343	0	0.54330E-07	410715.5	3766085.8	94.5	0.00	3.30	4.96	YES	
L0001344	0	0.54330E-07	410721.3	3766089.9	94.3	0.00	3.30	4.96	YES	
L0001345	0	0.54330E-07	410727.1	3766094.1	94.1	0.00	3.30	4.96	YES	
L0000790	0	0.29000E-06	410733.7	3766109.1	94.0	0.00	3.34	4.96	YES	
L0000791	0	0.29000E-06	410740.3	3766112.1	94.0	0.00	3.34	4.96	YES	
L0000792	0	0.29000E-06	410746.8	3766115.1	94.0	0.00	3.34	4.96	YES	
L0000793	0	0.29000E-06	410753.3	3766118.2	94.0	0.00	3.34	4.96	YES	
L0000794	0	0.29000E-06	410759.8	3766121.2	94.0	0.00	3.34	4.96	YES	
L0000795	0	0.29000E-06	410766.3	3766124.2	94.0	0.00	3.34	4.96	YES	
L0000796	0	0.29000E-06	410772.8	3766127.2	94.0	0.00	3.34	4.96	YES	
L0000797	0	0.29000E-06	410779.4	3766130.2	94.0	0.00	3.34	4.96	YES	
L0000798	0	0.29000E-06	410785.9	3766133.2	94.0	0.00	3.34	4.96	YES	
L0000799	0	0.29000E-06	410792.4	3766136.2	94.0	0.00	3.34	4.96	YES	
L0000800	0	0.29000E-06	410798.9	3766139.2	94.0	0.00	3.34	4.96	YES	
L0000801	0	0.29000E-06	410805.4	3766142.2	94.0	0.00	3.34	4.96	YES	
L0000802	0	0.29000E-06	410812.2	3766144.1	94.0	0.00	3.34	4.96	YES	
L0000803	0	0.29000E-06	410819.4	3766144.1	94.0	0.00	3.34	4.96	YES	
L0000804	0	0.29000E-06	410826.6	3766144.2	94.2	0.00	3.34	4.96	YES	
L0000805	0	0.29000E-06	410833.8	3766144.3	94.5	0.00	3.34	4.96	YES	
L0000806	0	0.29000E-06	410841.0	3766144.3	94.7	0.00	3.34	4.96	YES	
L0000564	0	0.97110E-07	410838.1	3766161.3	94.6	0.00	3.36	0.85	YES	
L0000565	0	0.97110E-07	410832.6	3766166.0	94.4	0.00	3.36	0.85	YES	

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000566	0	0.97110E-07	410827.2	3766170.7	94.2	0.00	3.36	0.85	YES	
L0000567	0	0.97110E-07	410821.7	3766175.5	93.9	0.00	3.36	0.85	YES	
L0000568	0	0.97110E-07	410816.2	3766180.2	93.8	0.00	3.36	0.85	YES	
L0000569	0	0.97110E-07	410810.8	3766184.9	93.8	0.00	3.36	0.85	YES	
L0000570	0	0.97110E-07	410805.3	3766189.7	93.8	0.00	3.36	0.85	YES	
L0000571	0	0.97110E-07	410799.9	3766194.4	93.9	0.00	3.36	0.85	YES	
L0000572	0	0.97110E-07	410794.4	3766199.1	93.9	0.00	3.36	0.85	YES	
L0000573	0	0.97110E-07	410788.9	3766203.9	94.2	0.00	3.36	0.85	YES	
L0000574	0	0.97110E-07	410783.5	3766208.6	94.4	0.00	3.36	0.85	YES	
L0000575	0	0.97110E-07	410778.0	3766213.3	94.7	0.00	3.36	0.85	YES	
L0000576	0	0.97110E-07	410772.5	3766218.0	94.8	0.00	3.36	0.85	YES	
L0000577	0	0.97110E-07	410767.1	3766222.8	94.9	0.00	3.36	0.85	YES	
L0000578	0	0.97110E-07	410761.6	3766227.5	95.0	0.00	3.36	0.85	YES	
L0000579	0	0.97110E-07	410756.1	3766232.2	95.0	0.00	3.36	0.85	YES	
L0000580	0	0.97110E-07	410750.7	3766237.0	95.1	0.00	3.36	0.85	YES	
L0000581	0	0.97110E-07	410745.2	3766241.7	95.1	0.00	3.36	0.85	YES	
L0000582	0	0.97110E-07	410739.7	3766246.4	95.1	0.00	3.36	0.85	YES	
L0000583	0	0.97110E-07	410734.3	3766251.2	95.1	0.00	3.36	0.85	YES	
L0000584	0	0.97110E-07	410728.8	3766255.9	95.2	0.00	3.36	0.85	YES	
L0000585	0	0.97110E-07	410723.3	3766260.6	95.2	0.00	3.36	0.85	YES	
L0000586	0	0.97110E-07	410717.9	3766265.4	95.2	0.00	3.36	0.85	YES	
L0000587	0	0.97110E-07	410712.4	3766270.1	95.2	0.00	3.36	0.85	YES	
L0000588	0	0.97110E-07	410706.9	3766274.8	95.3	0.00	3.36	0.85	YES	
L0000589	0	0.97110E-07	410701.5	3766279.6	95.3	0.00	3.36	0.85	YES	
L0000590	0	0.97110E-07	410696.0	3766284.3	95.2	0.00	3.36	0.85	YES	
L0000591	0	0.97110E-07	410690.5	3766289.0	95.0	0.00	3.36	0.85	YES	
L0000592	0	0.97110E-07	410685.1	3766293.8	94.9	0.00	3.36	0.85	YES	
L0000593	0	0.97110E-07	410679.6	3766298.5	94.8	0.00	3.36	0.85	YES	
L0000594	0	0.97110E-07	410674.2	3766303.2	94.6	0.00	3.36	0.85	YES	
L0000595	0	0.97110E-07	410668.7	3766308.0	94.4	0.00	3.36	0.85	YES	
L0000596	0	0.97110E-07	410663.2	3766312.7	94.5	0.00	3.36	0.85	YES	
L0000597	0	0.97110E-07	410657.8	3766317.4	94.5	0.00	3.36	0.85	YES	
L0000598	0	0.97110E-07	410652.3	3766322.2	94.7	0.00	3.36	0.85	YES	
L0000599	0	0.97110E-07	410646.8	3766326.9	95.0	0.00	3.36	0.85	YES	
L0000600	0	0.97110E-07	410641.4	3766331.6	95.3	0.00	3.36	0.85	YES	
L0000601	0	0.97110E-07	410635.9	3766336.4	95.5	0.00	3.36	0.85	YES	

L0000602	0	0.97110E-07	410630.4	3766341.1	95.7	0.00	3.36	0.85	YES	
L0000603	0	0.97110E-07	410625.0	3766345.8	95.9	0.00	3.36	0.85	YES	
L0000604	0	0.97110E-07	410619.5	3766350.6	96.0	0.00	3.36	0.85	YES	
L0000605	0	0.97110E-07	410614.0	3766355.3	96.1	0.00	3.36	0.85	YES	
L0000606	0	0.97110E-07	410608.6	3766360.0	96.3	0.00	3.36	0.85	YES	

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000607	0	0.97110E-07	410603.1	3766364.8	96.4	0.00	3.36	0.85	YES	
L0000608	0	0.97110E-07	410597.6	3766369.5	96.4	0.00	3.36	0.85	YES	
L0000609	0	0.97110E-07	410592.2	3766374.2	96.3	0.00	3.36	0.85	YES	
L0000610	0	0.97110E-07	410586.7	3766379.0	96.2	0.00	3.36	0.85	YES	
L0000611	0	0.97110E-07	410581.2	3766383.7	96.0	0.00	3.36	0.85	YES	
L0000612	0	0.97110E-07	410575.8	3766388.4	96.0	0.00	3.36	0.85	YES	
L0000613	0	0.97110E-07	410570.3	3766393.2	95.9	0.00	3.36	0.85	YES	
L0000614	0	0.97110E-07	410564.8	3766397.9	95.7	0.00	3.36	0.85	YES	
L0000615	0	0.97110E-07	410559.4	3766402.6	95.5	0.00	3.36	0.85	YES	
L0000616	0	0.97110E-07	410553.9	3766407.4	95.2	0.00	3.36	0.85	YES	
L0000617	0	0.97110E-07	410548.4	3766412.1	95.0	0.00	3.36	0.85	YES	
L0000618	0	0.97110E-07	410543.0	3766416.8	94.9	0.00	3.36	0.85	YES	
L0000619	0	0.97110E-07	410537.5	3766421.6	94.7	0.00	3.36	0.85	YES	
L0000620	0	0.97110E-07	410532.1	3766426.3	94.4	0.00	3.36	0.85	YES	
L0000621	0	0.97110E-07	410526.6	3766431.0	94.0	0.00	3.36	0.85	YES	
L0000622	0	0.97110E-07	410521.1	3766435.8	93.5	0.00	3.36	0.85	YES	
L0000623	0	0.97110E-07	410515.7	3766440.5	93.1	0.00	3.36	0.85	YES	
L0000624	0	0.97110E-07	410510.2	3766445.2	93.1	0.00	3.36	0.85	YES	
L0000625	0	0.97110E-07	410504.7	3766450.0	93.2	0.00	3.36	0.85	YES	
L0000626	0	0.97110E-07	410499.3	3766454.7	93.2	0.00	3.36	0.85	YES	
L0000627	0	0.97110E-07	410493.8	3766459.4	93.2	0.00	3.36	0.85	YES	
L0000628	0	0.97110E-07	410488.3	3766464.2	93.2	0.00	3.36	0.85	YES	
L0000629	0	0.97110E-07	410482.9	3766468.9	93.0	0.00	3.36	0.85	YES	
L0000630	0	0.97110E-07	410477.4	3766473.6	93.0	0.00	3.36	0.85	YES	
L0000631	0	0.97110E-07	410471.9	3766478.4	92.8	0.00	3.36	0.85	YES	
L0000632	0	0.97110E-07	410466.5	3766483.1	92.7	0.00	3.36	0.85	YES	
L0000633	0	0.97110E-07	410461.0	3766487.8	92.4	0.00	3.36	0.85	YES	
L0000634	0	0.97110E-07	410455.5	3766492.6	92.4	0.00	3.36	0.85	YES	
L0000635	0	0.97110E-07	410450.1	3766497.3	92.4	0.00	3.36	0.85	YES	
L0000636	0	0.97110E-07	410444.6	3766502.0	92.5	0.00	3.36	0.85	YES	
L0000637	0	0.97110E-07	410439.1	3766506.7	92.8	0.00	3.36	0.85	YES	

L0000638	0	0.97110E-07	410433.7	3766511.5	92.9	0.00	3.36	0.85	YES
L0000639	0	0.97110E-07	410428.2	3766516.2	93.1	0.00	3.36	0.85	YES
L0000640	0	0.97110E-07	410422.7	3766520.9	93.3	0.00	3.36	0.85	YES
L0000641	0	0.97110E-07	410417.3	3766525.7	93.5	0.00	3.36	0.85	YES
L0000642	0	0.97110E-07	410411.8	3766530.4	93.6	0.00	3.36	0.85	YES
L0000643	0	0.97110E-07	410406.3	3766535.1	93.4	0.00	3.36	0.85	YES
L0000644	0	0.97110E-07	410400.9	3766539.9	93.0	0.00	3.36	0.85	YES
L0000645	0	0.97110E-07	410395.4	3766544.6	92.6	0.00	3.36	0.85	YES
L0000646	0	0.97110E-07	410390.0	3766549.3	92.3	0.00	3.36	0.85	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000891	0	0.98230E-07	410856.0	3766145.2	95.2	0.00	3.39	0.85	YES	
L0000892	0	0.98230E-07	410861.5	3766140.5	95.4	0.00	3.39	0.85	YES	
L0000893	0	0.98230E-07	410867.1	3766135.7	95.4	0.00	3.39	0.85	YES	
L0000894	0	0.98230E-07	410872.6	3766130.9	95.5	0.00	3.39	0.85	YES	
L0000895	0	0.98230E-07	410878.1	3766126.2	95.5	0.00	3.39	0.85	YES	
L0000896	0	0.98230E-07	410883.6	3766121.4	95.5	0.00	3.39	0.85	YES	
L0000897	0	0.98230E-07	410889.1	3766116.7	95.5	0.00	3.39	0.85	YES	
L0000898	0	0.98230E-07	410894.7	3766111.9	95.5	0.00	3.39	0.85	YES	
L0000899	0	0.98230E-07	410900.2	3766107.1	95.7	0.00	3.39	0.85	YES	
L0000900	0	0.98230E-07	410905.7	3766102.4	96.1	0.00	3.39	0.85	YES	
L0000901	0	0.98230E-07	410911.2	3766097.6	96.5	0.00	3.39	0.85	YES	
L0000902	0	0.98230E-07	410916.8	3766092.9	96.8	0.00	3.39	0.85	YES	
L0000903	0	0.98230E-07	410922.3	3766088.1	97.1	0.00	3.39	0.85	YES	
L0000904	0	0.98230E-07	410927.8	3766083.3	97.5	0.00	3.39	0.85	YES	
L0000905	0	0.98230E-07	410933.3	3766078.6	97.9	0.00	3.39	0.85	YES	
L0000906	0	0.98230E-07	410938.9	3766073.8	98.4	0.00	3.39	0.85	YES	
L0000907	0	0.98230E-07	410944.4	3766069.1	98.8	0.00	3.39	0.85	YES	
L0000908	0	0.98230E-07	410949.9	3766064.3	99.2	0.00	3.39	0.85	YES	
L0000909	0	0.98230E-07	410955.4	3766059.5	99.5	0.00	3.39	0.85	YES	
L0000910	0	0.98230E-07	410960.9	3766054.8	99.8	0.00	3.39	0.85	YES	
L0000911	0	0.98230E-07	410966.5	3766050.0	100.0	0.00	3.39	0.85	YES	
L0000912	0	0.98230E-07	410972.0	3766045.3	99.9	0.00	3.39	0.85	YES	
L0000913	0	0.98230E-07	410977.5	3766040.5	99.7	0.00	3.39	0.85	YES	
L0000914	0	0.98230E-07	410983.0	3766035.7	99.4	0.00	3.39	0.85	YES	
L0000915	0	0.98230E-07	410988.6	3766031.0	99.0	0.00	3.39	0.85	YES	
L0000916	0	0.98230E-07	410994.1	3766026.2	98.6	0.00	3.39	0.85	YES	
L0000917	0	0.98230E-07	410999.6	3766021.5	98.1	0.00	3.39	0.85	YES	

L0000918	0	0.98230E-07	411005.1	3766016.7	97.7	0.00	3.39	0.85	YES
L0000919	0	0.98230E-07	411010.7	3766011.9	97.3	0.00	3.39	0.85	YES
L0000920	0	0.98230E-07	411016.2	3766007.2	96.9	0.00	3.39	0.85	YES
L0000921	0	0.98230E-07	411021.7	3766002.4	96.5	0.00	3.39	0.85	YES
L0000922	0	0.98230E-07	411027.2	3765997.6	96.2	0.00	3.39	0.85	YES
L0000923	0	0.98230E-07	411032.8	3765992.9	96.1	0.00	3.39	0.85	YES
L0000924	0	0.98230E-07	411038.3	3765988.1	96.3	0.00	3.39	0.85	YES
L0000925	0	0.98230E-07	411043.8	3765983.4	96.7	0.00	3.39	0.85	YES
L0000926	0	0.98230E-07	411049.3	3765978.6	97.0	0.00	3.39	0.85	YES
L0000927	0	0.98230E-07	411054.8	3765973.8	97.4	0.00	3.39	0.85	YES
L0000928	0	0.98230E-07	411060.4	3765969.1	97.7	0.00	3.39	0.85	YES
L0000929	0	0.98230E-07	411065.9	3765964.3	98.2	0.00	3.39	0.85	YES
L0000930	0	0.98230E-07	411071.4	3765959.6	98.8	0.00	3.39	0.85	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000931	0	0.98230E-07	411076.9	3765954.8	99.0	0.00	3.39	0.85	YES	
L0000932	0	0.98230E-07	411082.5	3765950.0	99.2	0.00	3.39	0.85	YES	
L0000933	0	0.98230E-07	411088.0	3765945.3	99.4	0.00	3.39	0.85	YES	
L0000934	0	0.98230E-07	411093.5	3765940.5	99.3	0.00	3.39	0.85	YES	
L0000935	0	0.98230E-07	411099.0	3765935.8	99.2	0.00	3.39	0.85	YES	
L0000936	0	0.98230E-07	411104.6	3765931.0	99.0	0.00	3.39	0.85	YES	
L0000937	0	0.98230E-07	411110.1	3765926.2	98.8	0.00	3.39	0.85	YES	
L0000938	0	0.98230E-07	411115.6	3765921.5	98.5	0.00	3.39	0.85	YES	
L0000939	0	0.98230E-07	411121.1	3765916.7	98.1	0.00	3.39	0.85	YES	
L0000940	0	0.98230E-07	411126.6	3765912.0	97.5	0.00	3.39	0.85	YES	
L0000941	0	0.98230E-07	411132.2	3765907.2	97.0	0.00	3.39	0.85	YES	
L0000942	0	0.98230E-07	411137.7	3765902.4	96.5	0.00	3.39	0.85	YES	
L0000943	0	0.98230E-07	411143.2	3765897.7	96.2	0.00	3.39	0.85	YES	
L0000944	0	0.98230E-07	411148.7	3765892.9	96.0	0.00	3.39	0.85	YES	
L0000945	0	0.98230E-07	411154.3	3765888.2	96.1	0.00	3.39	0.85	YES	
L0000946	0	0.98230E-07	411159.8	3765883.4	96.3	0.00	3.39	0.85	YES	
L0000947	0	0.98230E-07	411165.3	3765878.6	96.5	0.00	3.39	0.85	YES	
L0000948	0	0.98230E-07	411170.8	3765873.9	96.7	0.00	3.39	0.85	YES	
L0000949	0	0.98230E-07	411176.4	3765869.1	96.9	0.00	3.39	0.85	YES	
L0000950	0	0.98230E-07	411181.9	3765864.4	97.5	0.00	3.39	0.85	YES	
L0000951	0	0.98230E-07	411187.4	3765859.6	98.2	0.00	3.39	0.85	YES	
L0000952	0	0.98230E-07	411192.9	3765854.8	98.9	0.00	3.39	0.85	YES	
L0000953	0	0.98230E-07	411198.4	3765850.1	99.6	0.00	3.39	0.85	YES	

L0000954	0	0.98230E-07	411204.0	3765845.3	100.2	0.00	3.39	0.85	YES
L0000955	0	0.98230E-07	411209.5	3765840.6	100.9	0.00	3.39	0.85	YES
L0000956	0	0.98230E-07	411215.0	3765835.8	101.3	0.00	3.39	0.85	YES
L0000957	0	0.98230E-07	411220.5	3765831.0	101.4	0.00	3.39	0.85	YES
L0000958	0	0.98230E-07	411226.1	3765826.3	101.5	0.00	3.39	0.85	YES
L0000959	0	0.98230E-07	411231.6	3765821.5	101.5	0.00	3.39	0.85	YES
L0000960	0	0.98230E-07	411237.1	3765816.8	101.3	0.00	3.39	0.85	YES
L0000961	0	0.98230E-07	411242.6	3765812.0	101.1	0.00	3.39	0.85	YES
L0000962	0	0.98230E-07	411248.2	3765807.2	100.8	0.00	3.39	0.85	YES
L0000963	0	0.98230E-07	411253.7	3765802.5	100.4	0.00	3.39	0.85	YES
L0000964	0	0.98230E-07	411259.2	3765797.7	100.0	0.00	3.39	0.85	YES
L0000965	0	0.98230E-07	411264.7	3765792.9	99.8	0.00	3.39	0.85	YES
L0000966	0	0.98230E-07	411270.3	3765788.2	99.6	0.00	3.39	0.85	YES
L0000967	0	0.98230E-07	411275.8	3765783.4	99.5	0.00	3.39	0.85	YES
L0000968	0	0.98230E-07	411281.3	3765778.7	99.7	0.00	3.39	0.85	YES
L0000969	0	0.98230E-07	411286.8	3765773.9	99.9	0.00	3.39	0.85	YES
L0000970	0	0.98230E-07	411292.3	3765769.1	100.0	0.00	3.39	0.85	YES

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000971	0	0.98230E-07	411297.9	3765764.4	99.9	0.00	3.39	0.85	YES	
L0000972	0	0.98230E-07	411303.4	3765759.6	99.5	0.00	3.39	0.85	YES	
L0000973	0	0.98230E-07	411308.9	3765754.9	99.0	0.00	3.39	0.85	YES	
L0000974	0	0.98230E-07	411314.4	3765750.1	98.5	0.00	3.39	0.85	YES	
L0000975	0	0.98230E-07	411320.0	3765745.3	98.3	0.00	3.39	0.85	YES	
L0000976	0	0.98230E-07	411325.5	3765740.6	98.1	0.00	3.39	0.85	YES	
L0000977	0	0.98230E-07	411331.0	3765735.8	98.0	0.00	3.39	0.85	YES	
L0000978	0	0.98230E-07	411336.5	3765731.1	98.2	0.00	3.39	0.85	YES	
L0000979	0	0.98230E-07	411342.1	3765726.3	98.4	0.00	3.39	0.85	YES	
L0000980	0	0.98230E-07	411347.6	3765721.5	98.6	0.00	3.39	0.85	YES	
L0000981	0	0.98230E-07	411353.1	3765716.8	98.8	0.00	3.39	0.85	YES	
L0000982	0	0.98230E-07	411358.6	3765712.0	99.0	0.00	3.39	0.85	YES	
L0000983	0	0.98230E-07	411364.1	3765707.3	99.1	0.00	3.39	0.85	YES	
L0000984	0	0.98230E-07	411369.7	3765702.5	99.3	0.00	3.39	0.85	YES	
L0000985	0	0.98230E-07	411375.2	3765697.7	99.5	0.00	3.39	0.85	YES	
L0000986	0	0.98230E-07	411380.7	3765693.0	99.7	0.00	3.39	0.85	YES	
L0000987	0	0.98230E-07	411386.2	3765688.2	99.8	0.00	3.39	0.85	YES	
L0000988	0	0.98230E-07	411391.8	3765683.5	99.8	0.00	3.39	0.85	YES	
L0000989	0	0.98230E-07	411397.3	3765678.7	100.0	0.00	3.39	0.85	YES	

L0000990	0	0.98230E-07	411402.8	3765673.9	100.1	0.00	3.39	0.85	YES
L0000991	0	0.98230E-07	411408.3	3765669.2	100.3	0.00	3.39	0.85	YES
L0000992	0	0.98230E-07	411413.9	3765664.4	100.6	0.00	3.39	0.85	YES
L0000993	0	0.98230E-07	411419.4	3765659.7	100.9	0.00	3.39	0.85	YES
L0000994	0	0.98230E-07	411424.9	3765654.9	100.8	0.00	3.39	0.85	YES
L0000995	0	0.98230E-07	411430.4	3765650.1	100.7	0.00	3.39	0.85	YES
L0000996	0	0.98230E-07	411436.0	3765645.4	100.6	0.00	3.39	0.85	YES
L0000997	0	0.98230E-07	411441.5	3765640.6	100.4	0.00	3.39	0.85	YES
L0000998	0	0.98230E-07	411447.0	3765635.9	100.3	0.00	3.39	0.85	YES
L0000999	0	0.98230E-07	411452.5	3765631.1	100.1	0.00	3.39	0.85	YES
L0001000	0	0.98230E-07	411458.0	3765626.3	100.0	0.00	3.39	0.85	YES
L0001001	0	0.98230E-07	411463.6	3765621.6	99.9	0.00	3.39	0.85	YES
L0001002	0	0.98230E-07	411469.1	3765616.8	99.7	0.00	3.39	0.85	YES
L0001003	0	0.98230E-07	411474.6	3765612.1	99.5	0.00	3.39	0.85	YES

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL STCK1 , STCK2 , L0000722 , L0000723 , L0000724 , L0000725 , L0000726 , L0000727 ,
L0000728 , L0000729 , L0000730 , L0000731 , L0000732 , L0000733 , L0000734 , L0000735 ,
L0000736 , L0000737 , L0000738 , L0001343 , L0001344 , L0001345 , L0000790 , L0000791 ,
L0000792 , L0000793 , L0000794 , L0000795 , L0000796 , L0000797 , L0000798 , L0000799 ,
L0000800 , L0000801 , L0000802 , L0000803 , L0000804 , L0000805 , L0000806 , L0000564 ,
L0000565 , L0000566 , L0000567 , L0000568 , L0000569 , L0000570 , L0000571 , L0000572 ,
L0000573 , L0000574 , L0000575 , L0000576 , L0000577 , L0000578 , L0000579 , L0000580 ,
L0000581 , L0000582 , L0000583 , L0000584 , L0000585 , L0000586 , L0000587 , L0000588 ,
L0000589 , L0000590 , L0000591 , L0000592 , L0000593 , L0000594 , L0000595 , L0000596 ,
L0000597 , L0000598 , L0000599 , L0000600 , L0000601 , L0000602 , L0000603 , L0000604 ,
L0000605 , L0000606 , L0000607 , L0000608 , L0000609 , L0000610 , L0000611 , L0000612 ,
L0000613 , L0000614 , L0000615 , L0000616 , L0000617 , L0000618 , L0000619 , L0000620 ,

L0000621 , L0000622 , L0000623 , L0000624 , L0000625 , L0000626 , L0000627 , L0000628 ,

L0000629 , L0000630 , L0000631 , L0000632 , L0000633 , L0000634 , L0000635 , L0000636 ,

L0000637 , L0000638 , L0000639 , L0000640 , L0000641 , L0000642 , L0000643 , L0000644 ,

L0000645 , L0000646 , L0000891 , L0000892 , L0000893 , L0000894 , L0000895 , L0000896 ,

L0000897 , L0000898 , L0000899 , L0000900 , L0000901 , L0000902 , L0000903 , L0000904 ,

L0000905 , L0000906 , L0000907 , L0000908 , L0000909 , L0000910 , L0000911 , L0000912 ,

L0000913 , L0000914 , L0000915 , L0000916 , L0000917 , L0000918 , L0000919 , L0000920 ,

L0000921 , L0000922 , L0000923 , L0000924 , L0000925 , L0000926 , L0000927 , L0000928 ,

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

L0000929 , L0000930 , L0000931 , L0000932 , L0000933 , L0000934 , L0000935 , L0000936 ,

L0000937 , L0000938 , L0000939 , L0000940 , L0000941 , L0000942 , L0000943 , L0000944 ,

L0000945 , L0000946 , L0000947 , L0000948 , L0000949 , L0000950 , L0000951 , L0000952 ,

L0000953 , L0000954 , L0000955 , L0000956 , L0000957 , L0000958 , L0000959 , L0000960 ,

L0000961 , L0000962 , L0000963 , L0000964 , L0000965 , L0000966 , L0000967 , L0000968 ,

L0000969 , L0000970 , L0000971 , L0000972 , L0000973 , L0000974 , L0000975 , L0000976 ,

L0000977 , L0000978 , L0000979 , L0000980 , L0000981 , L0000982 , L0000983 , L0000984 ,

L0000985 , L0000986 , L0000987 , L0000988 , L0000989 , L0000990 , L0000991 , L0000992 ,

L0000993 , L0000994 , L0000995 , L0000996 , L0000997 , L0000998 , L0000999 , L0001000 ,

L0001001 , L0001002 , L0001003 ,

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK1

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	10.7,	158.1,	186.1,	-68.3,	-62.7,	2	10.7,	131.5,	196.7,	-61.4,	-56.4,
3	10.7,	101.0,	201.2,	-52.6,	-48.3,	4	10.7,	67.4,	200.0,	-42.2,	-38.8,
5	10.7,	76.4,	208.0,	-40.0,	-31.8,	6	10.7,	100.3,	210.4,	-37.3,	-24.0,
7	10.7,	125.5,	206.4,	-33.4,	-13.4,	8	10.7,	149.2,	196.0,	-28.5,	-1.2,
9	10.7,	170.0,	179.8,	-22.8,	11.8,	10	10.7,	186.1,	158.1,	-16.3,	24.7,
11	10.7,	196.7,	131.5,	-9.4,	36.9,	12	10.7,	201.2,	101.0,	-2.1,	48.0,
13	10.7,	200.0,	67.4,	5.1,	57.8,	14	10.7,	208.0,	76.4,	-6.4,	64.0,
15	10.7,	210.4,	100.3,	-26.1,	67.9,	16	10.7,	206.4,	125.5,	-49.3,	69.8,
17	10.7,	196.0,	149.2,	-73.3,	69.5,	18	10.7,	179.8,	170.0,	-96.8,	67.1,
19	10.7,	158.1,	186.1,	-117.8,	62.7,	20	10.7,	131.5,	196.7,	-135.3,	56.4,
21	10.7,	101.0,	201.2,	-148.7,	48.3,	22	10.7,	67.4,	200.0,	-157.8,	38.8,
23	10.7,	76.4,	208.0,	-168.0,	31.8,	24	10.7,	100.3,	210.4,	-173.1,	24.0,
25	10.7,	125.5,	206.4,	-172.9,	13.4,	26	10.7,	149.2,	196.0,	-167.5,	1.2,
27	10.7,	170.0,	179.8,	-157.0,	-11.8,	28	10.7,	186.1,	158.1,	-141.7,	-24.7,
29	10.7,	196.7,	131.5,	-122.1,	-36.9,	30	10.7,	201.2,	101.0,	-98.8,	-48.0,
31	10.7,	200.0,	67.4,	-72.5,	-57.8,	32	10.7,	208.0,	76.4,	-70.0,	-64.0,
33	10.7,	210.4,	100.3,	-74.2,	-67.9,	34	10.7,	206.4,	125.5,	-76.2,	-69.8,
35	10.7,	196.0,	149.2,	-75.8,	-69.5,	36	10.7,	179.8,	170.0,	-73.2,	-67.1,

SOURCE ID: STCK2

IFV	BH	BW	BL	XADJ	YADJ	IFV	BH	BW	BL	XADJ	YADJ
1	10.7,	158.1,	186.1,	-125.9,	-6.7,	2	10.7,	131.5,	196.7,	-127.8,	-11.2,
3	10.7,	101.0,	201.2,	-125.9,	-15.4,	4	10.7,	67.4,	200.0,	-120.1,	-19.1,
5	10.7,	76.4,	208.0,	-120.2,	-25.9,	6	10.7,	100.3,	210.4,	-117.2,	-32.1,
7	10.7,	125.5,	206.4,	-110.7,	-35.3,	8	10.7,	149.2,	196.0,	-100.9,	-36.2,
9	10.7,	170.0,	179.8,	-88.0,	-35.2,	10	10.7,	186.1,	158.1,	-72.4,	-32.8,
11	10.7,	196.7,	131.5,	-54.6,	-29.5,	12	10.7,	201.2,	101.0,	-35.1,	-25.2,
13	10.7,	200.0,	67.4,	-14.6,	-20.1,	14	10.7,	208.0,	76.4,	-12.3,	-16.2,
15	10.7,	210.4,	100.3,	-18.1,	-12.0,	16	10.7,	206.4,	125.5,	-27.4,	-7.6,
17	10.7,	196.0,	149.2,	-38.4,	-2.9,	18	10.7,	179.8,	170.0,	-49.8,	1.9,
19	10.7,	158.1,	186.1,	-60.2,	6.7,	20	10.7,	131.5,	196.7,	-68.9,	11.2,
21	10.7,	101.0,	201.2,	-75.4,	15.4,	22	10.7,	67.4,	200.0,	-79.9,	19.1,
23	10.7,	76.4,	208.0,	-87.9,	25.9,	24	10.7,	100.3,	210.4,	-93.1,	32.1,
25	10.7,	125.5,	206.4,	-95.6,	35.3,	26	10.7,	149.2,	196.0,	-95.2,	36.2,
27	10.7,	170.0,	179.8,	-91.8,	35.2,	28	10.7,	186.1,	158.1,	-85.7,	32.8,
29	10.7,	196.7,	131.5,	-77.0,	29.5,	30	10.7,	201.2,	101.0,	-65.9,	25.2,
31	10.7,	200.0,	67.4,	-52.8,	20.1,	32	10.7,	208.0,	76.4,	-64.0,	16.2,
33	10.7,	210.4,	100.3,	-82.3,	12.0,	34	10.7,	206.4,	125.5,	-98.0,	7.6,
35	10.7,	196.0,	149.2,	-110.8,	2.9,	36	10.7,	179.8,	170.0,	-120.2,	-1.9,

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

410276.2, 410326.2, 410376.2, 410426.2, 410476.2, 410526.2, 410576.2, 410626.2, 410676.2, 410726.2,
410776.2, 410826.2, 410876.2, 410926.2, 410976.2, 411026.2, 411076.2, 411126.2, 411176.2, 411226.2,
411276.2,

*** Y-COORDINATES OF GRID ***
(METERS)

3765587.9, 3765637.9, 3765687.9, 3765737.9, 3765787.9, 3765837.9, 3765887.9, 3765937.9, 3765987.9, 3766037.9,
3766087.9, 3766137.9, 3766187.9, 3766237.9, 3766287.9, 3766337.9, 3766387.9, 3766437.9, 3766487.9, 3766537.9,
3766587.9,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 410276.18	410326.18	410376.18	410426.18	410476.18	410526.18	410576.18	410626.18	410676.18
3766587.88	96.10	93.60	92.00	93.70	97.50	99.70	97.20	96.90	98.90
3766537.88	98.70	96.50	93.40	93.00	94.20	96.50	96.00	95.00	96.50
3766487.88	94.90	93.70	93.90	93.20	92.70	93.30	94.80	94.50	94.50
3766437.88	93.90	92.50	92.10	93.70	94.60	93.40	94.90	95.10	95.30
3766387.88	91.70	92.10	92.80	93.70	95.70	96.50	96.00	96.30	96.20
3766337.88	91.20	91.90	91.00	92.40	94.10	95.60	95.60	95.60	94.80
3766287.88	92.90	93.00	91.00	91.90	94.10	95.90	95.10	96.00	95.10
3766237.88	93.00	92.60	91.80	92.90	95.40	96.20	96.00	97.30	97.50
3766187.88	92.10	91.20	91.20	93.70	95.60	94.20	95.40	97.00	96.40
3766137.88	93.10	93.10	93.30	94.90	94.40	93.00	94.00	96.40	95.70
3766087.88	94.70	94.00	94.10	93.60	92.30	94.30	96.50	94.90	94.40
3766037.88	94.00	92.90	92.60	92.10	92.00	94.20	93.50	93.70	93.20
3765987.88	93.10	92.50	90.30	91.90	92.00	91.10	90.20	91.50	93.20

3765937.88	93.00	92.90	91.70	92.00	92.50	92.50	91.10	91.50	92.10
3765887.88	92.50	92.80	91.70	91.60	93.50	93.80	92.50	92.90	92.40
3765837.88	94.90	91.40	89.00	90.80	93.10	93.00	93.00	94.40	93.80
3765787.88	94.80	91.80	89.90	92.50	92.60	93.20	93.10	93.00	93.20
3765737.88	95.50	93.60	91.60	93.40	91.90	92.40	93.10	92.00	93.00
3765687.88	90.90	91.90	92.20	93.00	93.00	93.90	93.00	92.10	93.00
3765637.88	91.20	91.60	93.50	93.10	92.90	94.80	93.10	92.60	93.20
3765587.88	95.40	95.40	95.30	94.80	94.00	94.20	92.10	92.80	93.60

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 410726.18	410776.18	410826.18	410876.18	410926.18	410976.18	411026.18	411076.18	411126.18
3766587.88	98.10	96.00	96.10	96.00	95.50	96.00	95.10	95.50	96.70
3766537.88	96.40	96.10	96.80	96.00	96.40	96.40	94.10	95.50	95.80
3766487.88	95.10	95.00	95.80	96.40	96.90	96.20	95.40	95.70	96.10
3766437.88	95.20	94.10	95.20	95.90	97.00	97.80	96.10	96.50	96.80
3766387.88	96.80	95.70	95.80	95.20	94.40	96.60	96.80	96.50	96.80
3766337.88	96.10	96.20	97.20	95.80	93.50	93.90	96.20	96.50	95.60
3766287.88	94.20	94.00	94.90	94.10	93.50	94.40	96.80	96.50	95.10
3766237.88	95.90	94.70	93.30	93.30	93.10	94.10	95.10	97.10	98.10
3766187.88	95.60	94.50	93.50	94.70	95.30	95.60	96.90	97.30	98.20
3766137.88	94.10	94.00	94.10	95.80	96.00	97.20	96.30	96.00	97.10
3766087.88	94.10	94.70	93.80	94.90	97.30	98.40	96.90	96.00	96.00
3766037.88	94.00	95.00	96.80	96.20	99.30	99.70	96.90	96.00	96.20
3765987.88	94.00	94.60	96.10	97.80	99.90	98.70	96.30	98.10	98.60
3765937.88	93.00	93.90	94.50	96.10	97.30	97.20	97.60	98.70	98.80
3765887.88	91.70	94.20	95.30	97.30	97.20	96.10	97.50	97.80	96.50
3765837.88	93.90	96.00	96.20	97.00	97.10	97.20	97.90	99.10	98.00
3765787.88	93.50	94.70	95.60	97.60	100.20	100.50	98.70	101.60	101.50
3765737.88	92.50	92.70	94.50	97.80	98.80	98.20	99.10	99.50	99.40
3765687.88	93.90	94.60	95.10	97.60	98.40	96.90	96.90	96.00	97.50
3765637.88	94.60	95.50	96.50	96.20	95.60	94.40	95.90	96.70	99.10
3765587.88	94.90	95.30	95.30	94.50	94.30	93.70	95.00	96.30	97.70

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 411176.18	411226.18	411276.18
3766587.88	95.10	96.00	96.60
3766537.88	94.20	94.70	97.20
3766487.88	95.50	95.90	97.80
3766437.88	95.90	96.50	96.40
3766387.88	95.10	96.40	98.50
3766337.88	95.60	97.50	99.50
3766287.88	95.90	96.50	98.00
3766237.88	95.50	95.80	96.50
3766187.88	95.20	95.50	96.90
3766137.88	96.20	96.50	96.70
3766087.88	95.40	96.00	95.00
3766037.88	95.40	95.80	95.10
3765987.88	96.10	94.40	94.30
3765937.88	96.80	94.60	96.10
3765887.88	96.90	98.30	100.00
3765837.88	98.90	101.50	101.50
3765787.88	100.30	99.60	99.80
3765737.88	98.60	97.60	98.70
3765687.88	100.00	98.60	97.20
3765637.88	101.20	100.20	97.90
3765587.88	98.50	98.00	100.50

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 410276.18	410326.18	410376.18	410426.18	410476.18	410526.18	410576.18	410626.18	410676.18
3766587.88	99.00	99.00	92.00	93.70	99.00	99.70	97.20	96.90	98.90
3766537.88	98.70	96.50	93.40	93.00	97.00	96.50	96.00	95.00	96.50
3766487.88	94.90	96.00	93.90	93.20	92.70	93.30	94.80	94.50	94.50
3766437.88	93.90	92.50	92.10	93.70	94.60	93.40	94.90	95.10	95.30
3766387.88	91.70	92.10	92.80	93.70	95.70	96.50	96.00	96.30	96.20
3766337.88	91.20	91.90	91.00	92.40	94.10	95.60	95.60	95.60	94.80
3766287.88	92.90	93.00	91.00	91.90	94.10	95.90	95.10	96.00	95.10

3766237.88	93.00	92.60	91.80	92.90	95.40	96.20	96.00	97.30	97.50
3766187.88	92.10	91.20	91.20	93.70	95.60	94.20	95.40	97.00	96.40
3766137.88	93.10	93.10	93.30	94.90	94.40	93.00	94.00	96.40	95.70
3766087.88	94.70	94.00	94.10	93.60	92.30	97.00	96.50	94.90	94.40
3766037.88	94.00	92.90	92.60	92.10	92.00	94.20	95.00	93.70	93.20
3765987.88	93.10	92.50	90.30	91.90	92.00	91.10	90.20	91.50	93.20
3765937.88	93.00	92.90	91.70	92.00	92.50	92.50	91.10	91.50	92.10
3765887.88	92.50	92.80	91.70	91.60	93.50	93.80	92.50	92.90	92.40
3765837.88	94.90	91.40	89.00	90.80	93.10	93.00	93.00	94.40	93.80
3765787.88	94.80	91.80	89.90	92.50	92.60	93.20	93.10	93.00	93.20
3765737.88	95.50	93.60	91.60	93.40	91.90	92.40	93.10	92.00	93.00
3765687.88	95.00	91.90	92.20	93.00	93.00	93.90	93.00	92.10	93.00
3765637.88	91.20	91.60	93.50	93.10	92.90	94.80	93.10	92.60	93.20
3765587.88	95.40	95.40	95.30	94.80	94.00	94.20	92.10	92.80	93.60

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 410726.18	410776.18	410826.18	410876.18	410926.18	410976.18	411026.18	411076.18	411126.18
3766587.88	98.10	96.00	96.10	96.00	95.50	96.00	95.10	95.50	96.70
3766537.88	96.40	96.10	96.80	96.00	96.40	96.40	94.10	95.50	95.80
3766487.88	95.10	95.00	95.80	96.40	96.90	96.20	95.40	95.70	96.10
3766437.88	95.20	94.10	95.20	95.90	97.00	97.80	96.10	96.50	96.80
3766387.88	96.80	95.70	95.80	95.20	94.40	96.60	96.80	96.50	96.80
3766337.88	96.10	96.20	97.20	95.80	93.50	93.90	96.20	96.50	95.60
3766287.88	94.20	94.00	94.90	94.10	93.50	94.40	96.80	96.50	95.10
3766237.88	95.90	94.70	93.30	93.30	93.10	94.10	95.10	97.10	98.10
3766187.88	95.60	94.50	93.50	94.70	95.30	95.60	96.90	97.30	98.20
3766137.88	94.10	94.00	94.10	95.80	96.00	97.20	96.30	96.00	97.10
3766087.88	94.10	94.70	93.80	94.90	97.30	98.40	96.90	96.00	96.00
3766037.88	94.00	95.00	96.80	98.00	99.30	99.70	96.90	96.00	96.20
3765987.88	94.00	94.60	96.10	97.80	99.90	98.70	96.30	98.10	98.60
3765937.88	93.00	93.90	94.50	96.10	97.30	97.20	97.60	98.70	98.80
3765887.88	91.70	94.20	95.30	97.30	97.20	96.10	97.50	97.80	96.50
3765837.88	93.90	96.00	96.20	97.00	97.10	101.00	97.90	99.10	101.00
3765787.88	93.50	94.70	95.60	97.60	100.20	100.50	98.70	101.60	101.50
3765737.88	92.50	92.70	94.50	97.80	98.80	98.20	99.10	99.50	99.40
3765687.88	93.90	94.60	95.10	98.00	98.40	96.90	96.90	96.00	97.50
3765637.88	94.60	95.50	96.50	96.20	95.60	94.40	95.90	96.70	99.10
3765587.88	94.90	95.30	95.30	94.50	94.30	93.70	95.00	96.30	97.70

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 411176.18	411226.18	411276.18
3766587.88	95.10	96.00	96.60
3766537.88	94.20	94.70	97.20
3766487.88	95.50	95.90	97.80
3766437.88	95.90	96.50	96.40
3766387.88	95.10	96.40	98.50
3766337.88	95.60	97.50	99.50
3766287.88	95.90	96.50	98.00
3766237.88	95.50	95.80	96.50
3766187.88	95.20	95.50	96.90
3766137.88	96.20	96.50	96.70
3766087.88	95.40	96.00	95.00
3766037.88	95.40	95.80	95.10
3765987.88	96.10	94.40	94.30
3765937.88	96.80	94.60	96.10
3765887.88	96.90	98.30	102.00
3765837.88	98.90	101.50	101.50
3765787.88	100.30	99.60	99.80
3765737.88	98.60	97.60	98.70
3765687.88	100.00	102.00	97.20
3765637.88	101.20	100.20	97.90
3765587.88	98.50	98.00	100.50

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
( 410811.9, 3766203.9,      93.3,      93.3,       0.0);         ( 410876.8, 3766146.8,      95.9,      95.9,       0.0);
( 410916.2, 3766115.1,      96.2,      96.2,       0.0);         ( 410950.8, 3766084.5,      98.2,      98.2,       0.0);
( 410694.8, 3766307.1,      94.9,      94.9,       0.0);
```

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
L0001344	410726.2	3766087.9	-1.80
L0001345	410726.2	3766087.9	-0.84
L0000804	410826.2	3766137.9	-0.85
L0000602	410626.2	3766337.9	-1.89
L0000603	410626.2	3766337.9	0.82
L0000611	410576.2	3766387.9	-0.66
L0000612	410576.2	3766387.9	-6.54
L0000613	410576.2	3766387.9	0.67
L0000621	410526.2	3766437.9	-0.36
L0000622	410526.2	3766437.9	-1.74
L0000894	410876.2	3766137.9	0.53
L0000903	410926.2	3766087.9	-3.39
L0000904	410926.2	3766087.9	-2.46
L0000913	410976.2	3766037.9	-4.35
L0000914	410976.2	3766037.9	-0.10
L0000923	411026.2	3765987.9	0.97
L0000966	411276.2	3765787.9	-1.35
L0000967	411276.2	3765787.9	-2.82

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\Users\Kate Wilson\Desktop\Met data\azus8.sfc Met Version: 14134
Profile file: C:\Users\Kate Wilson\Desktop\Met data\azus8.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2008 Year: 2008

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
08	01	01	1	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.4	5.5
08	01	01	1	02	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.4	5.5
08	01	01	1	03	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.4	5.5
08	01	01	1	04	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.4	5.5
08	01	01	1	05	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08	01	01	1	06	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	284.9	5.5
08	01	01	1	07	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	284.2	5.5
08	01	01	1	08	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	0.55	999.00	999.	-9.0	284.9	5.5
08	01	01	1	09	27.6	-9.000	-9.000	-9.000	60.	-999.	-99999.0	0.36	1.00	0.32	999.00	999.	-9.0	285.9	5.5
08	01	01	1	10	81.3	-9.000	-9.000	-9.000	161.	-999.	-99999.0	0.36	1.00	0.25	999.00	999.	-9.0	287.5	5.5
08	01	01	1	11	127.9	-9.000	-9.000	-9.000	417.	-999.	-99999.0	0.36	1.00	0.22	999.00	999.	-9.0	289.9	5.5
08	01	01	1	12	127.8	-9.000	-9.000	-9.000	612.	-999.	-99999.0	0.36	1.00	0.21	999.00	999.	-9.0	292.5	5.5
08	01	01	1	13	110.0	-9.000	-9.000	-9.000	720.	-999.	-99999.0	0.36	1.00	0.21	999.00	999.	-9.0	293.8	5.5
08	01	01	1	14	82.4	-9.000	-9.000	-9.000	758.	-999.	-99999.0	0.36	1.00	0.22	999.00	999.	-9.0	293.8	5.5
08	01	01	1	15	36.0	-9.000	-9.000	-9.000	774.	-999.	-99999.0	0.36	1.00	0.26	999.00	999.	-9.0	293.1	5.5
08	01	01	1	16	11.4	-9.000	-9.000	-9.000	778.	-999.	-99999.0	0.36	1.00	0.35	999.00	999.	-9.0	292.0	5.5
08	01	01	1	17	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	0.62	999.00	999.	-9.0	290.9	5.5
08	01	01	1	18	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	288.8	5.5
08	01	01	1	19	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	288.1	5.5
08	01	01	1	20	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	287.0	5.5
08	01	01	1	21	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.9	5.5
08	01	01	1	22	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	286.4	5.5
08	01	01	1	23	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	286.4	5.5
08	01	01	1	24	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-99999.0	0.36	1.00	1.00	999.00	999.	-9.0	285.9	5.5

```
First hour of profile data
YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
08 01 01 01    5.5 0 -999.  -99.00   285.4   99.0  -99.00  -99.00
08 01 01 01    9.1 1 -999.  -99.00  -999.0   99.0  -99.00  -99.00

F indicates top of profile (=1) or below (=0)
```


**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 , STCK2 , L0000722 , L0000723 , L0000724 ,
L0000725 , L0000726 , L0000727 , L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,
L0000733 , L0000734 , L0000735 , L0000736 , L0000737 , L0000738 , L0001343 , L0001344 ,
L0001345 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 , L0000795 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 410276.18	410326.18	410376.18	410426.18	410476.18	410526.18	410576.18	410626.18	410676.18
3766587.88	0.00010	0.00013	0.00019	0.00032	0.00030	0.00026	0.00024	0.00022	0.00021
3766537.88	0.00012	0.00019	0.00077	0.00168	0.00069	0.00047	0.00037	0.00031	0.00026
3766487.88	0.00014	0.00023	0.00047	0.00126	0.00223	0.00087	0.00056	0.00043	0.00035
3766437.88	0.00016	0.00023	0.00035	0.00057	0.00113	0.00170	0.00101	0.00062	0.00048
3766387.88	0.00016	0.00022	0.00030	0.00040	0.00058	0.00102	0.00130	0.00117	0.00069
3766337.88	0.00017	0.00021	0.00026	0.00033	0.00043	0.00059	0.00096	0.00152	0.00138
3766287.88	0.00017	0.00021	0.00025	0.00030	0.00037	0.00046	0.00061	0.00093	0.00239
3766237.88	0.00017	0.00020	0.00024	0.00029	0.00034	0.00041	0.00051	0.00066	0.00097
3766187.88	0.00017	0.00020	0.00024	0.00028	0.00034	0.00041	0.00051	0.00065	0.00089
3766137.88	0.00018	0.00021	0.00024	0.00029	0.00034	0.00043	0.00056	0.00080	0.00122
3766087.88	0.00019	0.00022	0.00025	0.00030	0.00036	0.00047	0.00064	0.00115	0.00282
3766037.88	0.00019	0.00023	0.00027	0.00032	0.00040	0.00054	0.00082	0.00185	0.00403
3765987.88	0.00020	0.00023	0.00027	0.00034	0.00044	0.00059	0.00089	0.00172	0.00186
3765937.88	0.00020	0.00024	0.00029	0.00036	0.00045	0.00059	0.00084	0.00125	0.00124
3765887.88	0.00021	0.00025	0.00029	0.00035	0.00044	0.00056	0.00076	0.00088	0.00076
3765837.88	0.00021	0.00024	0.00028	0.00034	0.00042	0.00053	0.00065	0.00066	0.00056
3765787.88	0.00020	0.00024	0.00027	0.00033	0.00040	0.00049	0.00055	0.00052	0.00044
3765737.88	0.00020	0.00023	0.00027	0.00031	0.00037	0.00044	0.00046	0.00042	0.00036
3765687.88	0.00019	0.00022	0.00026	0.00030	0.00035	0.00039	0.00039	0.00035	0.00031
3765637.88	0.00019	0.00021	0.00025	0.00028	0.00032	0.00034	0.00033	0.00030	0.00027
3765587.88	0.00018	0.00020	0.00023	0.00026	0.00029	0.00029	0.00028	0.00025	0.00023

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 , STCK2 , L0000722 , L0000723 , L0000724 ,
L0000725 , L0000726 , L0000727 , L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,
L0000733 , L0000734 , L0000735 , L0000736 , L0000737 , L0000738 , L0001343 , L0001344 ,
L0001345 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 , L0000795 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 410726.18	410776.18	410826.18	410876.18	410926.18	410976.18	411026.18	411076.18	411126.18
3766587.88	0.00019	0.00018	0.00017	0.00017	0.00016	0.00016	0.00016	0.00015	0.00015
3766537.88	0.00024	0.00022	0.00021	0.00020	0.00019	0.00019	0.00019	0.00018	0.00018
3766487.88	0.00031	0.00028	0.00026	0.00024	0.00023	0.00023	0.00022	0.00022	0.00021
3766437.88	0.00040	0.00035	0.00032	0.00030	0.00028	0.00027	0.00027	0.00026	0.00025
3766387.88	0.00053	0.00046	0.00041	0.00038	0.00037	0.00034	0.00033	0.00032	0.00031
3766337.88	0.00080	0.00063	0.00054	0.00050	0.00048	0.00045	0.00042	0.00041	0.00039
3766287.88	0.00167	0.00098	0.00080	0.00071	0.00065	0.00060	0.00056	0.00053	0.00050
3766237.88	0.00213	0.00224	0.00133	0.00110	0.00096	0.00085	0.00076	0.00068	0.00060
3766187.88	0.00135	0.00248	0.00349	0.00201	0.00148	0.00118	0.00097	0.00081	0.00069
3766137.88	0.00220	0.00463	0.00553	0.00388	0.00211	0.00145	0.00111	0.00089	0.00072
3766087.88	0.00494	0.00363	0.00293	0.00278	0.00257	0.00180	0.00120	0.00092	0.00074
3766037.88	0.00292	0.00235	0.00184	0.00174	0.00170	0.00193	0.00164	0.00103	0.00079
3765987.88	0.00170	0.00136	0.00122	0.00105	0.00101	0.00126	0.00218	0.00168	0.00096
3765937.88	0.00110	0.00092	0.00079	0.00072	0.00072	0.00080	0.00103	0.00219	0.00186
3765887.88	0.00063	0.00058	0.00055	0.00053	0.00054	0.00058	0.00067	0.00088	0.00173
3765837.88	0.00048	0.00043	0.00042	0.00042	0.00043	0.00045	0.00050	0.00058	0.00077
3765787.88	0.00039	0.00035	0.00034	0.00034	0.00033	0.00035	0.00039	0.00042	0.00050
3765737.88	0.00032	0.00030	0.00029	0.00028	0.00029	0.00030	0.00032	0.00035	0.00039
3765687.88	0.00028	0.00026	0.00025	0.00024	0.00025	0.00026	0.00027	0.00029	0.00032
3765637.88	0.00024	0.00023	0.00022	0.00021	0.00022	0.00022	0.00023	0.00024	0.00026
3765587.88	0.00021	0.00020	0.00019	0.00019	0.00019	0.00019	0.00020	0.00021	0.00022

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 , STCK2 , L0000722 , L0000723 , L0000724 ,
L0000725 , L0000726 , L0000727 , L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,

L0000733 , L0000734 , L0000735 , L0000736 , L0000737 , L0000738 , L0001343 , L0001344 ,
L0001345 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 , L0000795 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF DPM IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 411176.18	411226.18	411276.18
3766587.88	0.00015	0.00015	0.00014
3766537.88	0.00018	0.00017	0.00017
3766487.88	0.00021	0.00020	0.00020
3766437.88	0.00025	0.00024	0.00024
3766387.88	0.00031	0.00029	0.00028
3766337.88	0.00037	0.00036	0.00034
3766287.88	0.00046	0.00042	0.00038
3766237.88	0.00054	0.00048	0.00042
3766187.88	0.00059	0.00051	0.00044
3766137.88	0.00061	0.00052	0.00044
3766087.88	0.00061	0.00052	0.00044
3766037.88	0.00063	0.00053	0.00045
3765987.88	0.00070	0.00056	0.00047
3765937.88	0.00093	0.00066	0.00052
3765887.88	0.00215	0.00094	0.00065
3765837.88	0.00140	0.00235	0.00099
3765787.88	0.00068	0.00117	0.00162
3765737.88	0.00047	0.00061	0.00102
3765687.88	0.00035	0.00043	0.00055
3765637.88	0.00028	0.00032	0.00039
3765587.88	0.00024	0.00026	0.00029

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 , STCK2 , L0000722 , L0000723 , L0000724 ,
L0000725 , L0000726 , L0000727 , L0000728 , L0000729 , L0000730 , L0000731 , L0000732 ,
L0000733 , L0000734 , L0000735 , L0000736 , L0000737 , L0000738 , L0001343 , L0001344 ,
L0001345 , L0000790 , L0000791 , L0000792 , L0000793 , L0000794 , L0000795 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
410811.88	3766203.94	0.00284	410876.76	3766146.77	0.00373
410916.18	3766115.13	0.00307	410950.81	3766084.52	0.00273
410694.82	3766307.13	0.00201			

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF DPM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.00553 AT	(410826.18, 3766137.88, 94.10, 94.10, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	0.00494 AT	(410726.18, 3766087.88, 94.10, 94.10, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	0.00463 AT	(410776.18, 3766137.88, 94.00, 94.00, 0.00)	GC	UCART1
	4TH HIGHEST VALUE IS	0.00403 AT	(410676.18, 3766037.88, 93.20, 93.20, 0.00)	GC	UCART1
	5TH HIGHEST VALUE IS	0.00388 AT	(410876.18, 3766137.88, 95.80, 95.80, 0.00)	GC	UCART1
	6TH HIGHEST VALUE IS	0.00373 AT	(410876.76, 3766146.77, 95.89, 95.89, 0.00)	DC	
	7TH HIGHEST VALUE IS	0.00363 AT	(410776.18, 3766087.88, 94.70, 94.70, 0.00)	GC	UCART1
	8TH HIGHEST VALUE IS	0.00349 AT	(410826.18, 3766187.88, 93.50, 93.50, 0.00)	GC	UCART1
	9TH HIGHEST VALUE IS	0.00307 AT	(410916.18, 3766115.13, 96.17, 96.17, 0.00)	DC	
	10TH HIGHEST VALUE IS	0.00293 AT	(410826.18, 3766087.88, 93.80, 93.80, 0.00)	GC	UCART1

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR

**MODELOPTs: NonDFAULT CONC ELEV FASTALL

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1124 Informational Message(s)

A Total of 43848 Hours Were Processed

A Total of 22 Calm Hours Identified

A Total of 1102 Missing Hours Identified (2.51 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
SO W320 357 PPARM:Input Parameter May Be Out-of-Range for Parameter VS
SO W320 358 PPARM:Input Parameter May Be Out-of-Range for Parameter VS

****
*** AERMOD Finishes Successfully ***
****

EMFAC2011 for Los Angeles County				PM10 Running Exhaust																					
Area	Season	Veh	Fuel	MdlYr	Speed	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
					(Miles/hr)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)	(gms/mile)
Los Angeles	Annual	LDA	GAS	AllMYr	5	0.01042934	0.01038854	0.010502234	0.01073767	0.0110349	0.0113455	0.011663	0.011968	0.012258	0.0125463	0.01283034	0.0130812	0.0132952	0.0134669	0.0136	0.013698289	0.0137675	0.013813723	0.0138352	0.013837084
Los Angeles	Annual	LDA	DSL	AllMYr	5	0.0720703	0.06032564	0.051448577	0.04366506	0.0376328	0.0328179	0.028569	0.024792	0.021389	0.0190047	0.01693718	0.01516071	0.0138593	0.0130579	0.012485	0.012189441	0.0118801	0.01170079	0.01155272	0.011399999
Los Angeles	Annual	LDA	GAS	AllMYr	10	0.00665995	0.00661539	0.006671253	0.00680843	0.006988	0.0071779	0.007372	0.007558	0.007735	0.0079123	0.00808903	0.00824499	0.0083779	0.0084836	0.008565	0.008625255	0.0086672	0.008694981	0.00870748	0.008707726
Los Angeles	Annual	LDA	DSL	AllMYr	10	0.06344755	0.05305215	0.045192398	0.03830054	0.0329572	0.0286901	0.024925	0.021577	0.018561	0.0164473	0.01461442	0.01303979	0.0118858	0.0111741	0.010664	0.01039985	0.010124	0.009963724	0.00983185	0.009696595
Los Angeles	Annual	LDA	GAS	AllMYr	15	0.00448469	0.00444265	0.004469375	0.00455322	0.0046676	0.00479	0.004915	0.005035	0.005148	0.0052636	0.00537957	0.00548189	0.0055689	0.0056377	0.005691	0.005729237	0.005756	0.005773685	0.00578134	0.00578091
Los Angeles	Annual	LDA	DSL	AllMYr	15	0.05011104	0.04184077	0.035585114	0.03009946	0.0258441	0.0224435	0.019442	0.016775	0.014372	0.0126861	0.01122477	0.00996964	0.0090493	0.0084806	0.008072	0.007858706	0.0076369	0.007507886	0.0074021	0.007294413
Los Angeles	Annual	LDA	GAS	AllMYr	20	0.00318319	0.0031453	0.003156982	0.00321081	0.0032876	0.0033709	0.003456	0.003537	0.003614	0.0036931	0.00377357	0.00384445	0.0039047	0.003952	0.003988	0.00401445	0.0040326	0.004044418	0.00404937	0.004048699
Los Angeles	Annual	LDA	DSL	AllMYr	20	0.04057317	0.03385611	0.02877438	0.02431802	0.0208603	0.0180964	0.015657	0.013489	0.011536	0.0101654	0.00897749	0.00795725	0.007209	0.0067462	0.006414	0.00623906	0.0060582	0.005952791	0.00586657	0.00577908
Los Angeles	Annual	LDA	GAS	AllMYr	25	0.00238063	0.00234678	0.002350498	0.00238688	0.0024414	0.0025012	0.002563	0.002621	0.002675	0.0027328	0.00279172	0.0028436	0.0028876	0.002922	0.002948	0.002967192	0.0029802	0.002988614	0.00299203	0.002991295
Los Angeles	Annual	LDA	DSL	AllMYr	25	0.03367051	0.02810041	0.023886584	0.02019135	0.0173244	0.0150328	0.01301	0.011213	0.009593	0.0084573	0.00747238	0.00662652	0.0060062	0.0056226	0.005347	0.005202455	0.0050526	0.004965335	0.0048939	0.004821351
Los Angeles	Annual	LDA	GAS	AllMYr	30	0.00187528	0.00184475	0.001844161	0.00187014	0.001911	0.0019565	0.002003	0.002047	0.002088	0.0021325	0.00217808	0.00221822	0.0022523	0.0022787	0.002299	0.002313359	0.0023232	0.002329635	0.00233215	0.002331442
Los Angeles	Annual	LDA	DSL	AllMYr	30	0.02864081	0.02392495	0.020358343	0.01723081	0.0148051	0.0128671	0.011157	0.009636	0.008267	0.0073064	0.0064737	0.00575844	0.0052341	0.0049102	0.004678	0.004556685	0.0044306	0.004357341	0.00429718	0.004235788
Los Angeles	Annual	LDA	GAS	AllMYr	35	0.00155547	0.0015274	0.001524395	0.00154406	0.0015766	0.0016131	0.001651	0.001686	0.001719	0.0017547	0.00179197	0.00182481	0.0018526	0.0018742	0.001891	0.001902428	0.0019104	0.0019156	0.00191759	0.001916944
Los Angeles	Annual	LDA	DSL	AllMYr	35	0.02497868	0.02090293	0.017822084	0.01512073	0.013027	0.0113556	0.009881	0.00857	0.007388	0.0065604	0.00584268	0.00522598	0.0047742	0.0044958	0.004297	0.00419393	0.0040864	0.004024018	0.00397256	0.003919551
Los Angeles	Annual	LDA	GAS	AllMYr	40	0.00135827	0.00133179	0.001327363	0.00134321	0.0013707	0.0014018	0.001434	0.001463	0.001492	0.0015223	0.00155464	0.00158305	0.0016071	0.0016258	0.00164	0.001650194	0.0016571	0.001661564	0.00166327	0.001662694
Los Angeles	Annual	LDA	DSL	AllMYr	40	0.02234839	0.01875362	0.016038673	0.01365846	0.0118156	0.0103464	0.00905	0.007898	0.006859	0.0061323	0.00550197	0.00496013	0.0045636	0.0043203	0.004147	0.004059142	0.0039663	0.003912623	0.00386799	0.003821312
Los Angeles	Annual	LDA	GAS	AllMYr	45	0.00124849	0.00122277	0.001217414	0.00123109	0.0012557	0.0012838	0.001313	0.001339	0.001365	0.0013926	0.0014222	0.00144821	0.0014703	0.0014874	0.0015	0.001509808	0.0015162	0.001520281	0.00152187	0.001521362
Los Angeles	Annual	LDA	DSL	AllMYr	45	0.02053112	0.01729723	0.014857933	0.0127198	0.011067	0.0097521	0.008592	0.007561	0.006631	0.0059814	0.00541791	0.00493326	0.0045791	0.0043632	0.00421	0.004135155	0.0040542	0.004007831	0.0039687	0.003926797
Los Angeles	Annual	LDA	GAS	AllMYr	50	0.00120792	0.00118213	0.00117608	0.00118875	0.0012122	0.0012391	0.001267	0.001292	0.001316	0.0013433	0.00137193	0.00139712	0.0014185	0.0014352	0.001448	0.001457038	0.0014633	0.001467327	0.00146892	0.00146849
Los Angeles	Annual	LDA	DSL	AllMYr	50	0.0193942	0.01642927	0.014197024	0.01224094	0.0107324	0.0095358	0.008481	0.007542	0.006695	0.006106	0.00559426	0.00515366	0.0048325	0.0046384	0.004502	0.004438593	0.0043679	0.004327866	0.00429334	0.004255057
Los Angeles	Annual	LDA	GAS	AllMYr	55	0.00123019	0.00120342	0.001196762	0.00120942	0.0012332	0.0012606	0.001288	0.001314	0.001338	0.0013663	0.0013956	0.0014214	0.0014433	0.0014605	0.001474	0.001483164	0.0014897	0.001493926	0.00149565	0.001495302
Los Angeles	Annual	LDA	DSL	AllMYr	55	0.018876	0.01610933	0.014032036	0.0122125	0.0108141	0.0097098	0.008737	0.007871	0.007088	0.0065465	0.00607564	0.00566961	0.0053747	0.005199	0.005077	0.005025083	0.004964	0.004929956	0.0048996	0.004864045
Los Angeles	Annual	LDA	GAS	AllMYr	60	0.00131897	0.00129018	0.001282919	0.00129654	0.0013222	0.0013517	0.001382	0.001409	0.001435	0.0014655	0.00149719	0.00152512	0.0015489	0.0015676	0.001582	0.001592528	0.0015998	0.001604489	0.00160648	0.001606235
Los Angeles	Annual	LDA	DSL	AllMYr	60	0.01898475	0.01636286	0.014402265	0.01268603	0.0113739	0.0103447	0.009438	0.008632	0.007901	0.0073993	0.00696237	0.00658476	0.006312	0.0061531	0.006045	0.00600597	0.0059548	0.005927363	0.0059012	0.005867756
Los Angeles	Annual	LDA	GAS	AllMYr	65	0.00148905	0.00145694	0.001449038	0.00146483	0.0014943	0.0015279	0.001562	0.001593	0.001623	0.0016577	0.00169398	0.00172594	0.0017531	0.0017748	0.001792	0.001803756	0.0018122	0.001817843	0.00182029	0.00182018
Los Angeles	Annual	LDA	DSL	AllMYr	65	0.01981345	0.0172992	0.015430828	0.01379692	0.0125579	0.0115962	0.010751	0.009997	0.009313	0.0088486	0.00844324	0.00809167	0.00784	0.0076987	0.007606	0.007583583	0.0075445	0.00752513	0.00750387	0.007472159
Los Angeles	Annual	LDA	GAS	AllMYr	70				0.00158802	0.0016203	0.0016569	0.001694	0.001728	0.001761	0.0017987	0.00183826	0.00187315	0.0019029	0.0019266	0.001945	0.001958505	0.0019679	0.001974119	0.00197688	0.001976867
Los Angeles	Annual	LDA	DSL	AllMYr	70				0.01581523	0.0146501	0.0137619	0.012983	0.012287	0.011653	0.011231	0.01086123	0.01053848	0.010311	0.0101918	0.01012	0.010120874	0.0100985	0.01009058	0.01007598	0.010045957
Los Angeles	Annual	LDT1	GAS	AllMYr	5	0.02244756	0.0212693	0.020295083	0.01953481	0.0188791	0.0182913	0.01774	0.01722	0.016746	0.0163243	0.01598312	0.01567297	0.0153918	0.0151225	0.014866	0.014589223	0.0143627	0.014163993	0.01397747	0.013850213
Los Angeles	Annual	LDT1	DSL	AllMYr	5	0.13814669	0.12185203	0.106504254	0.08964581	0.0780387	0.0728755	0.069659	0.063571	0.056021	0.0474989	0.04084644	0.02284593	0.0158364	0.0126167	0.010669	0.010537165	0.0105069	0.010613884	0.01067776	0.01068819
Los Angeles	Annual	LDT1	GAS	AllMYr	10	0.01465575	0.01384732	0.013175696	0.01265158	0.0121982	0.0117916	0.011411	0.011051	0.010723	0.010431	0.01019446	0.00997939	0.0097841	0.0095966	0.009418	0.009227073	0.0090715	0.008936822	0.00881062	0.008725142
Los Angeles	Annual	LDT1	DSL	AllMYr	10	0.12186417	0.10744684	0.093867582	0.07895441	0.0686834	0.0641084	0.061255	0.055866	0.049187	0.0416486	0.03576328	0.019852	0.0136503	0.0107981	0.009071	0.008948591	0.0089178	0.009008653	0.00906287	0.009071721
Los Angeles	Annual	LDT1	GAS	AllMYr	15	0.01006835	0.00948816	0.009004332	0.00862708	0.0083	0.0080067	0.007732	0.007473	0.007236	0.0070249	0.00685411	0.00669871	0.0065575	0.0064215	0.006292	0.006154772	0.0060432	0.005947765	0.00585841	0.005798254
Los Angeles	Annual	LDT1	DSL	AllMYr	15	0.09651226	0.08504795	0.074250384	0.062395	0.0542265	0.0505816	0.048305	0.044017	0.038706	0.0327147	0.02803563	0.01539978	0.0104687	0.008197	0.006819	0.00671607	0.0066874	0.006755489	0.00679614	0.006802783
Los Angeles	Annual	LDT1	GAS	AllMYr	20	0.00726977	0.00683466	0.006470794	0.0061876	0.0059417	0.0057212	0.005515	0.00532	0.005142	0.0049832	0.00485482	0.00473799	0.0046318	0.0045293	0.004432	0.004328882	0.0042455	0.004174868	0.00410878	0.004064492
Los Angeles	Annual	LDT1	DSL	AllMYr	20	0.07823458	0.0689253	0.060157557	0.05053184	0.0438984	0.0409362	0.039085	0.035602	0.03129	0.0264254	0.02262612	0.01237122	0.0083672	0.0065212	0.005401	0.005315153	0.0052904	0.005344272	0.00537643	0.005381687
Los Angeles	Annual	LDT1	GAS	AllMYr	25	0.00551135	0.00517062	0.004885128	0.0046636	0.0044711	0.0042986	0.004137	0.003985	0.003845	0.0037211	0.00362077	0.00352944	0.0034464	0.0033661	0.00329	0.003209661	0.0031448	0.003090273	0.00303927	0.00300522
Los Angeles	Annual	LDT1	DSL	AllMYr	25	0.0649062	0.05718612	0.049915086	0.04193236	0.0364314	0.0339754	0.03244	0.029553	0.025976	0.0219422	0.01879148	0.01028606	0.0069656	0.005435	0.004506	0.004435482	0.0044152	0.004460208	0.00448705	0.004491434
Los Angeles	Annual	LDT1	GAS	AllMYr	30	0.00438343	0.00410496	0.003871368	0.0036909	0.0035341	0.0033936	0.003262	0.003138	0.003025	0.0029236	0.00284206	0.00276789	0.0027005	0.0026352	0.002574	0.002508289	0.0024559	0.002411955	0.00237093	0.002343615
Los Angeles	Annual	LDT1	DSL	AllMYr	30	0.05511298	0.04857479	0.04241678	0.03565497	0.0309966	0.0289192	0.027622	0.025177	0.022148	0.0187309	0.01606221	0.00885289	0.0060406	0.0047457	0.003961	0.00390296	0.0038874	0.003926959	0.00395059	0.003954451
Los Angeles	Annual	LDT1	GAS	AllMYr	35	0.00365535	0.00341788	0.003218622	0.00306555	0.0029326	0.0028136	0.002702	0.002597	0.002501	0.0024158	0.00234703	0.00228447	0.0022277	0.0021726	0.002121	0.002065694	0.0020216	0.001984831	0.00195046	0.001927614
Los Angeles	Annual	LDT1	DSL	AllMYr	35	0.04790279	0.04224855	0.036922899	0.0310733	0.0270455	0.0252533	0.024136	0.022024	0.019404	0.016447	0.01413864	0.0078939	0.0054616	0.0043441	0.003668	0.003621582	0.0036107	0.003647476	0.00366943	0.003673012
Los Angeles	Annual	LDT1	GAS	AllMYr	40	0.00319482	0.00298354	0.002806333	0.00267118	0.002554	0.0024492	0.002351	0.002259	0.002174	0.002099	0.00203875	0.00198397	0.0019343	0.0018861	0.001841	0.001792601	0.0017541	0.001722016	0.00169204	0.00167212
Los Angeles	Annual	LDT1	DSL	AllMYr	40	0.04263078	0.03763887	0.03293678	0.02776961	0.0242147	0.0226386	0.021659	0.019796	0.017483	0.0148701	0.01283154	0.00730406	0.0051564	0.004173	0.00358	0.003543976	0.003538	0.003574072	0.00359558	0.003599093
Los Angeles	Annual	LDT1	GAS	AllMYr	45	0.0029263	0.00273014	0.002565803	0.00244156	0.0023341	0.002238	0.002148	0.002064	0.001986	0.0019175	0.00186269	0.00181287	0.0017678	0.001724	0.001683	0.001639148	0.0016042	0.001575081	0.00154787	0.001529768
Los Angeles	Annual	LDT1	DSL	AllMYr	45	0.0388628	0.03436539	0.030128701	0.02546966	0.0222683	0.0208565	0.019983	0.018308	0.016223	0.0138662	0.01202862	0.0070296	0.0050942	0.0042126	0.003683	0.003657795	0.0036574	0.003694612	0.00371685	0.003720477
Los Angeles	Annual	LDT1	GAS	AllMYr	50	0.00280932	0.00261922	0.002460247	0.00234129	0.0022387	0.0021471	0.002062	0.001981	0.001907	0.001842	0.00179012	0.00174308	0.0017006	0.0016593	0.00162	0.00157938	0.0015464	0.001518906	0.00149318	0.001476041
Los Angeles	Annual	LDT1	DSL	AllMYr	50	0.0363155	0.03218328	0.028290102	0.02400437	0.0210649	0.0197787	0.018989	0.017454	0.015537	0.0133674	0.01167783	0.0070592	0.0052804	0.0044762	0.003997	0.003982311	0.0039885	0.00402911	0.00405336	0.004057317
Los Angeles	Annual	LDT1	GAS	AllMYr	55	0.00282783	0.00263543	0.002474932	0.00235624	0.0022542	0.0021633	0.002079	0.001999	0.001926	0.001861	0.00181007	0.00176392	0.0017224	0.0016819	0.001644	0.001603739	0.0015715	0.00154435	0.00151902	0.001502095
Los Angeles	Annual	LDT1	DSL	AllMYr	55	0.03482177	0.03095376	0.027308813	0.02329031	0.0205414	0.0193524	0.01863	0.017198	0.015403	0.0133665	0.01178337	0.00742528	0.0057594	0.0050146	0.004575	0.004573899	0.0045886	0.004635368	0.00466326	0.004667819
Los Angeles	Annual	LDT1	GAS	AllMYr	60	0.00298625	0.00278276	0.002613531	0.00249004	0.0023844	0.0022904	0.002203	0.00212	0.002045	0.0019784	0.00192635	0.00187928	0.001837	0.0017959	0.001757	0.001716438	0.0016835	0.001655717	0.00162971	0.001612276
Los Angeles	Annual	LDT1	DSL	AllMYr	60	0.03431572	0.03063307	0.027161828	0.02332635	0.0207128	0.0196019	0.018937	0.017582	0.01587	0.0139246	0.012415	0.00821696	0.0066299	0.0059318	0.005527	0.00554261	0.0055692	0.005625926	0.00565978	0.005665312
Los Angeles	Annual	LDT1	GAS	AllMYr	65	0.00331092	0.00308586	0.002899359	0.00276524	0.0026511	0.0025497	0.002456	0.002367	0.002286	0.0022141	0.00215875	0.0021088	0.0020642	0.0020207	0.00198	0.001936674	0.0019017	0.001871975	0.00184412	0.001825351
Los Angeles	Annual	LDT1	DSL	AllMYr	65	0.03483711	0.03128065	0.027926938	0.02420895	0.0216903	0.0206481	0.02004	0.018743	0.017087	0.0151971	0.01373594	0.00961052	0.0080762	0.0074183	0.007046	0.007086765	0.0071308	0.007203417	0.00724677	0.007253847
Los Angeles	Annual	LDT1	GAS	AllMYr	70				0.00296956	0.002849	0.002742	0.002643	0.002549	0.002464	0.0023883	0.00233034	0.0022781	0.0022315	0.0021862	0.002144	0.002098463	0.0020619	0.002030609	0.00200131	0.001981499
Los Angeles	Annual	LDT1	DSL	AllMYr	70				0.02617539	0.0237279	0.0227587	0.022218	0.02097	0.019352	0.0174925	0.01606275	0.01193156	0.0104332	0.0098165	0.009483	0.00956104	0.009632	0.009730113	0.00978867	0.009798233
Los Angeles	Annual	LDT2	GAS	AllMYr	5	0.01120155	0.01107709	0.011097865	0.01121457	0.0113899	0.011595	0.011818	0.012048	0.012272	0.0124924	0.0127161	0.01292164	0.0131042	0.0132606	0.013394	0.013503773	0.0135905	0.013652584	0.01369999	0.013731057
Los Angeles	Annual	LDT2	DSL	AllMYr	5	0.08702901	0.06172027	0.05013456	0.04629147	0.0424277	0.0405798	0.040021	0.035358	0.028767	0.025822	0.02471929	0.01969637	0.0158868	0.0146721	0.013437	0.012557852	0.0123102	0.012347516	0.01230035	0.012180447
Los Angeles	Annual	LDT2	GAS	AllMYr	10	0.00715424	0.00705429	0.007049923	0.00711063	0.0072117	0.0073342	0.007468	0.007608	0.007744	0.0078794	0.00801764	0.00814496	0.0082579	0.0083544	0.008437	0.008504274	0.0085574	0.008595215	0.00862386	0.008642359
Los Angeles	Annual	LDT2	DSL	AllMYr	10	0.07668857	0.05430145	0.044044306	0.04063153	0.0372026	0.0355553	0.035049	0.030918	0.025085	0.0224736	0.02149273	0.01705003	0.013679	0.0126015	0.011507	0.010726321	0.0105049	0.010535163	0.01049318	0.010386448
Los Angeles	Annual	LDT2	GAS	AllMYr	15	0.00481767	0.00473718	0.00472289	0.0047549	0.004816	0.004893	0.004978	0.005068	0.005155	0.0052423	0.00533249	0.00541573	0.0054895	0.0055523	0.005606	0.005649822	0.0056842	0.005708486	0.00572676	0.005738371
Los Angeles	Annual	LDT2	DSL	AllMYr	15	0.06064605	0.04285057	0.034687699	0.03196066	0.029223	0.0279002	0.027484	0.024194	0.019554	0.0174721	0.01668653	0.01315544	0.0104746	0.0096147	0.008742	0.008118845	0.0079403	0.007961449	0.0079278	0.007842241
Los Angeles	Annual	LDT2	GAS	AllMYr	20	0.00341897	0.00335316	0.003335537	0.00335245	0.0033913	0.0034424	0.0035	0.00356	0.003619	0.0036786	0.00374079	0.00379827	0.0038492	0.0038924	0.003929	0.003959401	0.0039829	0.003999408	0.00401174	0.004019447
Los Angeles	Annual	LDT2	DSL	AllMYr	20	0.04912994	0.03468177	0.028051036	0.02583202	0.0236051	0.0225265	0.022184	0.019511	0.015742	0.0140497	0.01340988	0.01054312	0.0083661	0.0076668	0.006957	0.006450484	0.0063046	0.006320806	0.00629339	0.006223678
Los Angeles	Annual	LDT2	GAS	AllMYr	25	0.0025559	0.00250087	0.002482676	0.00249147	0.0025175	0.0025535	0.002594	0.002637	0.002679	0.0027223	0.00276762	0.00280958	0.0028467	0.0028781	0.002905	0.002926874	0.0029439	0.002955764	0.00296458	0.002970017
Los Angeles	Annual	LDT2	DSL	AllMYr	25	0.04076612	0.02878398	0.023285645	0.02144636	0.0196004	0.0187068	0.018424	0.016207	0.013082	0.0116789	0.01114865	0.00877117	0.0069658	0.0063861	0.005798	0.00537775	0.0052569	0.005270583	0.00524786	0.005190102
Los Angeles	Annual	LDT2	GAS	AllMYr	30	0.00201193	0.00196465	0.00194692	0.00195127	0.0019698	0.0019966	0.002027	0.00206	0.002092	0.0021245	0.00215937	0.00219176	0.0022204	0.0022446	0.002265	0.002282142	0.0022952	0.002304267	0.00231097	0.002315054
Los Angeles	Annual	LDT2	DSL	AllMYr	30	0.03464792	0.02449787	0.019843716	0.01829088	0.0167316	0.0159795	0.015745	0.013869	0.011223	0.010037	0.00958999	0.00757588	0.006047	0.0055572	0.00506	0.004704947	0.0046035	0.004616164	0.00459702	0.004548353
Los Angeles	Annual	LDT2	GAS	AllMYr	35	0.00166712	0.00162524	0.001608243	0.00161014	0.0016242	0.0016455	0.00167	0.001696	0.001722	0.0017481	0.00177662	0.00180309	0.0018265	0.0018462	0.001863	0.001876866	0.0018875	0.00189486	0.00190029	0.001903567
Los Angeles	Annual	LDT2	DSL	AllMYr	35	0.03016988	0.02138829	0.01736747	0.01603277	0.0146911	0.0140487	0.013854	0.012235	0.009948	0.0089255	0.0085424	0.00679959	0.0054776	0.0050559	0.004627	0.004321815	0.0042357	0.004248359	0.00423197	0.004190303
Los Angeles	Annual	LDT2	GAS	AllMYr	40	0.00145383	0.00141551	0.001399149	0.00139973	0.0014112	0.0014292	0.00145	0.001472	0.001494	0.0015167	0.00154133	0.00156422	0.0015845	0.0016016	0.001616	0.001628052	0.0016373	0.001643606	0.00164829	0.001651117
Los Angeles	Annual	LDT2	DSL	AllMYr	40	0.02692622	0.01916791	0.015623855	0.01445702	0.0132821	0.0127262	0.012566	0.011141	0.009123	0.0082255	0.00789214	0.00635206	0.0051852	0.0048155	0.004439	0.004171581	0.0040977	0.004111406	0.00409717	0.004060978
Los Angeles	Annual	LDT2	GAS	AllMYr	45	0.00133414	0.00129786	0.001281895	0.00128182	0.001292	0.0013083	0.001327	0.001347	0.001367	0.0013875	0.00141001	0.00143098	0.0014496	0.0014652	0.001479	0.001489516	0.001498	0.001503811	0.00150812	0.001510736
Los Angeles	Annual	LDT2	DSL	AllMYr	45	0.02464841	0.01765141	0.014466158	0.01343036	0.0123847	0.011899	0.01177	0.010492	0.008676	0.0078741	0.00758027	0.00619086	0.00514	0.0048105	0.004474	0.00423583	0.0041722	0.00418789	0.00417538	0.004143565
Los Angeles	Annual	LDT2	GAS	AllMYr	50	0.00128835	0.00125275	0.001236864	0.00123657	0.0012463	0.001262	0.00128	0.001299	0.001318	0.0013383	0.00136013	0.00138047	0.0013985	0.0014137	0.001427	0.001437367	0.0014456	0.001451327	0.00145556	0.00145815
Los Angeles	Annual	LDT2	DSL	AllMYr	50	0.02316771	0.01672921	0.013812927	0.01288189	0.0119384	0.0115122	0.011414	0.010248	0.008583	0.0078543	0.00759303	0.00631389	0.0053488	0.0050508	0.004745	0.004530257	0.0044757	0.004494597	0.00448352	0.004455352
Los Angeles	Annual	LDT2	GAS	AllMYr	55	0.00130935	0.00127311	0.001256933	0.00125678	0.0012669	0.0012831	0.001302	0.001321	0.001341	0.0013611	0.00138354	0.00140442	0.001423	0.0014386	0.001452	0.001462997	0.0014715	0.001477475	0.0014819	0.001484641
Los Angeles	Annual	LDT2	DSL	AllMYr	55	0.02239536	0.01635539	0.013639645	0.01279627	0.0119365	0.0115651	0.011501	0.010421	0.008866	0.0081956	0.00796294	0.00676213	0.0058594	0.0055869	0.005306	0.005109748	0.0050639	0.005087786	0.00507799	0.005053069
Los Angeles	Annual	LDT2	GAS	AllMYr	60	0.00140073	0.00136241	0.001345528	0.00134587	0.0013573	0.0013751	0.001395	0.001417	0.001438	0.0014598	0.00148416	0.00150683	0.001527	0.0015441	0.001559	0.001570673	0.00158	0.001586592	0.00159151	0.001594597
Los Angeles	Annual	LDT2	DSL	AllMYr	60	0.02231739	0.01654841	0.013982557	0.01321908	0.0124334	0.0121183	0.012096	0.011083	0.009608	0.008987	0.00878214	0.00763401	0.0067755	0.0065252	0.006264	0.00608498	0.0060488	0.006080099	0.00607157	0.006049878
Los Angeles	Annual	LDT2	GAS	AllMYr	65	0.00157778	0.00153568	0.001517601	0.00151894	0.0015327	0.0015535	0.001577	0.001602	0.001626	0.0016512	0.00167913	0.00170516	0.0017284	0.001748	0.001765	0.001778732	0.0017896	0.001797263	0.00180305	0.001806743
Los Angeles	Annual	LDT2	DSL	AllMYr	65	0.02300551	0.01740728	0.014958175	0.01427849	0.0135678	0.0133198	0.013356	0.0124	0.010983	0.0104076	0.0102341	0.00911823	0.0082905	0.008062	0.00782	0.007657552	0.0076335	0.007676239	0.00766917	0.007651188
Los Angeles	Annual	LDT2	GAS	AllMYr	70				0.00164584	0.0016613	0.0016844	0.00171	0.001737	0.001764	0.0017915	0.00182208	0.00185054	0.0018759	0.0018975	0.001916	0.001931176	0.0019431	0.001951591	0.00195801	0.001962128
Los Angeles	Annual	LDT2	DSL	AllMYr	70				0.016234	0.0156145	0.0154587	0.015581	0.014684	0.013314	0.0127904	0.01265847	0.01155965	0.0107547	0.0105522	0.010331	0.010189428	0.0101825	0.010243424	0.01023832	0.010225322
Los Angeles	Annual	LHD1	GAS	AllMYr	5	0.00729622	0.0066302	0.006008227	0.00540456	0.0048774	0.0044349	0.004032	0.003661	0.003325	0.0030229	0.00275947	0.00253034	0.0023282	0.0021393	0.001963	0.001813046	0.0016823	0.00156361	0.00143506	0.001331444
Los Angeles	Annual	LHD1	DSL	AllMYr	5	0.09985803	0.09573744	0.091377632	0.08695845	0.0829934	0.0801063	0.077429	0.074581	0.071974	0.0695122	0.06755397	0.06569444	0.0640282	0.0624175	0.060972	0.060445028	0.0599787	0.059530735	0.05890738	0.058164693
Los Angeles	Annual	LHD1	GAS	AllMYr	10	0.00587552	0.00533918	0.004838318	0.0043522	0.0039276	0.0035713	0.003247	0.002948	0.002677	0.0024343	0.00222215	0.00203764	0.0018748	0.0017227	0.00158	0.001460014	0.0013547	0.001259147	0.00115563	0.001072188
Los Angeles	Annual	LHD1	DSL	AllMYr	10	0.08823463	0.08459368	0.08074135	0.07683655	0.073333	0.070782	0.068416	0.0659	0.063596	0.061421	0.05969074	0.05804765	0.0565754	0.0551521	0.053875	0.053409272	0.0529973	0.0526014	0.0520506	0.051394366

Los Angeles	Annual	LHD1	GAS	AllMYr	15	0.00393061	0.00357181	0.003236742	0.00291154	0.0026275	0.0023891	0.002172	0.001972	0.001791	0.0016285	0.00148658	0.00136314	0.0012542	0.0011525	0.001057	9.77E-04	9.06E-04	8.42E-04	7.73E-04	7.17E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	15	0.07003531	0.06714534	0.06408759	0.0609882	0.0582073	0.0561825	0.054305	0.052308	0.050479	0.0487523	0.0473789	0.04607471	0.0449061	0.0437764	0.042763	0.042393046	0.042066	0.041751809	0.04131462	0.040793734
Los Angeles	Annual	LHD1	GAS	AllMYr	20	0.00274092	0.00249072	0.002257069	0.00203029	0.0018322	0.001666	0.001515	0.001375	0.001249	0.0011356	0.00103663	9.51E-04	8.75E-04	8.04E-04	7.37E-04	6.81E-04	6.32E-04	5.87E-04	5.39E-04	5.00E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	20	0.05682632	0.05448141	0.052000369	0.04948554	0.0472291	0.0455862	0.044062	0.042442	0.040958	0.0395574	0.03844301	0.03738481	0.0364366	0.03552	0.034697	0.034397516	0.0341322	0.033877219	0.03352248	0.033099847
Los Angeles	Annual	LHD1	GAS	AllMYr	25	0.00199231	0.00181045	0.001640608	0.00147577	0.0013318	0.001211	0.001101	1.00E-03	9.08E-04	8.25E-04	7.54E-04	6.91E-04	6.36E-04	5.84E-04	5.36E-04	4.95E-04	4.59E-04	4.27E-04	3.92E-04	3.64E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	25	0.04713423	0.04518926	0.043131379	0.04104547	0.0391739	0.0378112	0.036547	0.035203	0.033972	0.0328106	0.03188632	0.03100859	0.0302221	0.0294618	0.02878	0.028530805	0.0283107	0.028099246	0.02780501	0.027454457
Los Angeles	Annual	LHD1	GAS	AllMYr	30	0.00150952	0.00137173	0.001243049	0.00111816	0.0010091	9.18E-04	8.34E-04	7.57E-04	6.88E-04	6.25E-04	5.71E-04	5.24E-04	4.82E-04	4.43E-04	4.06E-04	3.75E-04	3.48E-04	3.23E-04	2.97E-04	2.75E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	30	0.03996482	0.0383157	0.036570827	0.0348022	0.0332153	0.0320599	0.030988	0.029849	0.028805	0.0278199	0.02703621	0.02629199	0.0256252	0.0249805	0.024402	0.02419109	0.0240045	0.023825175	0.0235757	0.023278462
Los Angeles	Annual	LHD1	GAS	AllMYr	35	0.00119219	0.00108337	9.82E-04	8.83E-04	7.97E-04	7.25E-04	6.59E-04	5.98E-04	5.43E-04	4.94E-04	4.51E-04	4.13E-04	3.80E-04	3.50E-04	3.21E-04	2.96E-04	2.75E-04	2.55E-04	2.34E-04	2.18E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	35	0.03463967	0.03321028	0.031697915	0.03016495	0.0287895	0.027788	0.026859	0.025871	0.024967	0.024113	0.02343375	0.02278869	0.0222107	0.0216519	0.021151	0.020967726	0.020806	0.020650566	0.02043433	0.020176701
Los Angeles	Annual	LHD1	GAS	AllMYr	40	9.81E-04	8.92E-04	8.08E-04	7.27E-04	6.56E-04	5.97E-04	5.42E-04	4.93E-04	4.47E-04	4.07E-04	3.71E-04	3.40E-04	3.13E-04	2.88E-04	2.64E-04	2.44E-04	2.26E-04	2.10E-04	1.93E-04	1.79E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	40	0.03069193	0.02942544	0.02808543	0.02672717	0.0255085	0.0246211	0.023798	0.022923	0.022122	0.021365	0.02076309	0.02019155	0.0196794	0.0191844	0.01874	0.018578118	0.0184348	0.018297105	0.01810551	0.017877245
Los Angeles	Annual	LHD1	GAS	AllMYr	45	8.42E-04	7.65E-04	6.94E-04	6.24E-04	5.63E-04	5.12E-04	4.65E-04	4.23E-04	3.84E-04	3.49E-04	3.19E-04	2.92E-04	2.69E-04	2.47E-04	2.27E-04	2.09E-04	1.94E-04	1.80E-04	1.66E-04	1.54E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	45	0.02779899	0.02665188	0.025438173	0.02420794	0.0231041	0.0223004	0.021555	0.020762	0.020036	0.0193511	0.01880602	0.01828835	0.0178245	0.0173761	0.016974	0.016826995	0.0166972	0.016572469	0.01639893	0.016192183
Los Angeles	Annual	LHD1	GAS	AllMYr	50	7.53E-04	6.85E-04	6.20E-04	5.58E-04	5.04E-04	4.58E-04	4.16E-04	3.78E-04	3.43E-04	3.12E-04	2.85E-04	2.61E-04	2.40E-04	2.21E-04	2.03E-04	1.87E-04	1.74E-04	1.61E-04	1.48E-04	1.37E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	50	0.0257388	0.02467671	0.023552948	0.02241389	0.0213919	0.0206477	0.019958	0.019224	0.018552	0.017917	0.01741231	0.016933	0.0165035	0.0160883	0.015716	0.015579946	0.0154598	0.015344282	0.01518361	0.01499218
Los Angeles	Annual	LHD1	GAS	AllMYr	55	7.02E-04	6.38E-04	5.78E-04	5.20E-04	4.70E-04	4.27E-04	3.88E-04	3.52E-04	3.20E-04	2.91E-04	2.66E-04	2.44E-04	2.24E-04	2.06E-04	1.89E-04	1.75E-04	1.62E-04	1.51E-04	1.38E-04	1.28E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	55	0.0243614	0.02335614	0.022292518	0.02121441	0.0202471	0.0195428	0.01889	0.018195	0.017559	0.0169582	0.01648049	0.01602684	0.0156203	0.0152274	0.014875	0.014746188	0.0146324	0.014523136	0.01437106	0.014189876
Los Angeles	Annual	LHD1	GAS	AllMYr	60	6.83E-04	6.20E-04	5.62E-04	5.06E-04	4.56E-04	4.15E-04	3.77E-04	3.43E-04	3.11E-04	2.83E-04	2.58E-04	2.37E-04	2.18E-04	2.00E-04	1.84E-04	1.70E-04	1.57E-04	1.46E-04	1.34E-04	1.25E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	60	0.02357059	0.02259797	0.021568871	0.02052576	0.0195898	0.0189084	0.018276	0.017604	0.016989	0.0164077	0.01594551	0.01550658	0.0151133	0.0147331	0.014392	0.014267506	0.0141574	0.014051694	0.01390456	0.013729253
Los Angeles	Annual	LHD1	GAS	AllMYr	65	6.92E-04	6.28E-04	5.70E-04	5.12E-04	4.62E-04	4.20E-04	3.82E-04	3.47E-04	3.15E-04	2.87E-04	2.62E-04	2.40E-04	2.21E-04	2.03E-04	1.86E-04	1.72E-04	1.59E-04	1.48E-04	1.36E-04	1.26E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	65	0.02331274	0.02235075	0.021332916	0.02030122	0.0193755	0.0187015	0.018076	0.017412	0.016803	0.0162282	0.01577107	0.01533694	0.014948	0.0145719	0.014234	0.014111423	0.0140026	0.013897973	0.01375245	0.01357906
Los Angeles	Annual	LHD1	GAS	AllMYr	70				5.41E-04	4.88E-04	4.44E-04	4.04E-04	3.67E-04	3.33E-04	3.03E-04	2.76E-04	2.53E-04	2.33E-04	2.14E-04	1.96E-04	1.81E-04	1.68E-04	1.57E-04	1.44E-04	1.33E-04
Los Angeles	Annual	LHD1	DSL	AllMYr	70				0.02052576	0.0195898	0.0189084	0.018276	0.017604	0.016989	0.0164077	0.01594551	0.01550658	0.0151133	0.0147331	0.014392	0.014267507	0.0141574	0.014051696	0.01390456	0.013729255
Los Angeles	Annual	LHD2	GAS	AllMYr	5	0.00585711	0.00516285	0.004451811	0.00390907	0.0034468	0.0030552	0.002735	0.002432	0.002169	0.0019375	0.00175187	0.00159923	0.0014851	0.0013762	0.001295	0.001220864	0.0011619	0.00111467	0.00107117	0.001030324
Los Angeles	Annual	LHD2	DSL	AllMYr	5	0.09769669	0.09411357	0.089703201	0.08561026	0.0818961	0.078292	0.075211	0.072106	0.069457	0.0659382	0.06370229	0.06174774	0.0597276	0.0583654	0.057239	0.057199489	0.0568926	0.056447561	0.05533369	0.05447453
Los Angeles	Annual	LHD2	GAS	AllMYr	10	0.00471662	0.00415755	0.003584964	0.0031479	0.0027757	0.0024603	0.002203	0.001959	0.001747	0.0015603	0.00141075	0.00128783	0.001196	0.0011082	0.001043	9.83E-04	9.36E-04	8.98E-04	8.63E-04	8.30E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	10	0.08632487	0.08315884	0.079261816	0.07564529	0.0723634	0.0691789	0.066457	0.063713	0.061372	0.0582631	0.05628739	0.05456035	0.0527753	0.0515717	0.050576	0.050541512	0.0502704	0.049877106	0.04889288	0.048133737
Los Angeles	Annual	LHD2	GAS	AllMYr	15	0.00315533	0.00278132	0.002398272	0.00210589	0.0018569	0.0016459	0.001474	0.00131	0.001169	0.0010438	9.44E-04	8.62E-04	8.00E-04	7.41E-04	6.98E-04	6.58E-04	6.26E-04	6.00E-04	5.77E-04	5.55E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	15	0.06851945	0.06600645	0.062913228	0.06004264	0.0574377	0.05491	0.052749	0.050571	0.048713	0.0462457	0.04467752	0.0433067	0.0418899	0.0409345	0.040145	0.040116792	0.0399016	0.039589425	0.03880821	0.038205647
Los Angeles	Annual	LHD2	GAS	AllMYr	20	0.0022003	0.00193949	0.001672381	0.00146849	0.0012948	0.0011477	0.001028	9.14E-04	8.15E-04	7.28E-04	6.58E-04	6.01E-04	5.58E-04	5.17E-04	4.87E-04	4.59E-04	4.36E-04	4.19E-04	4.02E-04	3.87E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	20	0.05559636	0.05355732	0.051047502	0.04871832	0.0466047	0.0445537	0.042801	0.041033	0.039526	0.0375235	0.03625113	0.03513885	0.0339892	0.033214	0.032573	0.03255058	0.0323759	0.032122674	0.0314888	0.030999881
Los Angeles	Annual	LHD2	GAS	AllMYr	25	0.00159934	0.00140977	0.001215613	0.00106741	9.41E-04	8.34E-04	7.47E-04	6.64E-04	5.92E-04	5.29E-04	4.78E-04	4.37E-04	4.06E-04	3.76E-04	3.54E-04	3.33E-04	3.17E-04	3.04E-04	2.92E-04	2.81E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	25	0.04611405	0.04442278	0.042341028	0.04040911	0.038656	0.0369548	0.035501	0.034035	0.032784	0.0311237	0.03006827	0.0291457	0.0281922	0.0275492	0.027018	0.026998869	0.026854	0.026643949	0.02611818	0.025712657
Los Angeles	Annual	LHD2	GAS	AllMYr	30	0.00121178	0.00106815	9.21E-04	8.09E-04	7.13E-04	6.32E-04	5.66E-04	5.03E-04	4.49E-04	4.01E-04	3.62E-04	3.31E-04	3.07E-04	2.85E-04	2.68E-04	2.53E-04	2.40E-04	2.31E-04	2.22E-04	2.13E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	30	0.03909982	0.0376658	0.035900691	0.03426263	0.0327762	0.0313337	0.030101	0.028858	0.027798	0.0263896	0.0254947	0.02471246	0.023904	0.0233588	0.022908	0.022892174	0.0227694	0.022591238	0.02214545	0.021801601
Los Angeles	Annual	LHD2	GAS	AllMYr	35	9.57E-04	8.44E-04	7.27E-04	6.39E-04	5.63E-04	4.99E-04	4.47E-04	3.97E-04	3.54E-04	3.17E-04	2.86E-04	2.61E-04	2.43E-04	2.25E-04	2.12E-04	1.99E-04	1.90E-04	1.82E-04	1.75E-04	1.68E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	35	0.03388992	0.03264699	0.031117069	0.02969727	0.0284089	0.0271586	0.02609	0.025013	0.024094	0.0228733	0.02209764	0.02141962	0.0207188	0.0202463	0.019856	0.019841882	0.0197354	0.019581048	0.01919466	0.018896623
Los Angeles	Annual	LHD2	GAS	AllMYr	40	7.88E-04	6.94E-04	5.99E-04	5.26E-04	4.64E-04	4.11E-04	3.68E-04	3.27E-04	2.92E-04	2.61E-04	2.36E-04	2.15E-04	2.00E-04	1.85E-04	1.74E-04	1.64E-04	1.56E-04	1.50E-04	1.44E-04	1.39E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	40	0.03002763	0.02892634	0.027570783	0.02631279	0.0251712	0.0240635	0.023117	0.022162	0.021348	0.0202665	0.01957926	0.01897851	0.0183576	0.0179389	0.017593	0.017580585	0.0174863	0.017349473	0.01700712	0.016743053
Los Angeles	Annual	LHD2	GAS	AllMYr	45	6.76E-04	5.96E-04	5.14E-04	4.51E-04	3.98E-04	3.53E-04	3.16E-04	2.81E-04	2.50E-04	2.24E-04	2.02E-04	1.85E-04	1.71E-04	1.59E-04	1.50E-04	1.41E-04	1.34E-04	1.29E-04	1.24E-04	1.19E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	45	0.0271973	0.02619982	0.024972034	0.02383262	0.0227987	0.0217953	0.020938	0.020073	0.019336	0.0183562	0.01773377	0.01718965	0.0166273	0.016248	0.015934	0.015923487	0.0158381	0.015714159	0.01540407	0.015164898
Los Angeles	Annual	LHD2	GAS	AllMYr	50	6.05E-04	5.33E-04	4.60E-04	4.04E-04	3.56E-04	3.15E-04	2.82E-04	2.51E-04	2.24E-04	2.00E-04	1.81E-04	1.65E-04	1.53E-04	1.42E-04	1.34E-04	1.26E-04	1.20E-04	1.15E-04	1.11E-04	1.06E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	50	0.02518171	0.02425815	0.023121358	0.02206639	0.021109	0.0201801	0.019386	0.018586	0.017903	0.0169958	0.01641952	0.01591572	0.015395	0.0150439	0.014754	0.014743395	0.0146643	0.014549582	0.01426248	0.014041027
Los Angeles	Annual	LHD2	GAS	AllMYr	55	5.64E-04	4.97E-04	4.29E-04	3.76E-04	3.32E-04	2.94E-04	2.63E-04	2.34E-04	2.09E-04	1.87E-04	1.69E-04	1.54E-04	1.43E-04	1.32E-04	1.25E-04	1.18E-04	1.12E-04	1.07E-04	1.03E-04	9.92E-05
Los Angeles	Annual	LHD2	DSL	AllMYr	55	0.02383411	0.02295998	0.02188402	0.02088551	0.0199794	0.0191001	0.018349	0.017591	0.016945	0.0160863	0.01554083	0.015064	0.0145712	0.0142388	0.013964	0.013954406	0.0138795	0.013770965	0.01349922	0.013289624
Los Angeles	Annual	LHD2	GAS	AllMYr	60	5.48E-04	4.83E-04	4.17E-04	3.66E-04	3.23E-04	2.86E-04	2.56E-04	2.28E-04	2.03E-04	1.81E-04	1.64E-04	1.50E-04	1.39E-04	1.29E-04	1.21E-04	1.14E-04	1.09E-04	1.04E-04	1.00E-04	9.64E-05
Los Angeles	Annual	LHD2	DSL	AllMYr	60	0.02306043	0.02221467	0.021173637	0.02020753	0.0193308	0.0184801	0.017753	0.01702	0.016395	0.0155641	0.01503635	0.014575	0.0140982	0.0137766	0.013511	0.013501427	0.013429	0.01332394	0.01306102	0.012858224
Los Angeles	Annual	LHD2	GAS	AllMYr	65	5.55E-04	4.89E-04	4.22E-04	3.71E-04	3.27E-04	2.90E-04	2.59E-04	2.31E-04	2.06E-04	1.84E-04	1.66E-04	1.52E-04	1.41E-04	1.30E-04	1.23E-04	1.16E-04	1.10E-04	1.06E-04	1.02E-04	9.77E-05
Los Angeles	Annual	LHD2	DSL	AllMYr	65	0.02280815	0.02197164	0.020942003	0.01998647	0.0191194	0.018278	0.017559	0.016834	0.016215	0.0153939	0.01487186	0.01441555	0.0139439	0.0136259	0.013363	0.013353725	0.0132821	0.01317818	0.01291814	0.01271756
Los Angeles	Annual	LHD2	GAS	AllMYr	70				3.91E-04	3.45E-04	3.06E-04	2.74E-04	2.43E-04	2.17E-04	1.94E-04	1.75E-04	1.60E-04	1.49E-04	1.38E-04	1.30E-04	1.22E-04	1.16E-04	1.12E-04	1.07E-04	1.03E-04
Los Angeles	Annual	LHD2	DSL	AllMYr	70				0.02020753	0.0193308	0.0184801	0.017753	0.01702	0.016395	0.0155641	0.01503636	0.014575	0.0140982	0.0137766	0.013511	0.013501427	0.013429	0.013323941	0.01306102	0.012858225
Los Angeles	Annual	MCY	GAS	AllMYr	5	8.69E-04	7.72E-04	6.98E-04	6.40E-04	5.96E-04	5.65E-04	5.42E-04	5.23E-04	5.07E-04	4.97E-04	4.89E-04	4.82E-04	4.78E-04	4.75E-04	4.72E-04	4.70E-04	4.69E-04	4.69E-04	4.68E-04	4.68E-04
Los Angeles	Annual	MCY	GAS	AllMYr	10	7.59E-04	6.73E-04	6.07E-04	5.56E-04	5.16E-04	4.89E-04	4.68E-04	4.51E-04	4.38E-04	4.28E-04	4.21E-04	4.16E-04	4.12E-04	4.09E-04	4.07E-04	4.05E-04	4.04E-04	4.03E-04	4.03E-04	4.02E-04
Los Angeles	Annual	MCY	GAS	AllMYr	15	6.00E-04	5.30E-04	4.76E-04	4.35E-04	4.02E-04	3.80E-04	3.63E-04	3.50E-04	3.39E-04	3.31E-04	3.25E-04	3.21E-04	3.17E-04	3.15E-04	3.13E-04	3.12E-04	3.11E-04	3.10E-04	3.10E-04	3.10E-04
Los Angeles	Annual	MCY	GAS	AllMYr	20	4.98E-04	4.38E-04	3.93E-04	3.57E-04	3.30E-04	3.11E-04	2.97E-04	2.85E-04	2.76E-04	2.69E-04	2.64E-04	2.60E-04	2.58E-04	2.56E-04	2.54E-04	2.53E-04	2.52E-04	2.52E-04	2.51E-04	2.51E-04
Los Angeles	Annual	MCY	GAS	AllMYr	25	4.33E-04	3.81E-04	3.40E-04	3.09E-04	2.84E-04	2.68E-04	2.55E-04	2.45E-04	2.36E-04	2.30E-04	2.26E-04	2.23E-04	2.20E-04	2.18E-04	2.17E-04	2.16E-04	2.15E-04	2.15E-04	2.14E-04	2.14E-04
Los Angeles	Annual	MCY	GAS	AllMYr	30	3.96E-04	3.47E-04	3.10E-04	2.80E-04	2.58E-04	2.42E-04	2.30E-04	2.21E-04	2.13E-04	2.07E-04	2.03E-04	2.00E-04	1.98E-04	1.96E-04	1.95E-04	1.94E-04	1.93E-04	1.93E-04	1.93E-04	1.92E-04
Los Angeles	Annual	MCY	GAS	AllMYr	35	3.80E-04	3.32E-04	2.96E-04	2.67E-04	2.45E-04	2.30E-04	2.19E-04	2.09E-04	2.02E-04	1.96E-04	1.92E-04	1.89E-04	1.87E-04	1.85E-04	1.84E-04	1.83E-04	1.83E-04	1.82E-04	1.82E-04	1.82E-04
Los Angeles	Annual	MCY	GAS	AllMYr	40	3.82E-04	3.33E-04	2.97E-04	2.68E-04	2.45E-04	2.30E-04	2.18E-04	2.09E-04	2.01E-04	1.96E-04	1.92E-04	1.88E-04	1.86E-04	1.84E-04	1.83E-04	1.82E-04	1.82E-04	1.81E-04	1.81E-04	1.81E-04
Los Angeles	Annual	MCY	GAS	AllMYr	45	4.03E-04	3.51E-04	3.12E-04	2.81E-04	2.57E-04	2.41E-04	2.29E-04	2.18E-04	2.10E-04	2.05E-04	2.00E-04	1.97E-04	1.95E-04	1.93E-04	1.91E-04	1.90E-04	1.90E-04	1.89E-04	1.89E-04	1.89E-04
Los Angeles	Annual	MCY	GAS	AllMYr	50	4.45E-04	3.88E-04	3.44E-04	3.10E-04	2.84E-04	2.66E-04	2.52E-04	2.40E-04	2.32E-04	2.25E-04	2.20E-04	2.17E-04	2.14E-04	2.12E-04	2.10E-04	2.09E-04	2.09E-04	2.08E-04	2.08E-04	2.08E-04
Los Angeles	Annual	MCY	GAS	AllMYr	55	5.16E-04	4.50E-04	3.99E-04	3.59E-04	3.28E-04	3.07E-04	2.91E-04	2.78E-04	2.68E-04	2.60E-04	2.55E-04	2.50E-04	2.47E-04	2.45E-04	2.43E-04	2.42E-04	2.41E-04	2.40E-04	2.40E-04	2.40E-04
Los Angeles	Annual	MCY	GAS	AllMYr	60	6.27E-04	5.46E-04	4.85E-04	4.36E-04	3.99E-04	3.74E-04	3.54E-04	3.38E-04	3.25E-04	3.16E-04	3.09E-04	3.04E-04	3.00E-04	2.97E-04	2.95E-04	2.94E-04	2.93E-04	2.92E-04	2.92E-04	2.91E-04
Los Angeles	Annual	MCY	GAS	AllMYr	65	7.99E-04	6.96E-04	6.18E-04	5.56E-04	5.09E-04	4.77E-04	4.52E-04	4.31E-04	4.15E-04	4.04E-04	3.95E-04	3.88E-04	3.83E-04	3.80E-04	3.77E-04	3.75E-04	3.74E-04	3.73E-04	3.72E-04	3.72E-04
Los Angeles	Annual	MCY	GAS	AllMYr	70				7.45E-04	6.81E-04	6.38E-04	6.05E-04	5.78E-04	5.56E-04	5.41E-04	5.30E-04	5.21E-04	5.14E-04	5.10E-04	5.06E-04	5.03E-04	5.02E-04	5.01E-04	5.00E-04	4.99E-04
Los Angeles	Annual	MDV	GAS	AllMYr	5	0.01264229	0.01255848	0.012539506	0.01252004	0.0125419	0.0125633	0.01259	0.012637	0.012688	0.0127638	0.01284877	0.01294116	0.0130309	0.0131079	0.013171	0.013224899	0.0132654	0.013295881	0.01331987	0.013340328
Los Angeles	Annual	MDV	DSL	AllMYr	5	0.07425977	0.06344937	0.0553895	0.0496621	0.0461815	0.040013	0.03459	0.028382	0.023851	0.0204723	0.01848418	0.01506832	0.0129714	0.0116569	0.011263	0.011166618	0.0111013	0.011028872	0.01099315	0.010962975
Los Angeles	Annual	MDV	GAS	AllMYr	10	0.00809544	0.00802668	0.008000301	0.0079729	0.0079739	0.0079763	0.007982	0.008002	0.008026	0.008068	0.00811724	0.00817148	0.0082243	0.0082693	0.008306	0.008336381	0.0083594	0.008376003	0.00838869	0.008399747
Los Angeles	Annual	MDV	DSL	AllMYr	10	0.06535705	0.05579052	0.04865584	0.04358402	0.0404984	0.0350378	0.030237	0.024743	0.020733	0.0177422	0.01598139	0.01295868	0.011102	0.0099364	0.009585	0.00949712	0.0094382	0.009375241	0.00934337	0.009316093
Los Angeles	Annual	MDV	GAS	AllMYr	15	0.00546466	0.00540858	0.005381688	0.00535362	0.005346	0.0053404	0.005337	0.005344	0.005354	0.0053788	0.00540882	0.00544235	0.0054751	0.0055027	0.005525	0.005543165	0.0055568	0.005566281	0.00557318	0.005579373
Los Angeles	Annual	MDV	DSL	AllMYr	15	0.05159987	0.04399108	0.038314142	0.0342766	0.0318166	0.0274715	0.023651	0.019282	0.016092	0.0137118	0.01230984	0.00990583	0.0084279	0.0074985	0.007215	0.007143282	0.0070953	0.007046363	0.00702074	0.006998431
Los Angeles	Annual	MDV	GAS	AllMYr	20	0.00388641	0.00384022	0.003815173	0.00378893	0.003778	0.0037694	0.003762	0.003763	0.003767	0.0037814	0.00380072	0.00382263	0.0038441	0.003862	0.003876	0.003887735	0.0038963	0.003901913	0.00390578	0.003909396
Los Angeles	Annual	MDV	DSL	AllMYr	20	0.04177189	0.03559279	0.030981743	0.02770159	0.0257018	0.0221724	0.019069	0.015521	0.01293	0.010997	0.00985792	0.00790567	0.006705	0.0059495	0.005718	0.005658952	0.0056196	0.005580251	0.00555935	0.005541017
Los Angeles	Annual	MDV	GAS	AllMYr	25	0.00291051	0.00287173	0.002849063	0.00282522	0.0028135	0.0028038	0.002795	0.002793	0.002793	0.0028028	0.00281596	0.00283114	0.002846	0.0028584	0.002868	0.002875801	0.0028815	0.002885032	0.00288729	0.002889516
Los Angeles	Annual	MDV	DSL	AllMYr	25	0.03466664	0.0295425	0.025718857	0.02299898	0.021341	0.0184143	0.015841	0.012899	0.01075	0.0091471	0.00820265	0.00658369	0.0055881	0.0049617	0.00477	0.004721212	0.0046886	0.004655946	0.00463863	0.004623472
Los Angeles	Annual	MDV	GAS	AllMYr	30	0.00229417	0.00226081	0.00224034	0.00221872	0.002207	0.0021974	0.002188	0.002185	0.002184	0.0021898	0.00219946	0.00221069	0.0022217	0.0022308	0.002238	0.002243433	0.0022475	0.002249899	0.00225131	0.002252782
Los Angeles	Annual	MDV	DSL	AllMYr	30	0.02949528	0.02515623	0.021919283	0.01961747	0.0182157	0.0157381	0.01356	0.011068	0.009249	0.0078921	0.00709287	0.00572192	0.0048793	0.0043498	0.004189	0.004148235	0.0041211	0.004092962	0.0040784	0.004065789
Los Angeles	Annual	MDV	GAS	AllMYr	35	0.00190266	0.00187314	0.001854457	0.00183463	0.0018233	0.0018139	0.001805	0.001801	0.001799	0.0018033	0.00181086	0.00181976	0.0018285	0.0018357	0.001841	0.00184559	0.0018488	0.001850541	0.00185152	0.001852603
Los Angeles	Annual	MDV	DSL	AllMYr	35	0.02573584	0.02198449	0.019187403	0.0171996	0.0159913	0.0138506	0.011969	0.009814	0.008242	0.0070694	0.00637932	0.00519398	0.0044662	0.0040098	0.003873	0.00383922	0.0038165	0.003791422	0.003779	0.003768478
Los Angeles	Annual	MDV	GAS	AllMYr	40	0.00165986	0.00163292	0.001615551	0.00159701	0.0015861	0.0015771	0.001568	0.001564	0.001561	0.0015651	0.00157145	0.00157904	0.0015866	0.0015926	0.001597	0.00160107	0.0016038	0.001605268	0.00160607	0.001606974
Los Angeles	Annual	MDV	DSL	AllMYr	40	0.0230425	0.01973206	0.01726576	0.01551476	0.0144535	0.0125662	0.010907	0.009006	0.007619	0.006585	0.00597741	0.00493129	0.0042901	0.0038894	0.003772	0.003743897	0.0037248	0.003701701	0.00369098	0.003682224
Los Angeles	Annual	MDV	GAS	AllMYr	45	0.00152302	0.00149763	0.001481099	0.00146334	0.0014528	0.0014439	0.001435	0.001431	0.001428	0.0014314	0.00143732	0.00144429	0.0014512	0.0014568	0.001461	0.001464648	0.0014672	0.001468609	0.0014694	0.001470267
Los Angeles	Annual	MDV	DSL	AllMYr	45	0.02119087	0.01821035	0.01599257	0.01442033	0.0134717	0.0117747	0.010283	0.008571	0.007323	0.0063938	0.00584848	0.00490648	0.0043306	0.0039726	0.003871	0.003848341	0.0038325	0.00381033	0.003801	0.003793828
Los Angeles	Annual	MDV	GAS	AllMYr	50	0.00146985	0.00144509	0.001428942	0.00141145	0.001401	0.0013923	0.001384	0.001379	0.001377	0.0013798	0.00138565	0.00139255	0.0013994	0.0014049	0.001409	0.001412898	0.0014155	0.00141703	0.00141794	0.001418886
Los Angeles	Annual	MDV	DSL	AllMYr	50	0.02004635	0.01731051	0.015278433	0.01384095	0.0129793	0.0114248	0.010058	0.008486	0.007342	0.0064911	0.00599284	0.00512799	0.0046012	0.0042763	0.004189	0.004171328	0.0041586	0.00413641	0.00412827	0.004122645
Los Angeles	Annual	MDV	GAS	AllMYr	55	0.00149223	0.00146721	0.001450996	0.00143326	0.0014228	0.001414	0.001406	0.001401	0.001398	0.0014018	0.0014081	0.00141544	0.0014227	0.0014285	0.001433	0.00143734	0.0014402	0.00144204	0.00144319	0.001444339
Los Angeles	Annual	MDV	DSL	AllMYr	55	0.01954906	0.01699177	0.015097276	0.01376135	0.0129683	0.0115196	0.010246	0.008776	0.007709	0.0069153	0.00645279	0.00564414	0.0051542	0.0048555	0.004781	0.004769815	0.0047604	0.004737138	0.00473012	0.004726157
Los Angeles	Annual	MDV	GAS	AllMYr	60	0.00159404	0.00156785	0.00155108	0.00153254	0.0015218	0.0015128	0.001504	0.0015	0.001497	0.0015013	0.00150852	0.00151685	0.0015251	0.0015317	0.001537	0.001542073	0.0015455	0.001547812	0.00154938	0.001550856
Los Angeles	Annual	MDV	DSL	AllMYr	60	0.01971343	0.01728377	0.01549082	0.01423247	0.0134965	0.0121261	0.010922	0.009525	0.008512	0.0077621	0.00732713	0.00655849	0.0060965	0.0058198	0.00576	0.005755786	0.0057503	0.005724688	0.00571884	0.005716905
Los Angeles	Annual	MDV	GAS	AllMYr	65	0.00179232	0.00176385	0.001746012	0.00172602	0.0017148	0.0017055	0.001696	0.001692	0.00169	0.0016951	0.00170399	0.00171405	0.001724	0.001732	0.001739	0.001744934	0.0017493	0.00175236	0.00175457	0.001756577
Los Angeles	Annual	MDV	DSL	AllMYr	65	0.02064543	0.01830646	0.016590636	0.01539518	0.0147122	0.0134017	0.012251	0.010904	0.009933	0.009216	0.0088038	0.00806334	0.0076237	0.0073678	0.007326	0.007331538	0.0073313	0.007301523	0.00729709	0.007297906

Los Angeles	Annual	MDV	GAS	AllMYr	70				0.00186793	0.0018564	0.0018468	0.001837	0.001833	0.001831	0.0018374	0.00184745	0.00185874	0.00187	0.0018789	0.001887	0.001893654	0.0018987	0.00190226	0.00190492	0.001907292
Los Angeles	Annual	MDV	DSL	AllMYr	70				0.01753381	0.0169103	0.0156525	0.014548	0.01324	0.012304	0.0116154	0.01122547	0.01050634	0.0100877	0.0098553	0.009839	0.009859175	0.0098667	0.009829938	0.00982748	0.009832375
Los Angeles	Annual	MH	GAS	AllMYr	5	0.01092305	0.0093452	0.00797936	0.00684542	0.005836	0.0048822	0.00414	0.003518	0.002988	0.0025555	0.0022081	0.00192425	0.0016798	0.0014722	0.00132	0.001198377	0.0011132	0.001048772	0.00100296	9.72E-04
Los Angeles	Annual	MH	DSL	AllMYr	5	0.47040679	0.44594717	0.422994461	0.39640557	0.3692759	0.3329551	0.298467	0.269103	0.243711	0.2216266	0.20203248	0.18247054	0.1630647	0.1440604	0.127818	0.112865191	0.1004844	0.089862391	0.08114996	0.073654998
Los Angeles	Annual	MH	GAS	AllMYr	10	0.00879614	0.00752552	0.006425636	0.0055125	0.0046996	0.0039316	0.003334	0.002833	0.002406	0.0020579	0.00177814	0.00154956	0.0013527	0.0011855	0.001063	9.65E-04	8.96E-04	8.45E-04	8.08E-04	7.82E-04
Los Angeles	Annual	MH	DSL	AllMYr	10	0.39756273	0.37723113	0.358010029	0.33588725	0.313308	0.2831512	0.254565	0.230211	0.209119	0.1905637	0.17403979	0.15747508	0.1411446	0.1252826	0.111667	0.098950046	0.0883513	0.079207641	0.07171739	0.065316551
Los Angeles	Annual	MH	GAS	AllMYr	15	0.00588445	0.00503443	0.004298627	0.00368775	0.003144	0.0026301	0.00223	0.001895	0.00161	0.0013767	0.00118954	0.00103663	9.05E-04	7.93E-04	7.11E-04	6.46E-04	6.00E-04	5.65E-04	5.40E-04	5.23E-04
Los Angeles	Annual	MH	DSL	AllMYr	15	0.27860419	0.26497296	0.251824918	0.2369535	0.2217629	0.201607	0.182591	0.166361	0.152248	0.1394424	0.1279281	0.11626209	0.1049453	0.0941906	0.084851	0.075795076	0.0681229	0.061413571	0.05593454	0.051328445
Los Angeles	Annual	MH	GAS	AllMYr	20	0.00410339	0.00351065	0.002997551	0.00257157	0.0021924	0.0018341	0.001555	0.001322	0.001122	9.60E-04	8.30E-04	7.23E-04	6.31E-04	5.53E-04	4.96E-04	4.50E-04	4.18E-04	3.94E-04	3.77E-04	3.65E-04
Los Angeles	Annual	MH	DSL	AllMYr	20	0.19528487	0.18628003	0.177351478	0.16749022	0.1574057	0.1441474	0.131724	0.121092	0.111794	0.1029938	0.09498124	0.08675298	0.0789339	0.0717166	0.065349	0.058873858	0.0532781	0.048306715	0.04426138	0.04092537
Los Angeles	Annual	MH	GAS	AllMYr	25	0.00298265	0.0025518	0.002178846	0.00186921	0.0015936	0.0013331	0.00113	9.61E-04	8.16E-04	6.98E-04	6.03E-04	5.25E-04	4.59E-04	4.02E-04	3.60E-04	3.27E-04	3.04E-04	2.86E-04	2.74E-04	2.65E-04
Los Angeles	Annual	MH	DSL	AllMYr	25	0.16161219	0.15444661	0.147211098	0.13934112	0.1312855	0.1207588	0.110942	0.102524	0.095135	0.0879439	0.08134331	0.07450956	0.0680968	0.0622875	0.05711	0.051685132	0.0469416	0.042689184	0.03923558	0.036418849
Los Angeles	Annual	MH	GAS	AllMYr	30	0.00225988	0.00193344	0.001650859	0.00141626	0.0012074	0.0010101	8.57E-04	7.28E-04	6.18E-04	5.29E-04	4.57E-04	3.98E-04	3.48E-04	3.05E-04	2.73E-04	2.48E-04	2.30E-04	2.17E-04	2.08E-04	2.01E-04
Los Angeles	Annual	MH	DSL	AllMYr	30	0.14408616	0.13795288	0.131656489	0.12488743	0.1179462	0.1089194	0.100547	0.093344	0.087008	0.0806779	0.07482045	0.06871761	0.0630474	0.057995	0.053453	0.048561074	0.0442362	0.040330636	0.03716209	0.034601239
Los Angeles	Annual	MH	GAS	AllMYr	35	0.00178481	0.00152699	0.001303816	0.00111853	9.54E-04	7.98E-04	6.76E-04	5.75E-04	4.88E-04	4.18E-04	3.61E-04	3.14E-04	2.74E-04	2.41E-04	2.16E-04	1.96E-04	1.82E-04	1.71E-04	1.64E-04	1.59E-04
Los Angeles	Annual	MH	DSL	AllMYr	35	0.13413793	0.12870721	0.123032225	0.11698959	0.1107736	0.102724	0.09531	0.088898	0.083256	0.0774507	0.07202797	0.06634672	0.0611148	0.0565317	0.052376	0.047765053	0.0436387	0.039886409	0.0368435	0.034405483
Los Angeles	Annual	MH	GAS	AllMYr	40	0.00146934	0.00125709	0.001073362	9.21E-04	7.85E-04	6.57E-04	5.57E-04	4.73E-04	4.02E-04	3.44E-04	2.97E-04	2.59E-04	2.26E-04	1.98E-04	1.78E-04	1.61E-04	1.50E-04	1.41E-04	1.35E-04	1.31E-04
Los Angeles	Annual	MH	DSL	AllMYr	40	0.13176752	0.12670966	0.12133829	0.11564758	0.1097677	0.1021724	0.095232	0.089187	0.083878	0.0782625	0.07296587	0.0673969	0.0622992	0.0578974	0.053879	0.049297048	0.0451491	0.041356497	0.03827982	0.035831569
Los Angeles	Annual	MH	GAS	AllMYr	45	0.00126088	0.00107875	9.21E-04	7.90E-04	6.74E-04	5.64E-04	4.78E-04	4.06E-04	3.45E-04	2.95E-04	2.55E-04	2.22E-04	1.94E-04	1.70E-04	1.52E-04	1.38E-04	1.29E-04	1.21E-04	1.16E-04	1.12E-04
Los Angeles	Annual	MH	DSL	AllMYr	45	0.13697489	0.13196016	0.126574677	0.12086142	0.1149285	0.1072648	0.100312	0.094211	0.088875	0.0831132	0.07763414	0.07186813	0.0666004	0.0620922	0.057963	0.053157077	0.0487674	0.044740908	0.04147104	0.038879515
Los Angeles	Annual	MH	GAS	AllMYr	50	0.00112785	9.65E-04	8.24E-04	7.07E-04	6.03E-04	5.04E-04	4.27E-04	3.63E-04	3.09E-04	2.64E-04	2.28E-04	1.99E-04	1.73E-04	1.52E-04	1.36E-04	1.24E-04	1.15E-04	1.08E-04	1.04E-04	1.00E-04
Los Angeles	Annual	MH	DSL	AllMYr	50	0.14976006	0.14445878	0.138741378	0.13263109	0.126256	0.118001	0.110551	0.103969	0.098246	0.0920028	0.08603278	0.07976042	0.0740185	0.0691161	0.064627	0.059345132	0.0544935	0.050039635	0.04641717	0.0435493
Los Angeles	Annual	MH	GAS	AllMYr	55	0.0010516	9.00E-04	7.68E-04	6.59E-04	5.62E-04	4.70E-04	3.99E-04	3.39E-04	2.88E-04	2.46E-04	2.13E-04	1.85E-04	1.62E-04	1.42E-04	1.27E-04	1.15E-04	1.07E-04	1.01E-04	9.66E-05	9.35E-05
Los Angeles	Annual	MH	DSL	AllMYr	55	0.17012305	0.1642055	0.157838424	0.15095659	0.1437502	0.1343811	0.125949	0.118462	0.111992	0.1049314	0.09816179	0.09107378	0.0845535	0.0789691	0.073871	0.067861222	0.0623276	0.057252688	0.05311821	0.049840942
Los Angeles	Annual	MH	GAS	AllMYr	60	0.00102205	8.74E-04	7.47E-04	6.41E-04	5.46E-04	4.57E-04	3.87E-04	3.29E-04	2.80E-04	2.39E-04	2.07E-04	1.80E-04	1.57E-04	1.38E-04	1.24E-04	1.12E-04	1.04E-04	9.81E-05	9.38E-05	9.09E-05
Los Angeles	Annual	MH	DSL	AllMYr	60	0.19806384	0.19120029	0.183865791	0.17583797	0.1674112	0.156405	0.146505	0.13769	0.130112	0.1218988	0.11402118	0.1058082	0.0982053	0.0916512	0.085696	0.078705329	0.0722694	0.066380057	0.06157415	0.057754426
Los Angeles	Annual	MH	GAS	AllMYr	65	0.00103543	8.86E-04	7.56E-04	6.49E-04	5.53E-04	4.63E-04	3.92E-04	3.33E-04	2.83E-04	2.42E-04	2.09E-04	1.82E-04	1.59E-04	1.40E-04	1.25E-04	1.14E-04	1.06E-04	9.94E-05	9.51E-05	9.21E-05
Los Angeles	Annual	MH	DSL	AllMYr	65	0.23358243	0.22544319	0.216823467	0.20727516	0.1972388	0.1840729	0.17222	0.161653	0.152608	0.1429051	0.13361093	0.12396368	0.1149741	0.1071624	0.100101	0.091877466	0.0843192	0.077421743	0.071785	0.067289762
Los Angeles	Annual	MH	GAS	AllMYr	70				6.85E-04	5.84E-04	4.89E-04	4.14E-04	3.52E-04	2.99E-04	2.56E-04	2.21E-04	1.93E-04	1.68E-04	1.47E-04	1.32E-04	1.20E-04	1.11E-04	1.05E-04	1.00E-04	9.73E-05
Los Angeles	Annual	MH	DSL	AllMYr	70				0.24526821	0.2332332	0.2173847	0.203094	0.19035	0.179477	0.1679504	0.15693108	0.14554022	0.1348597	0.1255027	0.117086	0.107377641	0.0984768	0.090377752	0.08375075	0.07844695
Los Angeles	Annual	OBUS	GAS	AllMYr	5	0.00470293	0.00409241	0.003594654	0.00319447	0.0028385	0.002543	0.002281	0.00205	0.001852	0.0016847	0.0015527	0.00145037	0.0013556	0.0012869	0.001214	0.001174574	0.0011327	0.001099659	0.00106887	0.001050646
Los Angeles	Annual	OBUS	DSL	AllMYr	5	0.23252322	0.12747499	0.11585848	0.10663703	0.079693	0.0609858	0.058884	0.057314	0.057154	0.0577311	0.05807087	0.05828733	0.0584075	0.0585407	0.058595	0.058525138	0.0585379	0.058518463	0.05847716	0.058435643
Los Angeles	Annual	OBUS	GAS	AllMYr	10	0.00378718	0.00329555	0.002894711	0.00257245	0.0022858	0.0020478	0.001837	0.001651	0.001492	0.0013566	0.00125036	0.00116795	0.0010916	0.0010363	9.77E-04	9.46E-04	9.12E-04	8.86E-04	8.61E-04	8.46E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	10	0.16951659	0.09858252	0.090749743	0.08540131	0.0684184	0.0557793	0.053852	0.05242	0.052607	0.053137	0.05344635	0.05364054	0.0537467	0.0538678	0.053917	0.053759839	0.0537715	0.053753451	0.05371569	0.053677762
Los Angeles	Annual	OBUS	GAS	AllMYr	15	0.00253355	0.00220466	0.001936506	0.00172092	0.0015291	0.00137	0.001229	0.001104	9.98E-04	9.08E-04	8.36E-04	7.81E-04	7.30E-04	6.93E-04	6.54E-04	6.33E-04	6.10E-04	5.92E-04	5.76E-04	5.66E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	15	0.12527672	0.07600732	0.071762315	0.06844701	0.0577506	0.0496352	0.04788	0.046636	0.046926	0.0474058	0.04770122	0.04790344	0.0480237	0.0481402	0.048186	0.048314772	0.0483263	0.048311317	0.04827581	0.048239832
Los Angeles	Annual	OBUS	GAS	AllMYr	20	0.00176672	0.00153737	0.001350379	0.00120005	0.0010663	9.55E-04	8.57E-04	7.70E-04	6.96E-04	6.33E-04	5.83E-04	5.45E-04	5.09E-04	4.83E-04	4.56E-04	4.41E-04	4.25E-04	4.13E-04	4.02E-04	3.95E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	20	0.08788328	0.05775932	0.05572014	0.05408734	0.0491361	0.0448444	0.043267	0.042137	0.04223	0.0426608	0.0429251	0.04310473	0.0432108	0.043315	0.043356	0.043334124	0.0433446	0.0433312	0.04329923	0.043266819
Los Angeles	Annual	OBUS	GAS	AllMYr	25	0.00128418	0.00111748	9.82E-04	8.72E-04	7.75E-04	6.94E-04	6.23E-04	5.60E-04	5.06E-04	4.60E-04	4.24E-04	3.96E-04	3.70E-04	3.51E-04	3.31E-04	3.21E-04	3.09E-04	3.00E-04	2.92E-04	2.87E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	25	0.07751739	0.05231221	0.050849857	0.04971531	0.0461649	0.0428919	0.041386	0.040303	0.040726	0.0411387	0.04138598	0.04154791	0.0416403	0.0417375	0.041776	0.04197367	0.0419829	0.041968953	0.04193928	0.041909449
Los Angeles	Annual	OBUS	GAS	AllMYr	30	9.73E-04	8.47E-04	7.44E-04	6.61E-04	5.87E-04	5.26E-04	4.72E-04	4.24E-04	3.83E-04	3.49E-04	3.21E-04	3.00E-04	2.80E-04	2.66E-04	2.51E-04	2.43E-04	2.34E-04	2.28E-04	2.21E-04	2.17E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	30	0.07087069	0.04961054	0.048606578	0.04775811	0.0453876	0.042793	0.041297	0.040211	0.040846	0.0412576	0.04149836	0.04164996	0.0417332	0.0418274	0.041866	0.041901483	0.0419103	0.041896113	0.04186695	0.041837713
Los Angeles	Annual	OBUS	GAS	AllMYr	35	7.68E-04	6.69E-04	5.87E-04	5.22E-04	4.64E-04	4.16E-04	3.73E-04	3.35E-04	3.03E-04	2.75E-04	2.54E-04	2.37E-04	2.22E-04	2.10E-04	1.98E-04	1.92E-04	1.85E-04	1.80E-04	1.75E-04	1.72E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	35	0.06781468	0.04915886	0.048530123	0.04774838	0.0462612	0.0445464	0.042999	0.041861	0.042213	0.042638	0.04288725	0.04304459	0.0431311	0.0432287	0.043268	0.043163068	0.0431724	0.043158038	0.04312765	0.043097119
Los Angeles	Annual	OBUS	GAS	AllMYr	40	6.33E-04	5.51E-04	4.84E-04	4.30E-04	3.82E-04	3.42E-04	3.07E-04	2.76E-04	2.49E-04	2.27E-04	2.09E-04	1.95E-04	1.82E-04	1.73E-04	1.63E-04	1.58E-04	1.52E-04	1.48E-04	1.44E-04	1.41E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	40	0.06815626	0.05081394	0.050462857	0.05005713	0.0492171	0.0474594	0.0458	0.044596	0.044903	0.0453579	0.0456297	0.04580704	0.0459079	0.0460146	0.046057	0.046123599	0.0461339	0.046118749	0.04608592	0.046052857
Los Angeles	Annual	OBUS	GAS	AllMYr	45	5.43E-04	4.72E-04	4.15E-04	3.69E-04	3.28E-04	2.94E-04	2.63E-04	2.37E-04	2.14E-04	1.94E-04	1.79E-04	1.67E-04	1.56E-04	1.49E-04	1.40E-04	1.36E-04	1.31E-04	1.27E-04	1.23E-04	1.21E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	45	0.07166536	0.05437966	0.05419692	0.05379209	0.0533673	0.0519485	0.050117	0.048811	0.049181	0.0496823	0.04998768	0.05019322	0.0503136	0.0504338	0.050481	0.050651866	0.0506636	0.05064745	0.05061077	0.05057371
Los Angeles	Annual	OBUS	GAS	AllMYr	50	4.86E-04	4.23E-04	3.71E-04	3.30E-04	2.93E-04	2.63E-04	2.36E-04	2.12E-04	1.91E-04	1.74E-04	1.60E-04	1.50E-04	1.40E-04	1.33E-04	1.25E-04	1.21E-04	1.17E-04	1.14E-04	1.10E-04	1.08E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	50	0.07900626	0.06069441	0.060578795	0.06015402	0.0599061	0.058439	0.056373	0.054908	0.05599	0.0565572	0.05689557	0.05711582	0.0572408	0.0573736	0.057427	0.057514001	0.0575268	0.057507846	0.05746698	0.057425843
Los Angeles	Annual	OBUS	GAS	AllMYr	55	4.53E-04	3.94E-04	3.46E-04	3.08E-04	2.73E-04	2.45E-04	2.20E-04	1.97E-04	1.78E-04	1.62E-04	1.49E-04	1.40E-04	1.31E-04	1.24E-04	1.17E-04	1.13E-04	1.09E-04	1.06E-04	1.03E-04	1.01E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	55	0.09028281	0.06981836	0.069674792	0.06940353	0.0690669	0.0674823	0.065119	0.06341	0.06435	0.0649993	0.06538209	0.06562611	0.0657617	0.0659117	0.065972	0.066015299	0.0660295	0.066007434	0.06596108	0.065914523
Los Angeles	Annual	OBUS	GAS	AllMYr	60	4.40E-04	3.83E-04	3.36E-04	2.99E-04	2.66E-04	2.38E-04	2.13E-04	1.92E-04	1.73E-04	1.58E-04	1.45E-04	1.36E-04	1.27E-04	1.20E-04	1.14E-04	1.10E-04	1.06E-04	1.03E-04	1.00E-04	9.83E-05
Los Angeles	Annual	OBUS	DSL	AllMYr	60	0.10733589	0.08390409	0.083654687	0.08248455	0.0817921	0.0799841	0.077256	0.075175	0.076332	0.0770877	0.07750114	0.07773034	0.0778383	0.0779984	0.078066	0.078553889	0.078567	0.078536747	0.07848693	0.078437979
Los Angeles	Annual	OBUS	GAS	AllMYr	65	4.46E-04	3.88E-04	3.41E-04	3.03E-04	2.69E-04	2.41E-04	2.16E-04	1.94E-04	1.76E-04	1.60E-04	1.47E-04	1.37E-04	1.29E-04	1.22E-04	1.15E-04	1.11E-04	1.07E-04	1.04E-04	1.01E-04	9.96E-05
Los Angeles	Annual	OBUS	DSL	AllMYr	65	0.12777871	0.10022652	0.099745266	0.09864141	0.0974022	0.0947536	0.091598	0.089075	0.090002	0.0908815	0.09133533	0.0915556	0.091639	0.091813	0.09189	0.092053746	0.092067	0.092029502	0.09197398	0.091920057
Los Angeles	Annual	OBUS	GAS	AllMYr	70				3.20E-04	2.84E-04	2.55E-04	2.28E-04	2.05E-04	1.85E-04	1.69E-04	1.55E-04	1.45E-04	1.36E-04	1.29E-04	1.22E-04	1.18E-04	1.13E-04	1.10E-04	1.07E-04	1.05E-04
Los Angeles	Annual	OBUS	DSL	AllMYr	70				0.11507728	0.1131283	0.1096045	0.105966	0.103039	0.104071	0.1050858	0.10560522	0.10585211	0.1059416	0.1061406	0.106229	0.10630669	0.1063218	0.106278178	0.10621441	0.106152566
Los Angeles	Annual	SBUS	GAS	AllMYr	5	0.03224937	0.02685269	0.018141098	0.01354593	0.0129349	0.0122457	0.011296	0.010178	0.009134	0.0087702	0.00823644	0.0079634	0.0077241	0.0071205	0.006532	0.006009948	0.0053765	0.004077043	0.00317794	0.002002271
Los Angeles	Annual	SBUS	DSL	AllMYr	5	0.43112285	0.43299406	0.24095329	0.23602456	0.2312365	0.2215373	0.213613	0.207436	0.19716	0.1867056	0.17434536	0.15882087	0.142475	0.1253136	0.108866	0.091600266	0.0796253	0.062835789	0.06382376	0.064330803
Los Angeles	Annual	SBUS	GAS	AllMYr	10	0.02596984	0.021624	0.014608704	0.0109083	0.0104163	0.0098613	0.009096	0.008197	0.007355	0.0070625	0.00663266	0.00641279	0.0062201	0.005734	0.00526	0.004839704	0.0043296	0.00328317	0.00255914	0.001612393
Los Angeles	Annual	SBUS	DSL	AllMYr	10	0.30502925	0.30635939	0.168734693	0.1650157	0.1614709	0.1543137	0.149498	0.145811	0.139481	0.1331937	0.1257159	0.11621162	0.1062497	0.0957337	0.085728	0.075131312	0.067962	0.057629532	0.05853564	0.059000676
Los Angeles	Annual	SBUS	GAS	AllMYr	15	0.01737332	0.01446604	0.009772942	0.00729744	0.0069683	0.006597	0.006085	0.005483	0.004921	0.0047246	0.00443712	0.00429003	0.0041611	0.0038359	0.003519	0.003237669	0.0028964	0.002196377	0.00171201	0.00107866
Los Angeles	Annual	SBUS	DSL	AllMYr	15	0.20841775	0.2093333	0.113555426	0.1107839	0.108206	0.1030229	0.100526	0.09869	0.095308	0.0921244	0.08828514	0.08327399	0.0780739	0.0725184	0.067316	0.061698903	0.0581066	0.052596462	0.05342344	0.053847858
Los Angeles	Annual	SBUS	GAS	AllMYr	20	0.0121149	0.01008757	0.006814941	0.00508871	0.0048592	0.0046003	0.004243	0.003824	0.003431	0.0032946	0.00309413	0.00299156	0.0029017	0.0026749	0.002454	0.002257716	0.0020198	0.001531595	0.00119383	7.52E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	20	0.13429312	0.13489173	0.071481384	0.06947216	0.067662	0.0640395	0.063226	0.06273	0.061496	0.0605618	0.0593627	0.05762151	0.055883	0.0539383	0.052226	0.05023524	0.0492318	0.047235989	0.04797868	0.048359846
Los Angeles	Annual	SBUS	GAS	AllMYr	25	0.00880602	0.00733241	0.004953614	0.00369886	0.003532	0.0033438	0.003084	0.002779	0.002494	0.0023948	0.00224904	0.00217449	0.0021092	0.0019443	0.001784	0.001641078	0.0014681	0.001113279	8.68E-04	5.47E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	25	0.11421513	0.11472929	0.06023597	0.05845384	0.0568674	0.0536949	0.053292	0.053119	0.052412	0.0520223	0.05146473	0.05052293	0.0496287	0.0485671	0.047706	0.046602091	0.0462245	0.045090116	0.04579907	0.046162918
Los Angeles	Annual	SBUS	GAS	AllMYr	30	0.00667211	0.00555559	0.003753233	0.00280253	0.0026761	0.0025335	0.002337	0.002106	0.00189	0.0018145	0.00170405	0.00164756	0.0015981	0.0014732	0.001351	0.001243405	0.0011124	8.44E-04	6.57E-04	4.14E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	30	0.09839404	0.09885999	0.051794529	0.0502526	0.0489021	0.0461724	0.046131	0.046248	0.046	0.0460959	0.04610688	0.04586447	0.0457126	0.0454228	0.045311	0.044981586	0.0451648	0.04477971	0.04548378	0.045845126
Los Angeles	Annual	SBUS	GAS	AllMYr	35	0.0052695	0.00438769	0.00296423	0.00221339	0.0021136	0.0020009	0.001846	0.001663	0.001492	0.001433	0.00134582	0.00130121	0.0012621	0.0011635	0.001067	9.82E-04	8.79E-04	6.66E-04	5.19E-04	3.27E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	35	0.08682987	0.08728384	0.04615706	0.04486845	0.043766	0.0414719	0.041744	0.042119	0.042259	0.0427825	0.04328914	0.04364613	0.0441347	0.0445056	0.045041	0.045373724	0.0460527	0.04630477	0.04703282	0.047406471
Los Angeles	Annual	SBUS	GAS	AllMYr	40	0.0043381	0.00361215	0.002440291	0.00182216	0.00174	0.0016473	0.001519	0.001369	0.001229	0.0011797	0.00110794	0.00107122	0.001039	9.58E-04	8.79E-04	8.08E-04	7.23E-04	5.48E-04	4.27E-04	2.69E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	40	0.07952261	0.08000084	0.043323564	0.04230138	0.0414592	0.0395936	0.040131	0.040731	0.041191	0.0420822	0.0430115	0.04386792	0.044895	0.0458154	0.046898	0.047778505	0.0488882	0.049665296	0.05044618	0.050846952
Los Angeles	Annual	SBUS	GAS	AllMYr	45	0.00372265	0.00309969	0.002094086	0.00156365	0.0014931	0.0014136	0.001304	0.001175	0.001054	0.0010124	9.51E-04	9.19E-04	8.92E-04	8.22E-04	7.54E-04	6.94E-04	6.21E-04	4.71E-04	3.67E-04	2.31E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	45	0.07647226	0.07701098	0.04329404	0.0425514	0.0419817	0.0405374	0.041291	0.042084	0.042794	0.0439949	0.04527397	0.04652984	0.0479936	0.0493521	0.050881	0.052195929	0.0536713	0.054861288	0.05572387	0.056166568
Los Angeles	Annual	SBUS	GAS	AllMYr	50	0.00332988	0.00277265	0.001873142	0.00139867	0.0013356	0.0012644	0.001166	0.001051	9.43E-04	9.06E-04	8.50E-04	8.22E-04	7.98E-04	7.35E-04	6.74E-04	6.21E-04	5.55E-04	4.21E-04	3.28E-04	2.07E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	50	0.07767882	0.07831427	0.046068489	0.0456185	0.0453334	0.0443033	0.045225	0.046177	0.04707	0.0485207	0.05007655	0.05163187	0.0534303	0.0551158	0.056989	0.058625997	0.0604021	0.061892745	0.06286588	0.063365322
Los Angeles	Annual	SBUS	GAS	AllMYr	55	0.00310476	0.0025852	0.001746506	0.00130411	0.0012453	0.0011789	0.001087	9.80E-04	8.79E-04	8.44E-04	7.93E-04	7.67E-04	7.44E-04	6.86E-04	6.29E-04	5.79E-04	5.18E-04	3.93E-04	3.06E-04	1.93E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	55	0.0831423	0.0839107	0.051646911	0.05150268	0.0515145	0.0508913	0.051933	0.053012	0.054017	0.0556595	0.05741924	0.05917404	0.0612054	0.0631066	0.065223	0.067068708	0.0690804	0.070759669	0.07187222	0.072443211
Los Angeles	Annual	SBUS	GAS	AllMYr	60	0.00301752	0.00251256	0.001697433	0.00126747	0.0012103	0.0011458	0.001057	9.52E-04	8.55E-04	8.21E-04	7.71E-04	7.45E-04	7.23E-04	6.66E-04	6.11E-04	5.62E-04	5.03E-04	3.81E-04	2.97E-04	1.87E-04
Los Angeles	Annual	SBUS	DSL	AllMYr	60	0.09286269	0.09380028	0.060029305	0.06020394	0.0605248	0.0603015	0.061415	0.062588	0.063636	0.0654113	0.06730203	0.06915632	0.0713186	0.0733243	0.075583	0.077524062	0.0797064	0.08146206	0.08274289	0.083400236
Los Angeles	Annual	T6	GAS	AllMYr	5	0.00640783	0.00526934	0.004349377	0.00369006	0.0031646	0.0027106	0.002404	0.002141	0.001932	0.0017563	0.00161607	0.00150537	0.0014078	0.0013199	0.001248	0.001198072	0.0011517	0.001110264	0.00106787	0.001029474
Los Angeles	Annual	T6	DSL	AllMYr	5	0.24409895	0.18934044	0.150636433	0.11585613	0.0603765	0.0417007	0.040931	0.039349	0.03951	0.0395905	0.03962519	0.03964121	0.0396447	0.0396264	0.039612	0.03960493	0.0395926	0.039573894	0.03954989	0.039530357
Los Angeles	Annual	T6	GAS	AllMYr	10	0.00516011	0.00424331	0.003502477	0.00297154	0.0025484	0.0021828	0.001936	0.001724	0.001556	0.0014143	0.0013014	0.00121225	0.0011337	0.0010629	0.001005	9.65E-04	9.27E-04	8.94E-04	8.60E-04	8.29E-04
Los Angeles	Annual	T6	DSL	AllMYr	10	0.18245077	0.14417149	0.116733177	0.09213563	0.0533734	0.0378641	0.037208	0.035866	0.036047	0.0361494	0.03620774	0.03624544	0.0362686	0.0362682	0.036269	0.036274582	0.0362737	0.036265742	0.03625077	0.036237678
Los Angeles	Annual	T6	GAS	AllMYr	15	0.00345202	0.00283869	0.002343089	0.0019879	0.0017048	0.0014603	0.001295	0.001153	0.001041	9.46E-04	8.71E-04	8.11E-04	7.58E-04	7.11E-04	6.72E-04	6.45E-04	6.20E-04	5.98E-04	5.75E-04	5.55E-04
Los Angeles	Annual	T6	DSL	AllMYr	15	0.13446301	0.10876785	0.089961772	0.07316196	0.0471638	0.034262	0.033701	0.032561	0.032752	0.0328679	0.03294161	0.03299382	0.0330305	0.0330428	0.033055	0.033068716	0.033076	0.033075835	0.03306761	0.033059405
Los Angeles	Annual	T6	GAS	AllMYr	20	0.00240719	0.0019795	0.001633901	0.00138622	0.0011888	0.0010183	9.03E-04	8.04E-04	7.26E-04	6.60E-04	6.07E-04	5.66E-04	5.29E-04	4.96E-04	4.69E-04	4.50E-04	4.33E-04	4.17E-04	4.01E-04	3.87E-04
Los Angeles	Annual	T6	DSL	AllMYr	20	0.09661298	0.08049826	0.068306198	0.0574742	0.0411905	0.0305474	0.030072	0.029113	0.029303	0.0294243	0.02950596	0.02956628	0.0296109	0.0296315	0.02965	0.029669941	0.0296826	0.029687779	0.0296845	0.029679952
Los Angeles	Annual	T6	GAS	AllMYr	25	0.00174972	0.00143885	0.001187642	0.00100761	8.64E-04	7.40E-04	6.57E-04	5.85E-04	5.28E-04	4.80E-04	4.41E-04	4.11E-04	3.84E-04	3.60E-04	3.41E-04	3.27E-04	3.14E-04	3.03E-04	2.92E-04	2.81E-04
Los Angeles	Annual	T6	DSL	AllMYr	25	0.0859194	0.07235485	0.061942967	0.05271405	0.0390144	0.0291012	0.028655	0.027756	0.027943	0.0280631	0.02814505	0.02820614	0.0282518	0.0282739	0.028294	0.028314614	0.0283283	0.028334635	0.02833258	0.028328983

Los Angeles	Annual	T6	GAS	AllMYr	30	0.00132572	0.00109018	9.00E-04	7.63E-04	6.55E-04	5.61E-04	4.97E-04	4.43E-04	4.00E-04	3.63E-04	3.34E-04	3.11E-04	2.91E-04	2.73E-04	2.58E-04	2.48E-04	2.38E-04	2.30E-04	2.21E-04	2.13E-04
Los Angeles	Annual	T6	DSL	AllMYr	30	0.07924949	0.06753477	0.058375237	0.0502795	0.0384491	0.0288419	0.028407	0.027532	0.027722	0.0278458	0.02793118	0.02799532	0.0280437	0.028068	0.02809	0.028112375	0.0281275	0.028135185	0.02813421	0.028131416
Los Angeles	Annual	T6	GAS	AllMYr	35	0.00104703	8.61E-04	7.11E-04	6.03E-04	5.17E-04	4.43E-04	3.93E-04	3.50E-04	3.16E-04	2.87E-04	2.64E-04	2.46E-04	2.30E-04	2.16E-04	2.04E-04	1.96E-04	1.88E-04	1.81E-04	1.74E-04	1.68E-04
Los Angeles	Annual	T6	DSL	AllMYr	35	0.07660326	0.06603802	0.057603008	0.05017055	0.0394947	0.0297696	0.029327	0.028439	0.02864	0.0287724	0.02886436	0.02893381	0.0289865	0.0290139	0.029038	0.029063224	0.0290802	0.029089429	0.0290894	0.029087254
Los Angeles	Annual	T6	GAS	AllMYr	40	8.62E-04	7.09E-04	5.85E-04	4.96E-04	4.26E-04	3.65E-04	3.23E-04	2.88E-04	2.60E-04	2.36E-04	2.17E-04	2.02E-04	1.89E-04	1.78E-04	1.68E-04	1.61E-04	1.55E-04	1.49E-04	1.44E-04	1.38E-04
Los Angeles	Annual	T6	DSL	AllMYr	40	0.0779807	0.06786461	0.059626281	0.0523872	0.0421511	0.031884	0.031416	0.030478	0.030698	0.0308429	0.03094457	0.03102161	0.0310803	0.0311114	0.031139	0.03116716	0.0311864	0.031197367	0.03119813	0.031196495
Los Angeles	Annual	T6	GAS	AllMYr	45	7.40E-04	6.08E-04	5.02E-04	4.26E-04	3.65E-04	3.13E-04	2.78E-04	2.47E-04	2.23E-04	2.03E-04	1.87E-04	1.74E-04	1.63E-04	1.52E-04	1.44E-04	1.38E-04	1.33E-04	1.28E-04	1.23E-04	1.19E-04
Los Angeles	Annual	T6	DSL	AllMYr	45	0.08338182	0.07301453	0.064445054	0.05692946	0.0464184	0.0351854	0.034673	0.033648	0.033894	0.0340574	0.03417183	0.03425873	0.034325	0.0343607	0.034392	0.034424184	0.0344462	0.034458999	0.03446042	0.034459139
Los Angeles	Annual	T6	GAS	AllMYr	50	6.62E-04	5.44E-04	4.49E-04	3.81E-04	3.27E-04	2.80E-04	2.48E-04	2.21E-04	1.99E-04	1.81E-04	1.67E-04	1.55E-04	1.45E-04	1.36E-04	1.29E-04	1.24E-04	1.19E-04	1.15E-04	1.10E-04	1.06E-04
Los Angeles	Annual	T6	DSL	AllMYr	50	0.09280661	0.08148779	0.072059329	0.06379731	0.0522966	0.0396737	0.039099	0.037951	0.03823	0.0384158	0.03854612	0.03864517	0.0387207	0.0387616	0.038798	0.038834295	0.0388595	0.038874326	0.03887626	0.038875187
Los Angeles	Annual	T6	GAS	AllMYr	55	6.17E-04	5.07E-04	4.19E-04	3.55E-04	3.05E-04	2.61E-04	2.31E-04	2.06E-04	1.86E-04	1.69E-04	1.56E-04	1.45E-04	1.36E-04	1.27E-04	1.20E-04	1.15E-04	1.11E-04	1.07E-04	1.03E-04	9.91E-05
Los Angeles	Annual	T6	DSL	AllMYr	55	0.10625508	0.09328438	0.082469104	0.07299077	0.0597856	0.0453488	0.044694	0.043386	0.043706	0.0439182	0.04406747	0.04418091	0.0442674	0.0443142	0.044356	0.044397494	0.0444263	0.044443346	0.04444565	0.044444638
Los Angeles	Annual	T6	GAS	AllMYr	60	6.00E-04	4.93E-04	4.07E-04	3.45E-04	2.96E-04	2.54E-04	2.25E-04	2.00E-04	1.81E-04	1.64E-04	1.51E-04	1.41E-04	1.32E-04	1.24E-04	1.17E-04	1.12E-04	1.08E-04	1.04E-04	9.99E-05	9.63E-05
Los Angeles	Annual	T6	DSL	AllMYr	60	0.12372722	0.10840431	0.095674381	0.08450983	0.0688854	0.0522108	0.051457	0.049952	0.05032	0.0505645	0.05073585	0.05086598	0.050965	0.0510186	0.051066	0.051113781	0.0511467	0.051166061	0.05116859	0.051167493
Los Angeles	Annual	T6	GAS	AllMYr	65	6.07E-04	4.99E-04	4.12E-04	3.50E-04	3.00E-04	2.57E-04	2.28E-04	2.03E-04	1.83E-04	1.66E-04	1.53E-04	1.43E-04	1.33E-04	1.25E-04	1.18E-04	1.14E-04	1.09E-04	1.05E-04	1.01E-04	9.76E-05
Los Angeles	Annual	T6	DSL	AllMYr	65	0.14522303	0.12684757	0.111675159	0.0983545	0.0795961	0.0602597	0.059389	0.05765	0.058074	0.0583547	0.05855127	0.05870035	0.0588136	0.0588746	0.058929	0.058983155	0.0590205	0.05904247	0.05904509	0.059043751
Los Angeles	Annual	T6	GAS	AllMYr	70				3.69E-04	3.17E-04	2.71E-04	2.41E-04	2.14E-04	1.93E-04	1.76E-04	1.62E-04	1.51E-04	1.41E-04	1.32E-04	1.25E-04	1.20E-04	1.15E-04	1.11E-04	1.07E-04	1.03E-04
Los Angeles	Annual	T6	DSL	AllMYr	70				0.11452476	0.0919176	0.0694955	0.06849	0.06648	0.066967	0.0672888	0.06751374	0.06768404	0.0678132	0.0678823	0.067944	0.068005617	0.0680479	0.068072573	0.06807514	0.068073413
Los Angeles	Annual	T7	GAS	AllMYr	5	0.00270473	0.00241712	0.002079367	0.00193613	0.0017176	0.0015421	0.001448	0.001351	0.001281	0.0012038	0.0011555	0.00111019	0.0010834	0.0010458	0.001014	9.80E-04	9.65E-04	9.51E-04	9.42E-04	9.38E-04
Los Angeles	Annual	T7	DSL	AllMYr	5	0.15739351	0.12506118	0.118613923	0.11244018	0.0987239	0.0895697	0.088356	0.087228	0.087367	0.0874953	0.08215066	0.08207723	0.0810018	0.0808878	0.080797	0.080712227	0.0806436	0.080547622	0.08045273	0.080390446
Los Angeles	Annual	T7	GAS	AllMYr	10	0.00217807	0.00194647	0.001674477	0.00155913	0.0013832	0.0012418	0.001166	0.001088	0.001032	9.69E-04	9.31E-04	8.94E-04	8.72E-04	8.42E-04	8.16E-04	7.89E-04	7.77E-04	7.66E-04	7.59E-04	7.55E-04
Los Angeles	Annual	T7	DSL	AllMYr	10	0.12645277	0.10374133	0.099654644	0.09560272	0.086771	0.0808258	0.079822	0.078947	0.079151	0.0793449	0.07451201	0.07451529	0.0735998	0.0735637	0.073549	0.073546286	0.0735511	0.073536343	0.07352122	0.073526861
Los Angeles	Annual	T7	GAS	AllMYr	15	0.00145709	0.00130215	0.001120193	0.00104303	9.25E-04	8.31E-04	7.80E-04	7.28E-04	6.90E-04	6.48E-04	6.22E-04	5.98E-04	5.84E-04	5.63E-04	5.46E-04	5.28E-04	5.20E-04	5.12E-04	5.08E-04	5.05E-04
Los Angeles	Annual	T7	DSL	AllMYr	15	0.10155639	0.08620088	0.083884465	0.08143257	0.0762725	0.0727429	0.071911	0.071237	0.071481	0.0717181	0.06736054	0.06741824	0.0666376	0.0666576	0.066698	0.066752822	0.0668096	0.066852875	0.06689471	0.066948446
Los Angeles	Annual	T7	GAS	AllMYr	20	0.00101607	9.08E-04	7.81E-04	7.27E-04	6.45E-04	5.79E-04	5.44E-04	5.08E-04	4.81E-04	4.52E-04	4.34E-04	4.17E-04	4.07E-04	3.93E-04	3.81E-04	3.68E-04	3.62E-04	3.57E-04	3.54E-04	3.52E-04
Los Angeles	Annual	T7	DSL	AllMYr	20	0.07891287	0.06479424	0.063245303	0.061415	0.0569878	0.0543876	0.053126	0.052392	0.056095	0.0564327	0.05407996	0.05425644	0.0539196	0.0540254	0.054133	0.054830028	0.0549323	0.055026231	0.05511365	0.055205817
Los Angeles	Annual	T7	GAS	AllMYr	25	7.39E-04	6.60E-04	5.68E-04	5.29E-04	4.69E-04	4.21E-04	3.95E-04	3.69E-04	3.50E-04	3.29E-04	3.16E-04	3.03E-04	2.96E-04	2.86E-04	2.77E-04	2.68E-04	2.63E-04	2.60E-04	2.57E-04	2.56E-04
Los Angeles	Annual	T7	DSL	AllMYr	25	0.07436132	0.06612372	0.065433178	0.0644734	0.0627065	0.0614182	0.060784	0.060321	0.060585	0.0608426	0.05715633	0.05725637	0.0566376	0.0567033	0.056787	0.056886848	0.0569836	0.057072592	0.05715946	0.057250127
Los Angeles	Annual	T7	GAS	AllMYr	30	5.60E-04	5.00E-04	4.30E-04	4.01E-04	3.55E-04	3.19E-04	3.00E-04	2.80E-04	2.65E-04	2.49E-04	2.39E-04	2.30E-04	2.24E-04	2.16E-04	2.10E-04	2.03E-04	2.00E-04	1.97E-04	1.95E-04	1.94E-04
Los Angeles	Annual	T7	DSL	AllMYr	30	0.07115034	0.06401855	0.063605297	0.06289313	0.0616916	0.0607759	0.060167	0.059736	0.060013	0.060284	0.05663578	0.05674767	0.0561448	0.0562205	0.056314	0.056424194	0.0565302	0.056629508	0.05672652	0.056826321
Los Angeles	Annual	T7	GAS	AllMYr	35	4.42E-04	3.95E-04	3.40E-04	3.16E-04	2.81E-04	2.52E-04	2.37E-04	2.21E-04	2.09E-04	1.97E-04	1.89E-04	1.81E-04	1.77E-04	1.71E-04	1.66E-04	1.60E-04	1.58E-04	1.55E-04	1.54E-04	1.53E-04
Los Angeles	Annual	T7	DSL	AllMYr	35	0.07113081	0.06470777	0.064524425	0.06400442	0.0632515	0.0626285	0.062022	0.061608	0.06191	0.0622069	0.05844811	0.05857693	0.0579649	0.0580528	0.058159	0.05828258	0.058401	0.058513369	0.05862331	0.058735614
Los Angeles	Annual	T7	GAS	AllMYr	40	3.64E-04	3.25E-04	2.80E-04	2.60E-04	2.31E-04	2.07E-04	1.95E-04	1.82E-04	1.72E-04	1.62E-04	1.55E-04	1.49E-04	1.46E-04	1.41E-04	1.36E-04	1.32E-04	1.30E-04	1.28E-04	1.27E-04	1.26E-04
Los Angeles	Annual	T7	DSL	AllMYr	40	0.07430273	0.06819138	0.06819056	0.06780728	0.0673861	0.066976	0.066349	0.065935	0.066277	0.0666114	0.06259333	0.06274414	0.062098	0.0622002	0.062322	0.062462005	0.062596	0.062724174	0.06284984	0.062978008
Los Angeles	Annual	T7	GAS	AllMYr	45	3.12E-04	2.79E-04	2.40E-04	2.23E-04	1.98E-04	1.78E-04	1.67E-04	1.56E-04	1.48E-04	1.39E-04	1.33E-04	1.28E-04	1.25E-04	1.21E-04	1.17E-04	1.13E-04	1.11E-04	1.10E-04	1.09E-04	1.08E-04
Los Angeles	Annual	T7	DSL	AllMYr	45	0.08066611	0.07446937	0.074603702	0.07430171	0.0740956	0.0738184	0.073148	0.072718	0.073112	0.0734975	0.06907142	0.06924929	0.068544	0.0686626	0.068803	0.06896247	0.0691151	0.069261923	0.0694061	0.069553502
Los Angeles	Annual	T7	GAS	AllMYr	50	2.79E-04	2.50E-04	2.15E-04	2.00E-04	1.77E-04	1.59E-04	1.50E-04	1.40E-04	1.32E-04	1.24E-04	1.19E-04	1.15E-04	1.12E-04	1.08E-04	1.05E-04	1.01E-04	9.96E-05	9.82E-05	9.73E-05	9.68E-05
Los Angeles	Annual	T7	DSL	AllMYr	50	0.09022093	0.08354174	0.083763853	0.0834877	0.0833799	0.0831556	0.082419	0.081957	0.082416	0.0828651	0.0778824	0.0780924	0.077303	0.0774402	0.077602	0.077783975	0.0779584	0.078126617	0.0782921	0.078462096
Los Angeles	Annual	T7	GAS	AllMYr	55	2.60E-04	2.33E-04	2.00E-04	1.86E-04	1.65E-04	1.48E-04	1.39E-04	1.30E-04	1.23E-04	1.16E-04	1.11E-04	1.07E-04	1.04E-04	1.01E-04	9.76E-05	9.43E-05	9.29E-05	9.15E-05	9.07E-05	9.03E-05
Los Angeles	Annual	T7	DSL	AllMYr	55	0.1029672	0.0954085	0.095671011	0.09536527	0.095239	0.0949878	0.094162	0.093652	0.094189	0.0947143	0.08902626	0.08927346	0.0883749	0.0885328	0.088718	0.088926519	0.0891258	0.089318254	0.08950783	0.089703791
Los Angeles	Annual	T7	GAS	AllMYr	60	2.53E-04	2.26E-04	1.95E-04	1.81E-04	1.61E-04	1.44E-04	1.35E-04	1.26E-04	1.20E-04	1.13E-04	1.08E-04	1.04E-04	1.01E-04	9.79E-05	9.49E-05	9.17E-05	9.03E-05	8.90E-05	8.82E-05	8.77E-05
Los Angeles	Annual	T7	DSL	AllMYr	60	0.11890493	0.11006964	0.110325176	0.1099344	0.1096729	0.1093148	0.108376	0.107803	0.108432	0.1090451	0.10250301	0.10279247	0.1017597	0.1019405	0.102153	0.102390102	0.1026173	0.102836835	0.10305329	0.103278587
Los Angeles	Annual	T7	GAS	AllMYr	65	2.56E-04	2.29E-04	1.97E-04	1.84E-04	1.63E-04	1.46E-04	1.37E-04	1.28E-04	1.21E-04	1.14E-04	1.10E-04	1.05E-04	1.03E-04	9.91E-05	9.61E-05	9.29E-05	9.14E-05	9.01E-05	8.93E-05	8.89E-05
Los Angeles	Annual	T7	DSL	AllMYr	65	0.1380341	0.12752516	0.127726349	0.1271951	0.1266816	0.1261367	0.125063	0.12441	0.125143	0.1258575	0.11831263	0.11864943	0.1174575	0.1176633	0.117905	0.118174725	0.118433	0.11868236	0.11892848	0.119186482
Los Angeles	Annual	T7	GAS	AllMYr	70				1.94E-04	1.72E-04	1.54E-04	1.45E-04	1.35E-04	1.28E-04	1.20E-04	1.16E-04	1.11E-04	1.08E-04	1.05E-04	1.01E-04	9.81E-05	9.66E-05	9.52E-05	9.43E-05	9.39E-05
Los Angeles	Annual	T7	DSL	AllMYr	70				0.14714737	0.1462651	0.1454535	0.144222	0.143473	0.144323	0.1451514	0.13645514	0.13684435	0.1354682	0.1357012	0.135975	0.136280388	0.1365729	0.13685483	0.13713341	0.137427478

Los Angeles	Annual	UBUS	GAS	AllMYr	5	0.00806745	0.00750075	0.007175978	0.00698698	0.006736	0.0064343	0.006267	0.00585	0.005448	0.0053586	0.00528073	0.0049614	0.0048906	0.004821	0.003923	0.003867072	0.003812	0.003664413	0.00257517	0.002034879
Los Angeles	Annual	UBUS	DSL	AllMYr	5	0.71052484	0.6939649	0.679264627	0.66422991	0.6187728	0.6026314	0.591935	0.579815	0.562256	0.5054927	0.49517073	0.48818271	0.4790885	0.4706065	0.464186	0.442907807	0.435027	0.428486361	0.39888769	0.388810847
Los Angeles	Annual	UBUS	GAS	AllMYr	10	0.00649657	0.00604022	0.005778687	0.00562649	0.0054244	0.0051814	0.005047	0.004711	0.004387	0.0043152	0.00425247	0.00399532	0.0039383	0.0038823	0.003159	0.003114084	0.0030697	0.002950886	0.00207374	0.001638651
Los Angeles	Annual	UBUS	DSL	AllMYr	10	0.60252487	0.58848204	0.576016235	0.56326682	0.5247192	0.5110313	0.501961	0.491683	0.476793	0.4286577	0.41990469	0.41397883	0.406267	0.3990742	0.393629	0.375585708	0.3689028	0.363356362	0.33825667	0.329711503
Los Angeles	Annual	UBUS	GAS	AllMYr	15	0.00434608	0.00404079	0.00386583	0.00376401	0.0036288	0.0034663	0.003376	0.003152	0.002935	0.0028868	0.00284482	0.00267279	0.0026347	0.0025972	0.002113	0.002083262	0.0020536	0.001974086	0.00138729	0.001096226
Los Angeles	Annual	UBUS	DSL	AllMYr	15	0.44480192	0.43443503	0.425232426	0.4158204	0.3873634	0.3772586	0.370563	0.362975	0.351983	0.3164479	0.30998619	0.30561155	0.2999184	0.2946085	0.290589	0.277268604	0.2723351	0.268240537	0.24971119	0.243402887
Los Angeles	Annual	UBUS	GAS	AllMYr	20	0.00303064	0.00281775	0.00269575	0.00262475	0.0025305	0.0024171	0.002354	0.002198	0.002047	0.002013	0.00198377	0.00186381	0.0018372	0.0018111	0.001474	0.001452716	0.001432	0.0013765 84	9.67E-04	7.64E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	20	0.34006234	0.33213663	0.325100959	0.31790524	0.2961491	0.2884238	0.283305	0.277503	0.2691	0.2419325	0.2369923	0.23364778	0.2292952	0.2252357	0.222163	0.211978881	0.2082071	0.205076694	0.19091054	0.186087679
Los Angeles	Annual	UBUS	GAS	AllMYr	25	0.0022029	0.00204816	0.001959474	0.00190787	0.0018393	0.0017569	0.001711	0.001598	0.001488	0.0014632	0.00144196	0.00135476	0.0013354	0.0013164	0.001071	0.001055944	0.0010409	0.001000606	7.03E-04	5.56E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	25	0.26924694	0.26297172	0.257401191	0.25170391	0.2344783	0.2283617	0.224309	0.219715	0.213062	0.1915519	0.18764045	0.18499242	0.1815462	0.1783321	0.175899	0.167835906	0.1648495	0.162371034	0.15115487	0.147336333
Los Angeles	Annual	UBUS	GAS	AllMYr	30	0.00166908	0.00155184	0.001484646	0.00144554	0.0013936	0.0013312	0.001297	0.00121	0.001127	0.0011087	0.00109254	0.00102647	0.0010118	9.97E-04	8.12E-04	8.00E-04	7.89E-04	7.58E-04	5.33E-04	4.21E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	30	0.2207717	0.21562622	0.211058604	0.20638708	0.1922628	0.1872474	0.183924	0.180158	0.174702	0.1570648	0.15385763	0.15168634	0.1488606	0.1462251	0.14423	0.137618692	0.13517	0.133137714	0.12394092	0.120809869
Los Angeles	Annual	UBUS	GAS	AllMYr	35	0.00131821	0.00122561	0.001172545	0.00114166	0.0011006	0.0010513	0.001024	9.56E-04	8.90E-04	8.76E-04	8.63E-04	8.11E-04	7.99E-04	7.88E-04	6.41E-04	6.32E-04	6.23E-04	5.99E-04	4.21E-04	3.32E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	35	0.18747193	0.18310256	0.179223926	0.17525701	0.1632631	0.1590042	0.156182	0.152984	0.148351	0.1333742	0.13065075	0.12880697	0.1264075	0.1241695	0.122475	0.116861184	0.1147818	0.113056096	0.10524648	0.102587693
Los Angeles	Annual	UBUS	GAS	AllMYr	40	0.00108521	0.00100898	9.65E-04	9.40E-04	9.06E-04	8.66E-04	8.43E-04	7.87E-04	7.33E-04	7.21E-04	7.10E-04	6.67E-04	6.58E-04	6.49E-04	5.28E-04	5.20E-04	5.13E-04	4.93E-04	3.46E-04	2.74E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	40	0.16486534	0.16102287	0.157611922	0.15412337	0.1435758	0.1398305	0.137349	0.134536	0.130462	0.1172911	0.11489604	0.11327459	0.1111644	0.1091963	0.107706	0.102769301	0.1009407	0.099423057	0.09255517	0.090217006
Los Angeles	Annual	UBUS	GAS	AllMYr	45	9.31E-04	8.66E-04	8.28E-04	8.07E-04	7.78E-04	7.43E-04	7.23E-04	6.75E-04	6.29E-04	6.19E-04	6.10E-04	5.73E-04	5.65E-04	5.57E-04	4.53E-04	4.46E-04	4.40E-04	4.23E-04	2.97E-04	2.35E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	45	0.15014915	0.14664965	0.143543165	0.14036602	0.1307599	0.1273489	0.125089	0.122527	0.118817	0.1068214	0.10464019	0.10316348	0.1012417	0.0994492	0.098092	0.093595917	0.0919305	0.090548357	0.08429352	0.082164057
Los Angeles	Annual	UBUS	GAS	AllMYr	50	8.33E-04	7.74E-04	7.41E-04	7.21E-04	6.96E-04	6.64E-04	6.47E-04	6.04E-04	5.63E-04	5.53E-04	5.45E-04	5.12E-04	5.05E-04	4.98E-04	4.05E-04	3.99E-04	3.94E-04	3.78E-04	2.66E-04	2.10E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	50	0.1416174	0.13831676	0.135386809	0.13239017	0.1233299	0.1201128	0.117981	0.115565	0.112065	0.1007517	0.09869435	0.09730156	0.0954889	0.0937984	0.092519	0.088277632	0.0867069	0.085403241	0.07950381	0.077495354
Los Angeles	Annual	UBUS	GAS	AllMYr	55	7.77E-04	7.22E-04	6.91E-04	6.73E-04	6.48E-04	6.19E-04	6.03E-04	5.63E-04	5.25E-04	5.16E-04	5.08E-04	4.78E-04	4.71E-04	4.64E-04	3.78E-04	3.72E-04	3.67E-04	3.53E-04	2.48E-04	1.96E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	55	0.1383282	0.13510421	0.132242315	0.12931528	0.1204655	0.117323	0.115241	0.112881	0.109463	0.0984116	0.09640208	0.09504161	0.0932711	0.0916198	0.09037	0.086227295	0.084693	0.083419675	0.07765726	0.075695445
Los Angeles	Annual	UBUS	GAS	AllMYr	60	7.55E-04	7.02E-04	6.71E-04	6.54E-04	6.30E-04	6.02E-04	5.86E-04	5.47E-04	5.10E-04	5.01E-04	4.94E-04	4.64E-04	4.58E-04	4.51E-04	3.67E-04	3.62E-04	3.57E-04	3.43E-04	2.41E-04	1.90E-04
Los Angeles	Annual	UBUS	DSL	AllMYr	60	0.13992815	0.13666688	0.133771854	0.13081099	0.1218588	0.11868	0.116574	0.114187	0.110729	0.0995499	0.09751709	0.0961409	0.0943499	0.0926795	0.091415	0.087224624	0.0856726	0.084384524	0.07855547	0.076570967

70-year Average DPM Emission Factors (2016-2085)

Vehicle Class	10 mph (g/mi)	35 mph (g/mi)
LHDT2	0.051942	0.020392
T6 (MHDT)	0.042092	0.031135
T7 (HHDT)	0.076058	0.059408

EMFAC2011 Idling Emission Factors			(2016 - 2085)			
Idling Emission Factors for LHDT1 and LHDT2 are derived by multiplying the						
Running Exhaust Emission Factor (g/mi) times 5 mph to get g/hr						
Idling Emission Factors for MHDT and HHDT derived directly from the CARB						
HDT Idling Emission Factor Database						
	70-year		70-year			
Vehicle	**Ave Emission**	**Speed**	Emission Factor			
Class	**Factor at 5 mph**	**(mph)**	(g/mi)			
LHDT2	0.0199	5	**0.0994**			
	T6 Idling Factors	T7 Idling Factors				
	(g/hr)	(g/hr)				
2016	0.277	0.147				
2017	0.235	0.125				
2018	0.205	0.123				
2019	0.178	0.12				
2020	0.112	0.117				
2021	0.098	0.114				
2022	0.096	0.112				
2023	0.093	0.11				
2024	0.092	0.11				
2025	0.092	0.11				
2026	0.092	0.109				
2027	0.092	0.109				
2028	0.091	0.109				
2029	0.091	0.109				
2030	0.091	0.109				
2031	0.091	0.108				
2032	0.091	0.108				
2033	0.091	0.108				
2034	0.091	0.108				
2035	0.09	0.108				
	70-Year Ave Idling Emission Factor					
	(g/hr)					
T6 (MHDT	0.098					
T7 (HHDT)	0.110					

Appendix D Noise Background Information

Appendix

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Noise Background Information

1. Noise and Vibration Basics

1.1 TERMINOLOGY AND NOISE DESCRIPTORS

The following are brief definitions of noise terminology:

- **Sound.** A vibratory disturbance that, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel** (**dB**). A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels which approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}).** The mean of the noise level averaged over the measurement period, regarded as an average level.

- **Day-Night Level (L_{dn}).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM. The L_{dn} and the CNEL are similar noise descriptors and rarely differ by more than 1 dBA.

- **Community Noise Equivalent Level (CNEL)**. The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring during the period from 7 to 10 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM.

  Note that L_{dn} and CNEL values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

- **Sensitive Receptor.** Certain land uses are particularly sensitive to noise and vibration. Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, guest lodging (motels and hotels), libraries, religious institutions, hospitals, nursing homes, and passive recreation areas are generally more sensitive to noise than are commercial and industrial land uses.

1.2 CHARACTERISTICS OF SOUND

Sound is a pressure wave transmitted through the air. When an object vibrates, it radiates part of its energy as acoustical pressure in the form of a sound wave. Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). The standard unit of measurement of the loudness of sound is the decibel (dB). The human hearing system is not equally sensitive to sound at all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Because of the physical characteristics of noise transmission and noise perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1, Change in Sound Pressure Level, dB, presents the subjective effect of changes in sound pressure levels. Typical human hearing can detect changes of approximately 3 dBA or greater under normal conditions. Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A change of 5 dBA or greater is typically noticeable to most people in an exterior environment and a change of 10 dBA is perceived as a doubling (or halving) of the noise.

Table 1 Change in Sound Pressure Level, dB

Change in Apparent Loudness	
± 3 dB	Threshold of human perceptibility
± 5 dB	Clearly noticeable change in noise level
± 10 dB	Half or twice as loud
± 20 dB	Much quieter or louder

Source: Bies and Hansen 2009.

1.2.1 Point and Line Sources

Noise may be generated from a point source, such as a piece of construction equipment, or from a line source, such as a road containing moving vehicles. Because noise spreads in an ever-widening pattern, the given amount of noise striking an object, such as an eardrum, is reduced with distance from the source. This is known as "spreading loss." The typical spreading loss for point source noise is 6 dBA per doubling of the distance from the noise source.

A line source of noise, such as vehicles proceeding down a roadway, would also be reduced with distance, but the rate of reduction is affected by of both distance and the type of terrain over which the noise passes. Hard sites, such as developed areas with paving, reduce noise at a rate of 3 dBA per doubling of the distance while soft sites, such as undeveloped areas, open space and vegetated areas reduce noise at a rate of 4.5 dBA per doubling of the distance. These represent the extremes and most areas would actually contain a combination

of hard and soft elements with the noise reduction placed somewhere in between these two factors. Unfortunately the only way to actually determine the absolute amount of attenuation that an area provides is through field measurement under operating conditions with subsequent noise level measurements conducted at varying distances from a constant noise source.

Objects that block the line of sight attenuate the noise source if the receptor is located within the "shadow" of the blockage (such as behind a sound wall). If a receptor is located behind the wall, but has a view of the source, the wall would do little to reduce the noise. Additionally, a receptor located on the same side of the wall as the noise source may experience an increase in the perceived noise level, as the wall would reflect noise back to the receptor compounding the noise.

1.2.2 Noise Metrics

Several rating scales (or noise "metrics") exist to analyze adverse effects of noise, including traffic-generated noise, on a community. These scales include the equivalent noise level (Leq), the community noise equivalent level (CNEL) and the day/night noise level (Ldn). Leq is a measurement of the sound energy level averaged over a specified time period.

The CNEL noise metric is based on 24 hours of measurement. CNEL differs from Leq in that it applies a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when quiet time and sleep disturbance is of particular concern). Noise occurring during the daytime period (7:00 AM to 7:00 PM) receives no penalty. Noise produced during the evening time period (7:00 to 10:00 PM) is penalized by 5 dB, while nighttime (10:00 PM to 7:00 AM) noise is penalized by 10 dB. The Ldn noise metric is similar to the CNEL metric except that the period from 7:00 to 10:00 PM receives no penalty. Both the CNEL and Ldn metrics yield approximately the same 24-hour value (within 1 dB) with the CNEL being the more restrictive (i.e., higher) of the two.

1.2.3 Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. A sound level of 190 dBA will rupture the eardrum and permanently damage the inner ear. Table 2 shows typical noise levels from various noise sources.

Table 2 Typical Noise Levels from Noise Sources

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 1998, Table N-2136.2.

1.3 CHARACTERISTICS OF VIBRATION

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources, but can also be associated with construction equipment, such as jackhammers, pile drivers, and hydraulic hammers. Vibration displacement is the distance that a point on a surface moves away from its original static position. The instantaneous speed that a point on a surface moves is described as the velocity, and the rate of change of the speed is described as the acceleration. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During the construction of a building, the operation of construction equipment could cause groundborne vibration. The three main wave types of concern in the propagation of groundborne vibrations are surface or Rayleigh waves, compression or P-waves, and shear or S-waves.

- Surface or Rayleigh waves travel along the ground surface. They carry most of their energy along an expanding cylindrical wave front, similar to the ripples produced by throwing a rock into a lake. The

particle motion is more or less perpendicular to the direction of propagation (known as retrograde elliptical).

- Compression or P-waves are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal, in a push-pull motion. P-waves are analogous to airborne sound waves.

- Shear or S-waves are also body waves, carrying their energy along an expanding spherical wave front. Unlike P-waves, however, the particle motion is transverse, or perpendicular to the direction of propagation.

The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal and RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response.

The units for PPV and RMS velocity are normally inches per second (in/sec). Often, vibration is presented and discussed in dB units to compress the range of numbers required to describe the vibration. All PPV and RMS velocity are in in/sec and all vibration levels in this study are in dB relative to 1 micro-inch per second (abbreviated as VdB). The threshold of perception is approximately 65 VdB. Typically groundborne vibration generated by manmade activities attenuates rapidly with distance from the source of the vibration. Manmade vibration problems are usually confined to short distances (500 feet or less) from the source.

Construction generally includes a wide range of activities that can generate groundborne vibration. In general, demolition of structures generates the highest vibrations. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at distances within 200 feet of the vibration sources. Heavy trucks can also generate groundborne vibrations that vary, depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, etc., all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions. Trains generate substantial quantities of vibration due to their engines, steel wheels, and heavy loads.

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2. Noise Regulatory Environment

To limit exposure of people to intrusive and physically and/or psychologically damaging noise levels, the federal government, the State of California, some county governments, and most municipalities in the state have established standards and ordinances to control noise. The proposed project site is within the City of Industry, but the city boundary is along Nelson Avenue; immediately to the north of the site. Beyond Nelson Avenue, farther to the north, is a residential area within the City of La Puente. Both the City of Industry and the City of La Puente are in Los Angeles County. The pertinent federal and local regulations regarding noise and vibration are discussed below.

2.1 FEDERAL

2.1.1 Noise

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the U.S. Environmental Protection Agency (EPA). Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan. The construction of the project would be subject to these OSHA limitations and all workers would receive appropriate training, hearing protection, and breaks, accordingly, ensuring that they are not exposed to harmful noise levels. Similarly, once operational, noise in the workplace would be subject to OSHA limitations.

The U.S. Department of Housing and Urban Development (HUD) has set a goal of 45 dBA Ldn as a desirable maximum interior standard for residential units developed under HUD funding. This level is also generally accepted within the State of California. While HUD does not specify acceptable exterior noise levels, standard construction of residential dwellings constructed under Code of Federal Regulations, Title 24 standards typically provide 20 dBA of attenuation with the windows closed. Based on this premise, the exterior Ldn should not exceed 65 dBA.

2.1.2 Vibration

The human reaction to various levels of vibration varies from person to persons and is highly subjective. Table 3 shows the level at which vibration becomes perceptible based on various types of land uses that are sensitive to vibration.

Table 3 Vibration Perceptibility

Land Use Category	Max L_v (VdB)[1]	Description
Workshop	90	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	84	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	78	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	72	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

Source: FTA 2006.
[1] As measured in 1/3 octave bands of frequency over the frequency ranges of 8 to 80 Hz.

In addition to the vibration standards for human annoyance, the FTA also has vibration standards for architectural damage, as shown in Table 4. Architectural damage is possible when the peak particle velocity (PPV) exceeds 0.2 inch per second. This criterion is the threshold at which there is a risk of damage to residential buildings. For structures of reinforced concrete, steel, or timber, architectural damage is possible when the PPV exceeds 0.5 inch per second.

Table 4 Groundborne Vibration Impact Criteria, Architectural Damage

Building Category	PPV (inches per second)[1]	VdB
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source: FTA 2006.
[1] RMS velocity calculated from vibration level (VdB) using the reference of one micro-inch per second.

2.2 STATE OF CALIFORNIA

The California Office of Noise Control has set acceptable noise limits for sensitive uses. Sensitive-type land uses, such as homes and schools, are "normally acceptable" in exterior noise environments up to 65 dBA CNEL and "conditionally acceptable" in areas up to 70 dBA CNEL. A "conditionally acceptable" designation implies that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use type is made and needed noise insulation features are incorporated in the design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements.

Applicable interior standards for new multi-family dwellings are governed by Title 24 of the California Code of Regulations (California Building Standards Code). These standards require that acoustical studies be performed prior to construction in areas that exceed 60 dBA Ldn. Such studies are required to establish measures that will limit interior noise to no more than 45 dBA Ldn and this level has been applied to many communities in California.

2.3 LOCAL

2.3.1 County of Los Angeles Standards

The County of Los Angeles regulates noise through the County Code, Title 12, Chapter 12.08 (Noise Control). Pursuant to the County Code, the county restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time.

Stationary Sources of Noise

The County of Los Angeles noise and vibration regulation is provided within Title 12, Chapter 12.08, of the County Code. Table 5 identifies the maximum permissible noise limits generated by stationary sources of noise at noise zones within the County. Pursuant to the Noise Ordinance, the County restricts noise levels generated at a property from exceeding certain noise levels for extended periods of time. The standards are applied to non-transportation fans, blowers, pumps, turbines, saws, engines, and other like machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property, as measured at the property line of the noise receptor. The County's Noise Ordinance is designed to protect people from objectionable non-transportation noise sources such as music, machinery, pumps, and heating, ventilation and air conditioning (HVAC) systems.

Table 5 County of Los Angeles Community Noise Criteria

		Exterior Noise Limits (dBA)				
		Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
Noise Zone	Time Period	L_{50}	L_{25}	$L_{8.3}$	$L_{1.7}$	L_{max}
Noise Sensitive Area	Anytime	45	50	55	60	65
Residential Properties	10 PM to 7 AM	45	50	55	60	65
	7 AM to 10 PM	50	55	60	65	70
Commercial Properties	10 PM to 7 AM	55	60	65	70	75
	7 AM to 10 PM	60	65	70	75	80
Industrial Properties	Anytime	70	75	80	85	90

Source: County of Los Angeles Municipal Code Section 12.08.390

Notes:

- If the measured ambient level differs from that permissible within any of the noise limit categories above, the allowable noise exposure standard shall reflect the ambient noise level.
- If the measurement location is on a boundary property between two different zones, the exterior noise standard shall be the arithmetic mean of the exterior noise levels, except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the receptor property.
- For any source of sound which emits a pure tone or impulsive noise, the maximum permissible noise levels shall be reduced by five decibels.

- Standard No. 1 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable L_{50} noise level shown above; or, if the ambient L_{50} exceeds the foregoing level, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.

- Standard No. 2 shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable L_{50} noise level shown above plus 5dB; or, if the ambient L_{25} exceeds the foregoing level, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.

- Standard No. 3 shall be the exterior noise level which may not be exceeded for a cumulative period of more than five minutes in any hour. Standard No. 3 shall be the applicable L_{50} noise level shown above plus 10dB; or, if the ambient L_8 exceeds the foregoing level, then the ambient L_8 becomes exterior noise level for Standard No. 3.

- Standard No. 4 shall be the exterior noise level which may not be exceeded for a cumulative period of more than one minute in any hour. Standard No. 4 shall be the applicable L_{50} noise level shown above plus 15dB; or, if the ambient L_2 exceeds the foregoing level, then the ambient L_2 becomes the exterior noise level for Standard No. 4.

- Standard No. 5 shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable L_{50} noise level shown above plus 20dB; or, if the ambient L_0 exceeds the foregoing level then the ambient L_{max} becomes the exterior noise level for Standard No. 5.

Construction Noise

The County also regulates construction noise through the County Code sections 12.08.440 and 12.12.030. Pursuant to section 12.08.440, the County prohibits the operation of tools or equipment used in construction between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line. For these tools, the County also sets maximum noise limits for long-term construction operation as shown in Table 6. However, the County permits noise levels to exceed these limits if the activity, operation, or noise source cannot be feasibly be done in a manner that would comply with these conditions. In addition, the County prohibits construction activities that involve excavating/earth moving activities between weekday hours of 8:00 PM and 6:30 AM, or at any time on Sundays or holidays that makes loud noises that disturb persons occupying sleeping quarters in a place of residence.

Table 6 Maximum Construction Noise for Stationary Equipment Operating for Periods 10 Days or More

Time Period	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70dBA
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA

Source: County of Los Angeles Municipal Code Section 12.08.440 for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment.

Vibration

The County of Los Angeles Municipal Code, Section 12.08.560, prohibits the operation of any device that creates vibration that is above 0.01 in/sec at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This criterion will be utilized to evaluate vibration-annoyance impacts from industrial uses to nearby sensitive receptors.

2.3.2 City of Industry Standards

Industry Noise Standards

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the City of Industry addresses public nuisances under Chapter 1.30 (Public Nuisance) of the City's Municipal Code. The City of Industry has not adopted long-term noise and vibration criteria for land use compatibility consideration. The City of Industry uses the County of Los Angeles Noise Ordinance and Community Noise Guidelines for environmental noise assessments, and is included by reference in the City of Industry Municipal Code. For the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) are used as significance thresholds for noise.

Industry Vibration Standards

The City of Industry does not have regulatory standards for construction or operational vibration sources. To evaluate project impacts for CEQA analyses, the City relies on the Los Angeles County Municipal Code to address vibration impacts from the operation of equipment to adjacent uses.

City of La Puente Standards

La Puente Noise Standards

The majority of residential uses that would potentially be impacted by operations of the proposed project are located within the City of La Puente; north of Nelson Avenue. The City of La Puente does not employ quantitative noise level limits as part of its noise code. Rather, the regulations are more in terms of disturbance and noise nuisances, which are discussed in Chapter 4.34 of the Municipal Code. The primary wording for the general noise standard is as follows:

> **4.34.010 Prohibited noises—General standard.**
>
> No person shall make, or cause or suffer, or permit to be made upon any premises owned, occupied or controlled by such person, any loud, raucous, jarring, unusual, unnecessary, excessive or other unreasonable noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time, or place as to cause or contribute to the unnecessary and unreasonable discomfort to any persons within the neighborhood surrounding the location from which said noises emanate or which unreasonably interfere with the peace and comfort of the residents of the surrounding neighborhood or their guests, or the operators or customers in places of business in the vicinity, or which detrimentally or adversely affect such residences or places of business. (Ord. 753 § 4 (part), 1997)

Subsequent sections of this chapter indicate that this general standard is aimed at controlling noise sources such as (private) radios, band rehearsals, engine repair, automobile testing, loading activities, animals, leaf blowers, and loud parties.

Since the City of La Puente has no numerical noise level standards, for the purpose of CEQA analysis for projects in the City, the noise standards contained in the County's noise ordinance (as presented above) will be used herein as significance thresholds for noise.

3. References

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U. S. Environmental Protection Agency (EPA). 1971, December. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.* Prepared by Bolt Beranek and Newman, Inc., Cambridge, MA for the U.S. EPA Office of Noise Abatement and Control. Washington, D.C.

Loading Bay Operations Noise Level Calculations

Trucks per day	**95**

24-hour operations

Trucks per hour	95/24 =	3.96
Total operational time per hour (10 mins operational time per truck)		39.6

exceeds 50% of 60 mins - all noise metrics are applicable

single truck L_{eq} 73 dBA

Noise Metric	Noise Levels at 50 ft (dBA)	Noise Levels (dBA) at 470 ft - nearest receptors (19 dB distance attenuation)	Noise Levels (dBA) after additional 10 dB attenuation from buildings
$L_{50} = L_{eq} - 3$ dB	70	51	41
$L_{25} = L_{eq}$	73	54	44
$L_8 = L_{eq} + 3$ dB	76	57	47
$L_2 = L_{eq} + 7$ dB	80	61	51
$L_0 = L_{eq} + 10$ dB	83	64	54

11-hour operations

Trucks per hour	95/11 =	8.64
Total operational time per hour (10 mins operational time per truck)		86.4
Trucks operating simultaneously	86.4/60	1.44

exceeds 100% of 60 mins - truck operations will overlap

(round to 1.5)

Sound Level for 1.5 Trucks Operating Simultaneously

Lt = Ls+10*log10(n) Lt = total noise level Ls = noise level of single source n = number of identical sources

one truck	1.5 simultaneous trucks Lt = 73 + 10*log10(1.5)
73	74.76

1.5 truck L_{eq} 75

Noise Metric	Noise Levels at 50 ft (dBA)	Noise Levels (dBA) at 470 ft - nearest homes & school - (19 dB distance attenuation)	Noise Levels (dBA) after additional 10 dB attenuation from buildings
$L_{50} = L_{eq} - 3$ dB	72	53	43
$L_{25} = L_{eq}$	75	56	46
$L_8 = L_{eq} + 3$ dB	78	59	49
$L_2 = L_{eq} + 7$ dB	82	63	53
$L_0 = L_{eq} + 10$ dB	85	66	56

Construction Generated Vibration

Vibration Annoyance Criteria

Receptor:	Average Vibration Level - Houses across Nelson Ave	Average Distance (feet):	75

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	84
Caisson Drill	87	77
Large bulldozer	87	77
Small bulldozer	58	48
Jackhammer	79	69
Loaded trucks	86	76
	Criteria	**78**

Receptor:	Average Vibration Level	Average Distance (feet):	160

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	78
Caisson Drill	87	71
Large bulldozer	87	71
Small bulldozer	58	42
Jackhammer	79	63
Loaded trucks	86	70
	Criteria	**78**

Structural Damage Criteria

Receptor:	Maximum Vibration Levels - Houses across Nelson Ave	Closest Distance (feet):	75

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.040
Caisson Drill	0.089	0.017
Large bulldozer	0.089	0.017
Small bulldozer	0.003	0.001
Jackhammer	0.035	0.007
Loaded trucks	0.076	0.015
	Criteria	**0.200**

[1.] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*

Exhibit A.3

Response to Comments

September 2015 | Response to Comments

DONLON BUILDING

Development Plan 15-7, City of Industry

Prepared for:

City of Industry
Contact: Brian James, Planning Director
15625 East Stafford, Suite 100
City of Industry, California 91774-0366
626.333.2211

Project Number:
IND-07.141

Prepared by:

PlaceWorks
Contact: Dwayne Mears, Principal, Environmental Services
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

PLACEWORKS

Response to Comments

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Tuesday, September 08, 2015 3:40 PM
To: Brian D James <BJames@cityofindustry.org>; andysalas07@yahoo.com
Subject: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

MR JAMES-

A1-1 we have just been informed of this proposed project by Mr. Andy Salas and we are concerned about the process defects and lack of legal tribal consultation and possible exclusion of TATTN as we are on all the NAHC contact s lists -

A1-2 we are also concerned you/COI doesn't understand the significance of that area for us and our tribal cultural resources and its well documented sacred sites -

A1-3 please send us all the proposed project info and documents on those 2 adjoining projects asap-

A1-4 if you refuse we will be forced to take action against COI -

we are demanding full tribal consultation .

my grandfather worked for rowland there and my father was born there so our family has direct lineal descendants status with those tribal lands-

I left you a voice mail message please respond when you can -

thanks

/S/ JOHNTOMMY ROSAS

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
A TRIBAL SOVEREIGN NATION UNDER UNDRIP
AND AS A CALIFORNIA NATIVE AMERICAN TRIBE / SB18-AJ52-AJR 42
25 U.S. Code § 1679 - Public Law 85-671
August 18, 1958 | [H. R. 2824] 72 Stat. 619
Tribal sovereignty in the United States is the inherent authority of indigenous tribes to govern themselves within and outside the borders and waters of the United States of America .
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ALL RIGHTS RESERVED
TATTN / TRIBAL NOTICE OF CONFIDENTIALITY:

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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©
tongvanation.org

Response to Comments

From: Johntommy Rosas [mailto:tattnlaw@gmail.com]
Sent: Wednesday, September 16, 2015 1:44 PM
To: Brian D James <BJames@cityofindustry.org>; Andy Salas <andysalas07@yahoo.com>
Subject: Re: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

//Documents/IND-07.14.15%20Memo%20Initial%20Study.pdf

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X			X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	X		X	
c) Disturb any human remains, including those interred outside of formal cemeteries?	X		X	
VI. PALEONTOLOGICAL RESOURCES. Would the project:				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
VII. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	X	X		

On Wed, Sep 16, 2015 at 12:05 PM, Johntommy Rosas <tattnlaw@gmail.com>wrote:
Brian -

A1-5 1. we do not accept the time frame that is on noi -. A 20-day public review period for the Mitigated Negative Declaration begins September 3, 2015, and ends September 23, 2015.
A1-6 2. its too short and not legal since we were not contacted for the IS -
A1-7 3. we also know that there are numerous tribal cultural areas on that property and around there-
A1-8 4. the 1 page cultural report is defective and illegal -
A1-9 5. we also know there was no legal tribal consultation-
A1-10 6. on those grounds we object and oppose the project and its defective process-

/s/ johntommy rosas

Response to Comments

A1. Response to Email Comments from John Tommy Rosas, Tribal Administrator, Tribal Litigator, Tongva Ancestral Territorial Tribal Nation (TATTN), dated September 8, 2015 and September 16, 2015.

A1-1 With respect to the City of Industry's (COI) tribal consultation process for the proposed Donlon Warehouse project, all activities have been conducted in accordance with the requirements of Public Resources Code (PRC) Section 21080.3.1. This section of the PRC requires the COI as lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project prior to the release of an environmental document. However, such consultation is only required if the California Native American tribe has formally requested to the lead agency, in writing, to be informed of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe.

The Native American Heritage Commission (NAHC) was to provide each tribe with a list of public agencies that may be lead agencies under the California Environmental Quality Act (CEQA) within the geographic area with which the tribe is traditionally and culturally affiliated on or before July 1, 2015. As described above, the PRC provides that if a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency. The COI did not receive such notification from the TATTN. Notifications were received by the COI from the Gabrieleño Band of Mission Indians – Kizh Nation on July 15, 2105, and the Soboba Band of Luiseño Indians on July 2, 2015, and were therefore consulted in accordance with PRC Section 21080.3.1.

A1-2 Based on the analysis in the Initial Study, there are no resources listed on the National Register of Historic Places or California Historical Resources on the project site. In addition, the COI does not list any historical resources associated with the project site in a local register, and does not have substantial evidence indicating that a significant resource is located on the project site associated with California Native American tribes.

The project site was previously developed with a trucking yard and several buildings prior to being demolished and regraded to its existing flat state. Prior to being purchased by the applicant, the site was used as a trucking yard (truck storage and repair). Currently, there are no existing buildings or structures that would require demolition and project construction would not be expected to involve a significant level of excavation.

Response to Comments

Based on communications from the Gabrieleño Band of Mission Indians – Kizh Nation, the project site is located within its traditional use territory. The Soboba Band of Luiseño Indians (SBLI) deferred issues with respect to consultation to the Gabrieleño Band of Mission Indians – Kizh Nation.

While it is anticipated that impacts to tribal cultural resources would be less than significant, the following project design feature/condition of approval was developed by the COI:

Project Design Feature:

The project applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

With the implementation of the project design feature identified above, a less than significant impact to tribal cultural resources would occur as a result of the proposed project.

A1-3 Project documents are available for review at the COI. A copy of the Negative Declaration (ND) and Notice of Intent to adopt the ND were provided to Mr. John Tommy Rosas of TATTN on September 28, 2015.

A1-4 As mentioned above, the PRC provides that if a tribe wishes to be notified of projects within its traditionally and culturally affiliated area, the tribe must submit a written request to the relevant lead agency. The COI did not receive such notification from the TATTN. Notifications were received by the COI from the Gabrieleño Band of Mission Indians – Kizh Nation on July 15, 2105, and the Soboba Band of Luiseño Indians on July 2, 2015, and were therefore consulted in accordance with PRC Section 21080.3.1. With respect to future projects in the COI that may be located within the geographic area with which the TATTN tribe is traditionally and culturally affiliated, a written request should be submitted to the COI to be notified of such projects, along with a map indicating the boundaries of the area pursuant to PRC Section 21080.3.1.

A1-5 The public review period was conducted in accordance with the requirements of PRC 15073, which indicates that the lead agency shall provide a public review period of not less than 20 days. The

Response to Comments

public review period runs from September 17, 2015 through October 7, 2015, and is compliant with the PRC.

A1-6 With respect to the length of the public review period, see response A1-5. As for the notification process, PRC Section 21080.3.1 requires that the tribe provide initial notification if it is traditionally and culturally affiliated with certain geographic areas. The lead agency is required to respond to such notification. As described above, no such notification was received from the TATTN for this project.

A1-7 Comment noted. With respect to future projects in the COI that may be located within the geographic area with which the TATTN tribe is traditionally and culturally affiliated, a written request should be submitted to the COI to be notified of such projects, along with a map indicating the boundaries of the area pursuant to PRC Section 21080.3.1. As indicated above in response A1-2, the project includes a design feature which requires the project applicant to contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. Should buried tribal cultural resources be discovered during ground-disturbing activities, work will stop in the area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures would be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies. Through implementation of this project design feature, impacts would be less than significant should buried tribal cultural resources be discovered during ground-disturbing activities.

A1-8 The Initial Study evaluated impacts to Tribal Cultural Resources (see response A1-2).

A1-9 Please refer to response A1-1.

A1-10 Comment noted. Please refer to response A1-1.

Response to Comments

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Response to Comments

From: Andy Salas [mailto:andysalas07@yahoo.com]
Sent: Wednesday, September 16, 2015 10:18 PM
To: Johntommy Rosas <tattnlaw@gmail.com>
Cc: Brian D James <BJames@cityofindustry.org>
Subject: Re: RE Proposed Donlon Warehouse Building Project, City of Industry, California.

Mr. james
Mr Rosas is correct you need to retract your final letter. You must still impose all feasible measures necessary to mitigate this is regards to AB52.

http://www.publicceo.com/2015/08/ceqa-takes-closer-look-at-native-american-cultural-resources/

B1-1 *Consultations come to an end when 1) the agency agrees to include mitigation measures agreed upon during consultation, 2) consultation was requested but the requesting tribe failed to engage in the process, or 3) a party to the consultation, after good faith and reasonable efforts, concludes that mutual agreement cannot be reached. Even if no agreement is reached, the agency must still impose all feasible measures necessary to mitigate a project's significant impacts on tribal cultural resources.*
Further, regardless of whether a tribe requests consultation, CEQA documents must now disclose and analyze whether the proposed project will cause a substantial adverse impact to a tribal cultural resource.

B1-2 *#1)* From the letters You sent us You did not provide any mitigating measures I identified .

B1-3 #2) your letter date 8/31 you claimed you met the consultation process. However, no agreement was reached. According to this article, You must still impose all feasible measures necessary to mitigate a project' significant impacts on tribal cultural resources. Based on your letters it looks like you are still operating under the standard CEQA guidelines and superficially interjecting AB52 which you felt met the 'consultation' requirement, not looking at any mitigating options.

Response to Comments

B1. Response to Email Comments from Andy Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation dated September 16, 2015.

B1-1 With respect to the COI's tribal consultation process for the proposed Donlon Warehouse project, all activities have been conducted in accordance with the requirements of the PRC. The COI has noted concerns from the commenter with regard to the potential for uncovering artifacts at the project site, however, no evidence of tribal cultural resources on the project site has been provided or found. In accordance with PRC Section 21074, tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:

- (a)(1)(A) included in or determined eligible for inclusion in the California Register of Historic Resources; or
- (a)(1)(B) included in a local register of historical resources; or
- (a)(2) determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Section 5024.1(c). When applying the criteria of Section 5024.1(c), the lead agency must consider the significance of the resource to the California Native American tribe.

The COI has not received any information indicating that the project site is included in, or determined eligible for inclusion in, the California Register of Historic Resources. Further, the COI has not received any information that the project site is included in a local register of historical resources. Lastly, the COI does not have substantial evidence which supports the factors set forth in Public Resources Code Section 5024.1(c).

Pursuant to Public Resources Code Section 21082.3(e), if substantial evidence demonstrates that the project will cause a significant effect, the lead agency must consider feasible mitigation measures pursuant to Section 21084.3(b). The aforementioned sections of the Public Resources Code, do not mandate the COI to impose all feasible measures.

Response to Comments

Moreover, there has been no finding of significant effect in regards to cultural, paleontological, and tribal cultural resources at 15000 Nelson Avenue. Even though the project will not cause a significant environmental effect to cultural resources, in good faith, the COI included the following project design feature as described in A1-2 above:

Project Design Feature:

The project applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

Based on the information set forth above, the COI has complied with the requirements of AB 52.

B1-2 As described above, the following project design feature was included as a direct result of the commenter's request.

Project Design Feature:

The project applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

B1-3 Please note that PRC Section 21080.3.2(b)(2) indicates that consultation may be considered concluded when "a party acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached". The COI believes that it has acted in good faith, and even though the project will not cause a significant environmental effect to cultural resources, it has included the project design feature described above.

Response to Comments

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Response to Comments

From: Andy [mailto:gabrielenoindians@yahoo.com]
Sent: Tuesday, September 08, 2015 10:29 PM
To: Brian D James <BJames@cityofindustry.org>; Peter Garcia <pgarcia@placeworks.com>
Cc: Katy@NAHC Sanchez <katy.sanchez@nahc.ca.gov>; Rob Wood <rw_nahc@pacbell.net>; Terrie@NAHC Robinson <terrie.robinson@nahc.ca.gov>; Christina Swindall Martinez. Kizh Gabrieleno <christinaswindall@yahoo.com>; Nadine Salas. Kizh Gabrieleno <nadinesalas@hotmail.com>; Albert Perez.Kizh Gabrieleno <cedarez@aol.com>; Martha Gonzalez. Kizh Gabrieleno <marthagonzalez777@yahoo.com>; Richard Gradias <RGRADIAS@Yahoo.com>; Matt Teutimez.Kizh Gabrieleno <Matt.Teutimez@gmail.com>; Henrypedregon <henrypedregon@aol.com>
Subject: Projects regarding the- Parriott Place Development - 489 and 499 Parriott Place. NEAR the Homestead Museum.

Brian D. James

C1-1 I've received your letter (attached below) and I'm not in agreement with your determination that the project site has no cultural sensitivity. Attached is a report from 1992 written by VanHorn which he describes the sensitivity within his own project area but also discusses the adjacent area and indicates that there were other village sites within this area. Your two project locations (the Parriot location & Nelson location) are within this discussed sensitive area. Please understand we are in no way trying to halt or stop your project, we are just requesting to have one of our knowledgeable monitors on site because of the high sensitivity to protect any resources. Sincerely Andrew Salas Gabrieleño Band of Mission Indians Kizh Nation pronounced (Keech) https://www.laconservancy.org/sites/default/files/community_documents/Historic%20Resource%20Report,%20Downtown%20Business%20District%20Specific%20Plan%20Area,%201992.pdf

Response to Comments

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

August 31, 2015

The Honorable Andrew Salas
Chairman
Gabrieleño Band of Mission Indians – Kizh Nation
PO Box 393
Covina, CA 91723

Subject: Proposed Parriott Place Warehouse Building Project, City of Industry, California.

Dear Chairman Salas:

The City of Industry ("City") appreciates the email response from the Tribal Archaeologist, Mr. Stickel, dated August 21, 2015, regarding Native American Consultation for the property located at 489 and 499 Parriott Place ("Subject Site"). In his response, Mr. Stickel restated the Tribe's opinion that Subject Site is culturally sensitive, and the need for a Kizh monitor to be present during all ground disturbing activities.

However, based on the independent analysis contained in the Initial Study and considering the condition of the Subject Site, there has been no finding of significant effect in regards to cultural, paleontological, and tribal cultural resources on the Subject Site. Based on this analysis, the City does not agree that an on-site monitor is merited for this project. In accordance with AB 52, the City has consulted in good faith with the Gabrieleno Band of Mission Indians, Kizh Nation, as evidenced by communications on July 14, 16, 17, 21, and August 12, 2015 from both the City, and Placeworks, the environmental consultant preparing the environmental analysis on the City's behalf. While the project will not cause a significant environmental effect, as part of the City's good faith consultation process, an alternative mitigation measure was proposed that provides a means of avoiding or substantially lessening any potential significant impacts to tribal cultural resources. However, the City's proposal to stop work in the event of the discovery of tribal cultural resources, and to consult with a qualified archaeologist regarding the findings, was rejected by the Tribe.

Therefore, in accordance AB 52, and after a good faith and reasonable effort, the City hereby concludes that a mutual agreement cannot be reached. Accordingly, the City will move forward and circulate the Mitigated Negative Declaration containing the following Mitigation Measure as originally proposed:

Mitigation Measure CR-1: *If buried tribal cultural resources (as defined in Section 21074 of the California Public Resources Code) are discovered during ground-*

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Response to Comments

C1. Response to Email Comments from Andy Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation dated September 8, 2015.

C1-1 The commenter provided a web link to a report entitled *An Historic Resource Report on the City of La Puente, Downtown Business District Specific Plan Area, Los Angeles County, California* (Report). According to the commenter, the report not only describes the sensitivity for cultural resources within the Downtown Business District Specific Plan Area (DBDSPA), but also discusses other potential village sites in areas adjacent to it. The commenter concludes that the Donlon Warehouse project is within a culturally sensitive area.

The purpose of the Report was to identify and evaluate the significance of all cultural resources known to be situated within the DBDSPA, which is generally located north of Old Valley Boulevard, and east of Glendora Avenue. The Report concludes that the DBDSPA is sensitive for cultural and historic resources, and that a historic Indian village identified as Awig-na, was located west of Glendora Avenue near its intersection with Nelson Avenue where La Puente High School is located. In addition, the Report suggests that smaller related village sites were situated nearby Awig-na.

The conclusions of the report cover a very limited area of the COI. The Donlon Warehouse project is not located in the local vicinity of the areas described in the Report. The Donlon Warehouse project is located approximately 1.0 mile northwest (DBDSPA), and 0.6 miles northwest (La Puente High School) of the culturally sensitive areas identified in the Report. Even though the project will not cause a significant environmental effect to cultural resources, in good faith, the COI included the following project design feature.

Project Design Feature:

The project applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the site during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

Attachment 5

Resolution No. CC 2015-34

RESOLUTION NO. CC 2015-34

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, APPROVING DEVELOPMENT PLAN 15-7 FOR THE CONSTRUCTION OF A 125,344 SQUARE FOOT INDUSTRIAL BUILDING AT 15000 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA, WITHIN THE MANUFACTURING ZONE

RECITALS

WHEREAS, on May 11, 2015, Donnellan Builders ("Applicant") filed a complete application requesting the approval of Development Plan ("DP") No. 15-7 described herein ("Application"); and

WHEREAS, the Application applies to a vacant 6.18 acre property at 15000 Nelson Avenue, City of Industry, California, Assessor's Parcel Number 8208-011-902 ("Property"); and

WHEREAS, the Applicant desires to construct a 125,344 square foot industrial building on a 6.18 acre lot in the "M" Manufacturing zone, and in accordance with Section 17.36.020 of the City's Municipal Code ("Code"), a Development Plan is required for this type of activity; and

WHEREAS, the Land Use Element of the General Plan designates the Property as Employment. The proposed use is consistent with the General Plan as it would allow for the development of an industrial building, which is a permitted use in the Employment land use designation, and does not conflict with the established goals and objectives of the Land Use Element; and

WHEREAS, an Environmental Assessment form was submitted by the Applicant pursuant to the City's requirements. Based upon the information received and Staff's review and assessment, an Initial Study/Negative Declaration were prepared in accordance with the requirements of the California Environmental Quality Act ("CEQA"), California Public Resources Code section 21000 *et seq.,* the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, sections 15000 *et seq.,* and the Environmental Impact Report Guidelines of the City of Industry, and the City Council has exercised its independent judgment when considering said Initial Study/Negative Declaration and all public comments received in connection therewith; and

WHEREAS, the Initial Study/Negative Declaration was circulated for public and agency review and comment on September 17, 2015 through, and including, October 7, 2015; and

WHEREAS, on October 8, 2015, the City Council of the City of Industry conducted a duly noticed public meeting on the Application, and considered all testimony written and oral; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, it is hereby found, determined and resolved by the City Council of the City of Industry as follows:

SECTION 1. The City Council finds that all of the facts set forth in the Recitals are true and correct, and are incorporated herein by reference.

SECTION 2. All necessary public meetings and opportunities for public testimony and comment have been conducted in compliance with State law and the Municipal Code of the City of Industry.

SECTION 3. Based upon substantial evidence presented to the City Council during the October 8, 2015 public meeting, including public testimony and written and oral staff reports, and which includes without limitation, CEQA, the CEQA Guidelines, the Negative Declaration, and the City's Code, the City Council finds as follows:

(a) The Property is suitable for development in accordance with the Development Plan because the Property has previously been subdivided to comply with minimum lot area and frontage requirements, is flat and free from hazards as noted in the accompanying Initial Study/Negative Declaration, and is designated as Employment in the General Plan and zoned Industrial, which are consistent with the proposed development; and

(b) The total development is arranged so as to avoid traffic congestion, ensure the public health, safety and general welfare or prevent adverse effects upon neighboring properties because, as noted in the accompanying Initial Study/Negative Declaration, the Project would add less than 30 trips at each nearby intersection and result in an increase of less than 10 percent over existing traffic, which would not significantly impact road capacity. In addition, the proposed project provides an extensive setback of the building and loading areas, adequately screens the loading area, presents a professional and coordinated architectural design, and provides a large landscape frontage to help separate the building and parking area from the adjacent school and residences. In addition, the attached conditions of approval set operational and management standards that ensure the business that will operate in a manner consistent with the General Plan's policies related to noise, safety, property maintenance, and maintaining a professional appearance; and

(c) The development is in general accord with all elements of the Industry Zoning Ordinance because, with the approval of the Minor Zoning Exceptions by

the Planning Director, the project complies with development standards in regards to building setbacks, height, access, screening, loading, and design; and

(d) The development is consistent with the provisions of the City's General Plan because is the Property is designated as Employment, which allows the development of buildings for industrial uses.

Based upon the foregoing findings, the City Council hereby approves DP No. 15-7, subject to Staff's approval of the minor exceptions related to the total number of parking spaces required for the Project, the number of compact parking spaces for the Project, and the amount of landscaping required for the Project; and the conditions contained in Exhibit A.

SECTION 4. The provisions of this Resolution are severable and if any provision, clause, sentence, word or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of the Resolution or their applicability to other persons or circumstances.

SECTION 5. That the City Clerk shall certify to the adoption of this Resolution and that the same shall be in full force and effect.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Industry at a regular meeting held on October 8, 2015 by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSTAIN:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:

_____
Mark D. Radecki, Mayor

ATTEST:

_____
Cecelia Dunlap, Deputy City Clerk

CITY OF INDUSTRY

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EXHIBIT A

Standard Requirements and Conditions of Approval

Application: **Development Plan 15-7**

Applicant: **Donlon Builders**

Location: **15000 Nelson Avenue**

Use: **New 1125,344 square foot industrial building**

Conditions of Approval

Conditions of approval are unique provisions, beyond the requirements of law, the municipal code, or standard practices that are applied to a project by the City Council per Section 17.36.080 of the Zoning Code. Please note that if the design of your project or site conditions change, the conditions of approval may also change. If you have any questions regarding these requirements, please contact the City of Industry.

1. The Applicant shall construct storm drains and water quality devices to the satisfaction of the City Engineer prior to the final approval of the development and the hook-up of utilities.

2. To ensure that other noise level standards for longer-duration activities (i.e., the L25 and L50 limits for activities occurring for 15 and 30 minutes per hour, respectively) are not breached by project trucking operations, on-site truck maneuvering should be restricted to a duration of no more than 10 minutes and on-site truck idling should be restricted to a duration of no more than 5 minutes, for a total duration of no more than 15 minutes for each truck trip. All maneuvering, including backing, should be conducted as far away from Nelson Avenue and as near the loading bay portion of the project building as practical. Signs with these operations procedures shall be used to enforce this restriction and shall be shown on the building submittal set.

3. All internal combustion engine-driven equipment shall be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

4. Stationary, noise-generating equipment (e.g., generators and compressors) shall be located as far as possible from adjacent residential properties.

5. If stationary, noise-generating equipment must be located near existing residential properties, then such equipment shall have temporary acoustical enclosures, blanketing, or barriers to reduce the noise emissions.

6. The Applicant shall utilize “quiet” air compressors and other stationary noise sources where technology exists.

7. The Applicant shall reduce non-essential idling of construction equipment to no more than five minutes.

8. The Applicant shall submit a construction plan identifying the schedule for major noise-generating construction activities to the City Engineer. The construction plan shall identify a procedure for coordinating with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

9. The Applicant shall post a sign, clearly visible at the construction site, with a contact name and telephone number of the construction Applicant to respond to in the event of a noise complaint. This designated contact person shall be responsible for responding to any complaints about construction noise. The contact person shall determine the cause of the noise complaint (e.g., bad muffler) and shall implement practical and reasonable measures to correct the problem.

10. The project Applicant shall contract with an associate of the Gabrieleño Band of Mission Indians – Kizh Nation to monitor the Property during construction when ground-disturbing activities occur. If buried tribal cultural resources are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified archeologist can assess the significance of the find with the tribal monitor. If necessary, appropriate treatment measures shall be developed in consultation with a representative of the Gabrieleño Band of Mission Indians – Kizh Nation, City of Industry and other appropriate agencies.

11. Electronic gates shall be equipped with a Knox electric switch and an alternative energy back-up system, such as a generator or battery, which would allow operation of the security gate(s) during an electrical power outage. Access through the gates shall be provided for both the Los Angeles County Fire and Sheriff Departments.

12. Roof-top address numbers that would only be visible from the air shall be installed to assist air borne patrols. The numbering should be a minimum of 3 feet and of a color that contrasts with the roof. If applicable, addresses will include designators for individual tenant addresses, such as Unit A.

13. Lighting shall be directed downward and away from the residences to the north and shall not exceed 0.5 foot-candles at a residential property line.

14. Between the hours of 7 PM and 7 AM, exterior doors shall remain closed. The exception is during loading/unloading operations.

15. There shall be no amplified sounds or outside speakers on-site.

16. If, during the operation of the business, noise complaints are received and verified by City Staff, the City will work with the operators to address the issue and may require that a noise analysis be prepared and funded by the operator. Remedies to address noise violations may include limiting the hours of outdoor operations, limiting the types of outdoor

operations, adjusting hours of operation, or other remedies as appropriate to address the issue.

Code Requirements and Standards

The following is a list of code requirements and standards deemed applicable to the proposed project. The list is intended to assist the Applicant by identifying requirements that must be satisfied during the various stages of project permitting, implementation, and operation. It should be noted that this list is in addition to any "conditions of approval" adopted by the City Council and noted above. Please note that if the design of your project or site conditions change, the list may also change. If you have any questions regarding these requirements, please contact the City of Industry.

1. The approval expires twelve (12) months after the date of approval by the City Council if a building permit for each building and structure thereby approved has not been obtained within such period.

2. In conformance with Chapter 13.18 of the Municipal Code, the Applicant shall provide landscaping and automatic irrigation plans to be approved by the Planning Director prior to the issuance of a building permit. Such plans shall be in substantial conformity with the approved development plan.

3. The Applicant shall construct adequate fire protection facilities to the satisfaction of the Los Angeles County Fire Department.

4. All exterior surfaces of buildings and appurtenant structures shall be painted in accordance with the approved development plan.

5. Depending upon the nature of the proposed use, the Applicant shall obtain an Industrial Waste Permit or receive Domestic Wastewater Clearance from the City Engineer.

6. The Applicant shall provide off-street parking as shown on the approved development plan.

7. The Applicant shall construct curb, gutter, pave-out, necessary drainage facilities, and sidewalk along street frontage in accordance with City standards and specifications.

8. The Applicant shall supply sanitary sewer facilities to serve all buildings to the satisfaction of the City Engineer prior to the final approval of the development and hook-up of utilities. One sewer connection per parcel is permitted and, in the case of multiple units or buildings, all sewer lines must join together at the connection point.

9. The Applicant shall provide drainage and grading plans to be approved by the City Engineer prior to the issuance of a building permit. Such plans shall be in substantial conformity with the development plans.

10. In conformance with Chapter 13.16 of the Municipal Code and prior to the start of grading and construction, the Applicant shall provide a Stormwater Pollution Prevention Plan (SWPPP), developed by a Qualified SWPPP Developer (QSD) and consistent with the current National Pollutant Discharge Elimination System (NPDES) construction general permit, along with proof that a Waste Discharger Identification (WDID) Number has been obtained, to the City Engineer for review and approval.

11. The Applicant shall provide building plans to be approved prior to the issuance of a building permit. Such plans shall be in substantial conformity with the development plans. (Building plans shall be submitted to and approved by the Los Angeles County Engineer's Office - Building and Safety Division prior to the issuance of a building permit.)

12. Street lights shall be designed and installed along the street frontage of a development to the satisfaction of the City Engineer.

13. Demolition and construction operations shall be limited to the hours prescribed by the Los Angeles County Noise Ordinance (Los Angeles County Municipal Code, Section 12.08.390).

14. No outdoor storage of any personal property, building materials, or other property not permanently affixed to the real property shall be allowed.

15. Should archeological resources be uncovered during site preparation, grading, or excavation, work shall be stopped for a period not to exceed 14 days. The find shall be immediately evaluated for significance by a county-certified archaeologist. If the archaeological resources are found to be significant, the archaeologist shall perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit resources to the California State University Fullerton; and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable).

16. Prior to Planning Final, all outstanding fees and invoices due to the City shall be paid in full. If requested by City Staff, the Applicant shall provide proof of payment.

Interpretation and Enforcement

1. The Planning Department, Engineering Department, and contract agencies (Los Angeles County Fire Department, Los Angeles Department of Building and Safety) shall be responsible for ensuring compliance with all applicable code requirements and conditions of approval.

2. The Planning Director may interpret the implementation of each condition of approval and, with advanced notice, grant minor amendments to approved plans and/or conditions of approval based on changed circumstances, new information, and/or relevant factors as long as the spirit and intent of the approved condition of approval is satisfied. Permits shall not be issued until the proposed minor amendment has been reviewed and approved for conformance with the intent of the approved condition of approval. If the proposed changes are substantial in nature, an amendment to the original entitlement may be required pursuant to the provisions of Industry Municipal Code.

Indemnification and Hold Harmless Condition

1. The Applicant, and each of its heirs, successors and assigns, shall defend, indemnify and hold harmless the City of Industry and its agents, officers, and employees from any claim, action or proceedings, liability cost, including attorney's fees and costs against the City or its agents, officers or employees, to attack, set aside, void or annul any approval of the City, including but not limited to any approval granted by the City Council and Planning Commission concerning this project. The City shall promptly notify the Applicant of any claim, action or proceeding and should cooperate fully in the defense thereof.

CITY COUNCIL

ITEM NO. 7.2

CITY OF INDUSTRY

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MEMORANDUM

To: City Council October 1, 2015

From: Paul J. Philips, City Manager

Staff: Brian James, Planning Director

Subject: Climate Action Plan Introduction and Measures

Overview

As summarized in Attachment 1, Climate Action Plans (CAPs) are roadmaps providing guidance for the activities that the City will undertake to reduce greenhouse gas (GHG) emissions. The need to prepare a CAP stems from Assembly Bill 32 and, subsequently, the Environmental Impact Report (EIR) prepared for the update to the City's General Plan (June 2014). The City has retained PlaceWorks to prepare a CAP for the City. To date, PlaceWorks has prepared a baseline inventory of GHG emissions and identified the appropriate emissions reduction target.

PlaceWorks is now asking that the City provide guidance on the appropriateness of measures that the City will enact to help reduce GHG. These measures will be modeled to determine the amount of GHG reductions the City could potentially achieve and then prepare the CAP document for review and adoption.

CAP Measures

PlaceWorks has prepared a list of Preliminary CAP Measures for review (Attachment 2). These measures addresses GHG reduction measures in regards to:

- Freight and Roadway Operations
- Alternative Fuels and Fuel Efficiency
- Bicycle, Pedestrian, and Transit Systems
- Transportation Demand Management
- Energy Efficiency and Conservation
- Renewable Energy
- Water
- Solid Waste
- Outreach and Education

Most of the CAP Measures reflect actions that the City already conducts, such as recycling and solid waste diversion activities, requiring water efficient landscaping and irrigation, generating power via solar arrays, supporting ridesharing efforts, and continuing to maintain electric vehicle charging stations at the Metrolink Station.

The following CAP Measures provide direction that, if accepted, would require amending the Municipal Code to implement new development standards:

- T-1: Implement a Truck Idling Emissions Reduction Program, which includes: Requiring that new or major rehabilitations of commercial or industrial development greater than or equal to 50 percent of the existing value incorporate diesel emission reduction strategies, such as electrifying docking bays, to eliminate and/or reduce idling at truck stops, warehouses, and distribution facilities throughout the city.

- T-17: Require employers with more than 20 employees—which is equivalent to 9,000 square feet of retail space, 17,000 square feet of big-box retail space, 7,000 square feet of office space, 19,000 square feet of manufacturing spaces, 30,000 square feet of warehousing and distribution, or 16,000 square feet of light industrial—to provide additional bike racks and end-of-trip facilities (e.g. showers and lockers).

- T-20: Amend the Zoning Code to require new projects to provide parking spaces reserved for carpool or car share vehicles next to entrances.

- E-2: Provide incentives in the Zoning Code for LEED-Silver, Build It Green, GreenPoint or equivalent rating, for example by reducing required parking and allowing additional building coverage.

- E-4: Review and revise the Zoning Code to require that building structures be adequately designed and constructed to support the weight of solar photovoltaic panels.

- E-8: Require that new or major rehabilitations of warehouses greater or equal to 30,000 square feet be constructed so that the rooftop can support the weight of solar panel systems.

Recommendation

It is Staff's opinion that all of the CAP Measures are appropriate, feasible, help reduce GHG, and should be incorporated into the CAP. At this time, Staff is requesting that the Council discuss the suggested CAP measures and provide direction to Staff.

Attachments

- Attachment 1: Introduction to the Climate Action Plan, September 30, 2015
- Attachment 2: Preliminary CAP Measures, September 14, 2015

Attachment 1

Introduction to the Climate Action Plan
September 30, 2015

PLACEWORKS

MEMORANDUM

DATE September 30, 2015

TO City of Industry Planning Commission and City Council

FROM Tanya Sundberg and Joanna Jansen

SUBJECT Introduction to the Climate Action Plan

At the October 8, 2015 Planning Commission and City Council meetings, the City will hold study sessions on the Climate Action Plan (CAP), which is currently underway. At these study sessions, City staff will ask for feedback on the preliminary list of greenhouse gas (GHG) emissions reduction measures that could be included in the CAP. This memorandum provides background information about the City of Industry CAP to support these study sessions. See also the separate PlaceWorks memorandum dated September 14, 2015, for a description of the preliminary GHG emissions reduction measures.

CAP BACKGROUND

The City of Industry CAP will be a strategic tool to implement the City's General Plan by providing a detailed strategy to reduce greenhouse gas (GHG) emissions and conserve resources with regard to transportation and land use, energy, water, and solid waste.

California Assembly Bill (AB) 32 directs the State to reduce GHG emissions to 1990 levels by 2020. Although AB 32 and other State laws don't explicitly require that cities prepare CAPs to achieve that target, they are effectively required by the California Environmental Quality Act (CEQA) through General Plan Environmental Impact Reports (EIRs). Typically, the increase in GHG emissions resulting from a General Plan Update will result in a significant environmental impact under CEQA, and CEQA requires implementation of all feasible mitigation to reduce significant environmental impacts. CAPs are widely used as mitigation to reduce significant GHG emissions impacts. The EIR for the City of Industry's General Plan, which was adopted in June 2014, included a mitigation measure requiring the City to prepare a CAP no later than June 2016 that evaluates strategies to reduce GHG emissions in the City of Industry by the year 2020 consistent with statewide efforts under AB 32.

In addition to fulfilling the City's mitigation requirements from the General Plan EIR, the CAP will have other benefits. In particular, the CAP will allow the City to streamline future development projects that are consistent with the CAP.

CAP PROGRESS TO DATE

The first step in the CAP process, which is complete, was to prepare an inventory of GHG emissions in the City of Industry. This inventory quantifies GHG emissions in the City of Industry in the baseline year of 2012 and forecasts emissions in the year 2020, the target year under AB 32. The 2020 forecast projects future GHG emissions if the City were to do nothing to reduce GHG emissions, but does account

for actions at the State and federal level. This inventory sets a foundation for future phases of the CAP, including target setting (discussed below), crafting GHG emissions reduction measures, and quantifying the reductions from those measures.

The second step, which is also complete, was to identify a target for the City of Industry CAP. Because the City did not conduct a 1990 emissions inventory, and data is not available to conduct such an inventory today, the City had to identify a target that is consistent with AB 32, but relies on more current data. The preliminary identified target is to reduce GHG emissions to 6 percent below the 2012 baseline emissions by 2020, which is anticipated to be approximately equivalent to 1990 emissions based on statewide data.

We are currently in the third step, which is to develop GHG emissions reduction measures that will achieve the City's target. City staff and the consultant team have prepared a preliminary list of GHG emissions reduction measures for Planning Commission and City Council review; see the separate PlaceWorks memorandum dated September 14, 2015, for a description of those measures.

STUDY SESSIONS AND NEXT STEPS

At the October 8, 2015 study sessions, we are seeking Planning Commission and City Council feedback on the preliminary list of GHG emissions reduction measures that will be included in the CAP. After receiving this input, City staff and the consultant team will compile a refined list of CAP measures. The emissions reductions from those measures will be modeled. The inventory, target, measures, and implementation information will be compiled into the Draft CAP for review prior to adoption.

Attachment 2

Preliminary CAP Measures
September 14, 2015

PLACEWORKS

MEMORANDUM

DATE September 14, 2015

TO Brian James, City of Industry

FROM Tanya Sundberg and Joanna Jansen

SUBJECT Preliminary CAP Measures

Brian,

This memorandum outlines a preliminary list of greenhouse gas (GHG) emissions reduction measures that could be included in the City of Industry's Climate Action Plan (CAP). The measures consider existing City General Plan policies and actions, the City of Industry General Plan EIR mitigation measures, other relevant planning documents, California Air Pollution Control Officer's Association (CAPCOA) guidance, and other climate action plans. The measures are divided into the following sectors:

» Transportation and Land Use
» Energy
» Water
» Solid Waste
» Education and Outreach

The table below includes a column entitled "Relative Magnitude of Measurable Reduction," which provides an estimate of the degree of measurable emissions reduction attributable to the measure in the GHG emissions model. The categories are as follows:

» High means that the measure would be expected to result in a measurable decrease in emissions.
» Medium means that the emissions reductions achieved would depend on variables such as rate of implementation (e.g. how quickly fixtures are replaced or installed) and level of participation, and are therefore difficult to quantify.
» Low means that the GHG model is not able to quantify the emissions reductions from the measure. This means that, although the measure would in fact reduce the GHG emissions attributable to the City of Industry, we are not able to reflect those reductions in the GHG modeling and the reductions will not be counted towards meeting the City's reduction target. However, these measures are still useful and important to consider.

After receiving final input on this list of preliminary measures from City staff, community members, and the Planning Commission and City Council, the PlaceWorks team will compile a refined list of final measures. For the final list of measures, additional information regarding each strategy will be provided, including:

- A detailed description of the strategy and how it might be implemented.
- What parties are responsible for implementing the strategy (City, private developers, etc.).
- A final emissions reduction estimate, based on any refinements of the strategy during the vetting process.

Table 1 Preliminary CAP Measures

#	MEASURE	RELATIVE MAGNITUDE OF MEASUREABLE REDUCTION	NOTES
TRANSPORTATION AND LAND USE			
Freight and Roadway Operations			
T-1	Implement a Truck Idling Emissions Reduction Program, which includes: • Requiring that new or major rehabilitations of commercial or industrial development greater than or equal to 50 percent of the existing value incorporate diesel emission reduction strategies, such as electrifying docking bays, to eliminate and/or reduce idling at truck stops, warehouses, and distribution facilities throughout the city. • Monitoring of the California Air Resources Board's five-minute nonessential idling restrictions for trucks and locomotive idling restrictions.	Medium	General Plan EIR Mitigation Measure 6-1; supports LA County CCAP
T-2	Continue to support the Alameda Corridor East Construction Authority in constructing a series of highway-rail grade separation projects intended to improve safety, reduce rail and highway delay and reduce emissions.	Low	Currently six grade separation projects are in the planning, design or construction phases. In total they will provide 335.9 vehicle hours of delay reduction per day (total time spend by vehicles idling at crossings).
T-3	As merited, implement strategies to improve signalization, incident responsiveness, traveler information systems (such as wayfinding and real-time traveler information), and active traffic management to smooth traffic flow and minimize idling.	Low	A similar mitigation was identified for a rail crossing on the Puente Hills Intermodal Facility. This will be done on a case-by-case basis in conjunction with Los Angeles County.
T-4	Monitor Valley Boulevard and conduct operational improvements to maintain mobility and reduce congestion along this corridor.	Low	General Plan EIR Mitigation Measure 13-1. This will be done on a case-by-case basis in conjunction with Los Angeles County.
T-5	Support efforts by Los Angeles County and others to evaluate zero and/or near-zero emission freight corridors.	Low	Supports LA County CCAP

#	MEASURE	RELATIVE MAGNITUDE OF MEASUREABLE REDUCTION	NOTES
Alternative Fuels and Fuel Efficiency			
T-6	Continue to maintain the electric vehicle charging stations installed at the Industry Metrolink Station, and expand the number of stations as appropriate and funding allows. Use solar panels to power or supplement these stations where possible.	Low	Supports General Plan EIR Mitigation Measure 6-1. In 2012, 64 charging stations were installed; at the same time, 8,000 solar panels were installed over 940 parking spaces, generating 2.2 megawatts (3,000 hp) of electricity per hour.
T-7	Map the location of public electric vehicle charging stations, and update the map as new facilities are installed. Provide this map on the City's website.	Low	Supports General Plan EIR Mitigation Measure 6-1
T-8	Encourage new construction to include vehicle access to properly wired outdoor charging stations to accommodate zero emission vehicles and/or plug-in electric hybrids.	Low	General Plan EIR Mitigation Measure 6-1
T-9	Encourage applicants for logistics centers/warehouses that own their own fleet to use trucks that rely on alternative fuels, partial zero emissions, or newer fleet mixes.	Low	General Plan EIR Mitigation Measure 6-1
T-10	Encourage the use of hybrid and electric construction equipment and the use of alternative fuels for construction equipment.	Low	
Bicycle, Pedestrian, and Transit Systems			
T-11	Develop and implement a Bicycle and Pedestrian Master Plan that improves connections between businesses, schools, and existing or future bike networks in surrounding communities, and include strategies to support biking and walking. Consider utility easements, drainage corridors, road rights-of-way, and other potential options for expansion of the bicycle and pedestrian network.	High	Supports General Plan Policies C2-1 and C2-4. This is already underway.
T-12	Develop and implement a program to provide signage directing pedestrians and bicyclists to the City's multipurpose sidewalks, multipurpose trails, and designated bike lanes and routes.	Low	Supports General Plan Policies C2-1 and C2-2 and Action IMP-3
T-13	As appropriate and in coordination with Metro and Foothill Transit, require transit facilities, such as bus shelters, transit bays, and turnouts, or improvements to existing transit stops as conditions of approval for nearby development.	Low	Supports General Plan Policy C2-7
T-14	Provide a link on the City's website to transit resources, schedules, and maps.	Low	Supports General Plan Policies C2-5 and C2-6

#	MEASURE	RELATIVE MAGNITUDE OF MEASUREABLE REDUCTION	NOTES
T-15	Support SCAG efforts to provide express bus rapid transit between the Industry Metrolink Station and Anaheim, which would be run by the Orange County Transportation Authority (OCTA).	Low	This is a SCAG RTP project
T-16	Continue to encourage the development and expansion of the Metro Rail Gold Line, Metrolink, and high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Industry.	Low	General Plan Policy C2-8
Transportation Demand Management			
T-17	Require employers with more than 20 employees—which is equivalent to 9,000 square feet of retail space, 17,000 square feet of big-box retail space, 7,000 square feet of office space, 19,000 square feet of manufacturing spaces, 30,000 square feet of warehousing and distribution, or 16,000 square feet of light industrial—to provide additional bike racks and end-of-trip facilities (e.g. showers and lockers).	Medium	General Plan EIR Mitigation Measure 6-1
T-18	Encourage large employers to implement an Employee Commute Trip Reduction Program that could include ride-share programs, discounted transit programs, telecommuting, flexible work schedules, and employer-sponsored vanpools.	Low	Supports General Plan EIR Mitigation Measure 6-1
T-19	Support regional ridesharing strategies by providing information on the City's website.	Low	
T-20	Amend the Zoning Code to require new projects to provide parking spaces reserved for carpool or car share vehicles next to entrances.	Low	
ENERGY			
Energy Efficiency and Conservation			
E-1	Encourage applicants for new development and major renovations to achieve the Tier 1 energy performance standards of the California Green Standards Code (CALGreen).	Low	General Plan EIR Mitigation Measure 6-1; supports General Plan Action IMP-6
E-2	Provide incentives in the Zoning Code for LEED-Silver, Build It Green, GreenPoint or equivalent rating, for example by reducing required parking and allowing additional building coverage.	Low	Supports General Plan EIR Mitigation Measure 6-1 and General Plan Action IMP-6
E-3	Continue to participate in Los Angeles County's Property Assessed Clean Energy (PACE) program, which offers innovative, low-interest financing for energy efficiency and renewable energy projects for existing and new development.	Medium	Supports General Plan Action IMP-6 and LA County CCAP; the City joined this program in June 2013.

#	MEASURE	RELATIVE MAGNITUDE OF MEASUREABLE REDUCTION	NOTES
Renewable Energy			
E-4	Review and revise the Zoning Code to require that building structures be adequately designed and constructed to support the weight of solar photovoltaic panels.	Low	General Plan EIR Mitigation Measure 6-1; supports LA County CCAP
E-5	Promote and encourage renewable energy generation and co-generation projects where feasible and appropriate.	Low	General Plan EIR Mitigation Measure 6-1; supports General Plan Action IMP-6
E-6	Encourage the installation of solar photovoltaic arrays in industrially-zoned parking lots and replacement in existing parking lots.	Low	Supports General Plan EIR Mitigation Measure 6-1 and General Plan Action IMP-6
E-7	Continue to generate power through solar arrays at the Industry Metrolink Station, and expand solar development on public parking lots and buildings as feasible.	Low	In 2012, 8,000 solar panels were installed at the Industry Metrolink Station (owned by the City) to cover 940 parking spaces in an $11 million project that generates 2.2 megawatts (3,000 hp) of electricity per hour
E-8	Require that new or major rehabilitations of warehouses greater or equal to 30,000 square feet be constructed so that the rooftop can support the weight of solar panel systems.	Medium	Supports General Plan EIR Mitigation Measure 6-1 and General Plan Action IMP-6
WATER			
W-1	Promote the use of recycled water for industrial and irrigation purposes.	Low	General Plan EIR Mitigation Measure 6-1; supports General Plan Policy RM1-2
W-2	Encourage the retrofit of irrigation systems to promote the use of recycled water.	Low	Supports General Plan EIR Mitigation Measure 6-1, General Plan Policy RM1-2, and LA County CCAP
W-3	Review and update the City's Water Efficient Landscape Ordinance with improved conservation programs and incentives for non-residential customers.	Low	Supports General Plan Policy RM1-3
SOLID WASTE			
S-1	Continue to promote recycling and waste diversion in the City of Industry through marketing efforts to increase participation by residents and businesses. As part of this program, continue to conduct public education and outreach about reuse and recycling, including appliance disposal, yard debris and organic waste collection and composting, waste to energy, and zero waste programs. Where applicable, coordinate recycling outreach efforts with the City's contracted solid waste hauler Valley Vista Services.	Low	This is ongoing on the City's website per AB 939, 341, 1374, 1826, and the California Building Code.

#	MEASURE	RELATIVE MAGNITUDE OF MEASUREABLE REDUCTION	NOTES
S-2	Encourage the use of salvaged and recycled-content materials and other materials that have low production energy costs for building materials, hard surfaces, and non-plant landscaping. Require sourcing of construction materials locally, as feasible.	Low	Supports General Plan Action IMP-6
OUTREACH AND EDUCATION			
O-1	Establish a citywide green business recognition program.	Low	Supports General Plan EIR Mitigation Measure 6-1
O-2	Create an awards program to recognize outstanding achievements by City of Industry businesses for green building practices, waste diversion and reduction, energy and water conservation, and public outreach.	Low	Supports General Plan EIR Mitigation Measure 6-1
O-3	When requesting proposals or applications for contracts, professional service agreements, or grants, request that proposals or applications include information about the sustainability practices of the organization, and use such information as a partial basis for proposal evaluations.	Low	Supports General Plan EIR Mitigation Measure 6-1

CITY COUNCIL

ITEM NO. 7.3

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: Honorable Mayor and Members of the City Council

From: Paul J. Philips, City Manager

Staff: John Ballas, City Engineer

Date: September 30, 2015

SUBJECT: Fullerton Road Grade Separation Construction, Operation and Maintenance Agreement

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Attached for your consideration is a Construction, Operation, and Maintenance ("COM") Agreement between the City of Industry, Union Pacific Railroad ("UPRR") and the Alameda Corridor-East Construction Authority ("ACE") for the Fullerton Road Grade Separation Project. The agreement sets forth the responsibilities of each party during the construction of the project and after it is completed. In 2001, ACE entered into a Master Agreement with UPRR for all grade separations identified in the ACE program. This Master Agreement requires that ACE, UPRR and any local agency having jurisdiction of the grade crossing to enter into a specific COM Agreement prior to initiating construction of individual projects.

On February 24, 2000, the City and ACE entered into an agreement "Regarding the Construction of Grade Crossing Safety Improvements and Grade Separation Projects by the Alameda Corridor-East Construction Authority" for improvements at various street crossings of the UPRR. This agreement was amended on November 26, 2012 to include the Fullerton Road Grade Separation at the Los Angeles Subdivision of the UPRR.

Final plans for the Fullerton Road Grade Separation are now complete with construction expected to begin in June of 2016. The total estimated cost of the construction contract is $82.1 million, of which the UPPR's contribution is $7.8 million. On April 22, 2013, the City of Industry entered into a Betterment Agreement with ACE for design, right of way and construction costs for widening portions of Gale Avenue and Fullerton Road as part of the project in the amount of $3.5 million. Upon completing the final cost estimates, ACE has informed us that the current estimate of the betterment improvements has increased to $7.5 million. An amendment to the Betterment Agreement will be forthcoming.

The COM Agreement specifies that ACE will bid, award, and construct the project in accordance with approved plans. UPRR will accept ownership of all track improvements and the railroad bridge deck and supporting girders. The City will accept ownership of the bridge abutment and roadway underpass, including electrical lighting installed underneath the bridge. In addition, the City will accept ownership of the retaining walls located within UPRR's right of way, which support the elevated mainline tracks. Retaining wall ownership includes annual inspections, any necessary maintenance and repair of the retaining walls, and replacement upon the end of their useful service life. The City will be responsible for graffiti removal of the walls and the railroad bridge on an ongoing basis.

It is hereby recommended that the City Council approve the Construction, Operation and Maintenance Agreement.

PJP:JDB:mk

FULLERTON ROAD UNDERPASS
CONSTRUCTION, OPERATION AND MAINTENANCE
STANDARD FORM AGREEMENT

THIS AGREEMENT, made this 1 day of October, 2015, is by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation, hereinafter termed the "**UNION PACIFIC**", the **ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY OF THE SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS**, a joint powers authority of the State of California, hereinafter termed "**ACE**", and the **CITY OF INDUSTRY**, a California municipal corporation, hereinafter "**CITY**".

RECITALS

UNION PACIFIC is a railroad corporation operating through and local freight train movements over its Los Angeles Subdivision and Alhambra Subdivision main lines in the San Gabriel Valley area of Los Angeles County. **ACE** was created to design and build the Alameda Corridor - East Project (the "Project"), which includes elimination of at-grade street, road and highway crossings of **UNION PACIFIC's** main lines in the valley through construction of underpasses. The **CITY** has primary responsibility for, and jurisdiction over, Fullerton Road, which presently has an at-grade crossing of one of the **UNION PACIFIC** main lines identified by the California Public Utilities Commission ("CPUC") by Crossing No. 003 – 21.40 (Los Angeles Subdivision) and DOT No. 441054X (currently designated as DOT Crossing

Number 810880T).

The **CITY** and **ACE** desire to undertake design, construction, operation and maintenance of a grade separation underpass structure and retaining walls as shown in attached Exhibit "A" (the "Underpass"). **ACE** has already executed an agreement with the **CITY** authorizing **ACE** to obtain approvals and permits from **UNION PACIFIC** on the **CITY's** behalf for design and construction of Underpass elements within the **CITY's** jurisdiction. That agreement allows the **CITY** and **ACE** to jointly negotiate an agreement with **UNION PACIFIC** for operation and maintenance of the Underpass. **ACE** and **UNION PACIFIC** have also entered into that certain Master Agreement Construction, Operation and Maintenance of Highway - Railroad Underpass, dated December 4, 2001, between **UNION PACIFIC** and **ACE** (the "Master Agreement") for design, construction, operation and maintenance of Project Underpasses.

NOW, THEREFORE, it is mutually agreed by and between the parties hereto as follows:

/
/
/

AGREEMENT

ARTICLE 1. UNION PACIFIC GRANTS RIGHT:

1.01 Grant of right to construct and maintain Underpass. In consideration of **ACE's, and CITY's** agreement to perform and abide by the covenants, terms and conditions of this Agreement, including Exhibits A, A-1, A-2, B, C, C-1 and D, which are attached hereto and hereby made a part thereof, **UNION PACIFIC** hereby grants to **ACE**, and to the **CITY** to the extent necessary, the right to construct, and to the **CITY** and **ACE,** the right to maintain, repair, rehabilitate and replace the Fullerton Road Underpass shown in Exhibit "A" on and within the property or properties shown in Exhibit "A-1" and described in Exhibit "A-2".

1.02 Grant of Right-of-Way. **UNION PACIFIC,** by separate indenture, agrees to grant to the **CITY** and **ACE,** an easement for permanent and temporary rights, as described in Exhibits "A-1" and "A-2", to construct, maintain, repair, rehabilitate and replace the Underpass shown in Exhibit "A". This agreement must be fully executed between **UNION PACIFIC**, **ACE**, and **CITY** prior to construction of the Underpass.

1.03 Interpretation of Exhibit "B": The term "Political Body" as used in Exhibit "B" shall be construed to mean both **ACE** and the **CITY**, collectively, except as the one is distinguished from the other within the present Agreement. If there is a conflict between terms of the present Agreement and Exhibit "B", the present Agreement shall take precedence.

ARTICLE 2. CONSTRUCTION - WORK TO BE PERFORMED BY UNION PACIFIC

2.01 Work to be performed by **UNION PACIFIC**: **UNION PACIFIC** shall perform the railroad work to the extent identified as UPRR work on Exhibit "A" or described in Exhibits "C" and "C-1". **UNION PACIFIC** shall make any and

all changes, alterations or relocations, whether temporary or permanent, and may provide flagging using Railroad personnel or approved third party flagging services and other protective services and devices, which in **UNION PACIFIC's** judgment may be or may become necessary or expedient because of the Underpass. Such work shall include, without limitation: (1) construction of all turnouts and lineover of track connections to two new mainline tracks, ballast and track hardware for the track connections and all appurtenances thereto; (2) track and signal work on industry (720 track) owned by UPRR; (3) removal of automatic grade crossing warning devices; train detection constant warning time devices and track circuits, any railroad related signal and railroad communications facilities, and the removal of any mainline track to be taken out of service due to the construction of two replacement mainline tracks; (4) construction of two new mainline tracks including ballast as shown in greater detail in Exhibit "A" and on final plans submitted by **ACE** and approved by **UNION PACIFIC**. The estimated costs of **UNION PACIFIC's** work are shown in Exhibit "C" and said costs have been estimated using and will be billed in accordance with all applicable regulatory requirements. All of **UNION PACIFIC's** costs incurred in performing such work shall be reimbursed by **ACE**, and the only contribution **UNION PACIFIC** shall make to the Underpass is set forth in Section 2.02 below.

2.02 Railroad's Contribution to Underpass Project Costs: The Railroad Contribution of 10% of theoretical structure grade separation costs shown in Exhibit C-1 to this Agreement shall constitute **UNION PACIFIC's** contribution pursuant to applicable law towards final Underpass project costs, including Underpass project construction costs and will be in full compliance with ARTICLE 5 – FEDERAL AID POLICY GUIDE. If the Political Body will receive any federal funding for the Project the Railroad contribution will be reduced to 5% of the theoretical structure per the current rules, regulations and provisions of the Federal Aid Policy Guide as contained in 23 CFR 140, Subpart 1 and 23 CFR 646, Subparts A & B are incorporated into this

Agreement by reference. The Project does not and will not receive federal funding and therefore Buy America regulations shall not apply. **UNION PACIFIC** shall not be responsible to contribute any portion of the increased cost incurred to raise **UNION PACIFIC's** tracks at the location of the Underpass. The parties agree that the Railroad Contribution is a fixed amount and that **UNION PACIFIC**, except as provided in Section 4 below, will not be obligated to make any other or further financial or in-kind contribution toward the Underpass or the Underpass costs or to repay in whole or in part any financing obtained by **ACE** as part of the Project. The amount of the **UNION PACIFIC** financial contribution, together with other accommodations to the Underpass and the Project, is a reasonable estimation of **UNION PACIFIC's** share of the cost of constructing the theoretical structure of the grade separated road under and across the width of the rail corridor for the number of lanes of the traveled roadway in existence prior to construction of the Underpass, as reflected in Exhibit C-1. **ACE** acknowledges that this Agreement is entered into pursuant to the Master Agreement. Notwithstanding any rights of **ACE** set out in other agreements associated with the Underpass project, including Sections 4.01 and 6.02 of the Agreement, **ACE**, to the maximum extent permitted by applicable law, hereby expressly releases, remises and discharges forever, and indemnifies, defends and holds harmless, **UNION PACIFIC**, its officers, employees, and agents, from any claim for payment or contributions by **UNION PACIFIC** to any aspect of the Underpass or the Project, and from any and all losses which may have been or in the future may be incurred or suffered by **ACE**, or its property, relating to or otherwise resulting from any demand on **UNION PACIFIC** by ACE or by any governmental agency with respect to any obligation of **UNION PACIFIC** under any California statutes, regulations or rules applicable to allocation of costs incurred by **ACE** for the Underpass or the Project. As used in this section, "Losses" means liabilities, losses, causes of action, penalties, demands, detriments, claims, damages, costs and judgments and all expenses incurred in connection with the Underpass or the

Project (including reasonable attorneys' fees, costs and expenses). **ACE**, after having read and been advised by legal counsel regarding the provisions of California Civil Code Section 1542 and in any and all similar statutes, rules and regulations and any other statute of the United States, hereby agrees, represents and warrants that the matter released in this Section 2.02 are not limited to the matters which are known or disclosed. California Civil Code Section 1542 reads as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING A RELEASE WHICH, IF KNOWN BY HIM, MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR. **ACE** HERETO EVIDENCES ITS SPECIFIC AGREEMENT TO THE TEAMS OF THIS RELEASE BY PLACING ITS INITIALS BELOW.

_____

ACE Initials

ACE hereby agrees, represents and warrants that it realizes and acknowledges that factual matters now unknown to it may have given or may hereafter give rise to causes of action, claims, demands, controversies, damages, costs, losses and expenses which are presently unknown, unanticipated and unsuspected, and further agrees, represents and warrants that the releases contained in this Section 2.02 have been negotiated and agreed upon in light of that realization and that it nevertheless hereby intends to release and discharge **UNION PACIFIC** from any such causes of action, claims, demands, controversies, damages, costs, losses and expenses.

ARTICLE 3. CONSTRUCTION - WORK TO BE PERFORMED BY ACE

3.01 Work to be performed by **ACE:** **ACE** shall do all necessary grading and excavation for the Underpass, to construct the structure, including any fill and structure necessary to raise **UNION PACIFIC's** tracks at the location of the Underpass, to place fill and sub-ballast suitable for permanent track

construction, to construct and remove the temporary track as shown on Exhibit "A" and as further described in the approved plans and specifications; and to provide both temporary and permanent drainage facilities and to do all other work as shown in Exhibit "A" and as further described in the approved plans and specifications for the Underpass, except for the work **UNION PACIFIC** herein agrees to do as put forth in Section 2.01 above, as shown on Exhibit "A" and described on Exhibit "C". The elevated track area will be 93 feet wide with 3 feet of separation from the southerly R/W line to the face of wall and 4 feet of separation from the northerly R/W line to the face of wall. The estimated costs of **ACE's** work subject to Federal Aid Policy Guide as contained in 23 CFR 140, Subpart 1 and 23 CFR 646, Subparts A & B and the State of California railroad cost-sharing requirements are shown in Exhibit "C-1".

3.01(a) **ACE** built spur tracks and shoofly: **ACE** will advertise, bid and award a general construction contract that includes provisions for construction of spur tracks and shoofly tracks by a qualified railroad subcontractor as detailed on the approved track plans. The railroad subcontractor will procure rail, ties, ballast and other track hardware from **UNION PACIFIC's** approved vendors meeting all **UNION PACIFIC's** engineering requirements and arrange for its transportation to and secure storage at the project site. Final preparation of sub-ballast, laying of ballast, on-site welding of rail and assembly of track, and tamping and final surfacing of track shall be performed by **ACE** to **UNION PACIFIC's** satisfaction. **ACE** will have on its construction management team qualified inspectors with experience in construction of **UNION PACIFIC** railroad facilities. The limits of **ACE's** work will be to active main clear points. Track and signal work on industry (720 track) owned by UPRR will be performed by UPRR forces. **ACE's** contractor shall use in-track welders to weld jointed rail if rail provided is not continuous welded rail (CWR).

(b) If **ACE** or it's contractor needs to bring any borrow material onto the job site to accomplish such grading and embankment work, the borrow material shall be first tested by **ACE** or it's contractor, at **ACE's** sole expense, to determine if the borrow material is acceptable to **UNION PACIFIC** including, without limitation, ensuring (1) that the borrow material meets specifications and standards provided by **UNION PACIFIC** to **ACE** and (2) that the borrow material does not contain any contamination or naturally occurring radiologic material or any other material deemed under any applicable current federal, state or local agency law, statute, rule or regulation to be of environmental concern.

(c) **UNION PACIFIC** shall allow **ACE** to temporarily disconnect Track 720 for a period not to exceed 24 months in order to construct the Project. **ACE** shall provide transloading for Consolidated Container and be liable for additional costs due to transloading. **ACE** will secure commitment from Consolidated Container to resume rail service from **UPRR** upon reconnection of Track 720. **ACE** shall be liable for loss of profits to **UPRR** due to the temporary disconnection of Track 720 for the extent of the disconnection.

3.02 <u>If work is to be performed by contractor:</u> **ACE** shall require any and all of **ACE's** prime contractors to complete, submit and have executed a **UNION PACIFIC** right-of-entry agreement as shown in Exhibit B, prior to prime contractor's entry on to **UNION PACIFIC** property. **ACE** will require its prime contractors to maintain an active and valid right-of-entry permit throughout the entire period of the prime contractors' activity on or occupancy of **UNION PACIFIC's** right-of-way.

3.03 <u>Insurance:</u> To the extent insurance as required by **UNION PACIFIC** as described in Exhibit B is not already provided for by other existing and active **ACE – UNION PACIFIC** agreement or agreements, **ACE** and **ACE's** contractors will provide and maintain the validity of certificates of insurance issued by

their insurance carriers providing the insurance coverage required pursuant to Exhibit B. The certificates of insurance shall indicate that the insurance policies contain endorsements specifically naming Union Pacific Railroad Company, Southern California Regional Rail Authority and the National Railroad Passenger Corporation as additionally-insured entities with respect to all liabilities arising out of Insured's performance of the work required for construction of the Underpass.

ARTICLE 4. OPERATION AND MAINTENANCE OF THE UNDERPASS:

4.01 By **UNION PACIFIC**: **UNION PACIFIC** shall operate and maintain the track structure, ballast roadbed, railroad drainage and waterproofing upon the Underpass superstructures and the Underpass superstructures above bridge seats at its sole cost; with the exceptions that any Underpass roadway illumination and electrical appurtenances, or aesthetic or cosmetic design elements or painting added to superstructure soffits, all retaining walls or facades, will be maintained by **ACE** or the **CITY** having jurisdiction for the road, street, or highway concerned.

4.02 By **ACE** and **CITY:** **ACE** shall operate and maintain the Underpass substructure below bridge seats, abutments, column bents, roadway, sidewalks, roadway drainage system, roadway lighting and landscaping, and any superstructure soffit or façade cosmetic elements, at its sole expense, until such time as the **CITY** accepts ownership, operational and maintenance responsibilities as provided for in the **ACE** – **CITY** agreement. **ACE** will notify **UNION PACIFIC** when **ACE** relinquishes to the **CITY** these operational and maintenance responsibilities.

4.03 Major Maintenance: For maintenance or other activities by the **CITY** of its portion of the Underpass which could affect on-track operations by **UNION PACIFIC** or otherwise affect the railroad operating environment, as further described in Exhibit B, **CITY** will first notify **UNION PACIFIC** in advance of

the proposed activity and obtain railroad flagging, inspection and other protective services as deemed necessary by **UNION PACIFIC.**

4.04 Maintenance of Retaining Walls along UPRR right-of-way: The **CITY** shall own, operate, perform annual inspections and perform any necessary maintenance and repair on the retaining walls, at the **CITY's** sole cost and expense. In addition to maintenance and repair of the walls, **CITY** shall be responsible at **CITY's** sole cost and expense, for replacement of the retaining walls at the end of their useful life and for repair or replacement of the retaining walls in the event of early or catastrophic failure of some or all of the retaining walls due to any accident, earthquake, act of God, defective materials, design or installation, or any other cause unrelated to on-track operations. Any damage to retaining walls as a result of on-track operations shall be the responsibility of **UNION PACIFIC** and all repairs and replacement shall be at **UNION PACIFIC's** sole expense. Retaining wall replacement shall be based on the criteria set forth in Exhibit D.

4.05 Graffiti Removal: Notwithstanding the provisions of this Section 4 or of Exhibit B attached hereto, the parties specifically agree that graffiti removal from or overpainting of all component surfaces of the overall project, and including without limitation the Underpass substructure and superstructure (above and below the bridge seats) and all retaining walls, along with the overall appearance of the retaining walls and bridge structure and the surrounding property, including vegetation control around the retaining walls and structure shall be the responsibility of **ACE** and the **CITY** in their sole and exclusive discretion, and **UNION PACIFIC** shall have no obligations whatsoever with regard to graffiti removal or the appearance of those areas. Before entering upon the track area of the Underpass superstructure to perform graffiti removal or overpainting or any other activities, **ACE** and/or the **CITY** shall notify **UNION PACIFIC** sufficiently in advance and **UNION PACIFIC** shall provide a flagger at **CITY's** sole expense as reasonably required for the safety of workers and trains. City will not be required to notify **UNION**

PACIFIC for to remove graffiti or perform routine wall inspection unless City enters the area within 25 feet of active track areas.

ARTICLE 5. FUTURE RECONSTRUCTION OR ALTERATION OF THE UNDERPASS:

5.01 Apportionment of future reconstruction or alteration expenses: For the purposes of apportioning costs of any future reconstruction or alteration of the Underpass under the provisions of Public Utilities Code, including Section 1202.5, **ACE**, **UNION PACIFIC** and the **CITY** herein state that State and local funds will have been used in construction of the present Underpass, and a future reconstruction or alteration of the Underpass that provides no ascertainable net benefit to **UNION PACIFIC** will not require cost participation by **UNION PACIFIC**, as provided for under Title 23 of the Code of Federal Regulations, Section 646.210(b).

ARTICLE 6. MUTUAL INDEMNIFICATION AND HOLD HARMLESS CLAUSE

6.01 By **ACE:** Neither **UNION PACIFIC** nor the **CITY,** and any of their Board members, elected officials, shareholders, officers, employees, agents, or contractors shall be responsible for any damage or liability occurring by reason of any acts or omissions on the part of **ACE** under or in connection with any work, authority or jurisdiction delegated to **ACE** under this agreement. The parties understand and agree that **ACE** shall fully indemnify, defend and hold **UNION PACIFIC** and the **CITY,** their Board members, elected officials, shareholders, officers, employees, agents, and contractors harmless from any and all liability, loss, expense (including reasonable attorneys' fees and other defense costs), or claims imposed for damages of any nature whatsoever, including but not limited to, bodily injury, death, personal injury, or property damage occurring by reason of any acts or omissions on the part of **ACE**, their Boards, officers, employees, agents, contractors, or volunteers under or in connection with any work, authority or jurisdiction delegated to **ACE** under this Agreement. This indemnity shall survive termination of this Agreement.

6.02 By **UNION PACIFIC**: Neither **ACE,** nor the **CITY,** their Board members, elected officials, officers, employees, agents, contractors, or volunteers shall be responsible for any damage or liability occurring by reason of any acts or omissions on the part of **UNION PACIFIC** under or in connection with any work, authority or jurisdiction delegated to **UNION PACIFIC** under this Agreement. The parties understand and agree that **UNION PACIFIC** shall fully indemnify, defend and hold **ACE** and the **CITY,** their Board members, elected officials, officers, employees, agents, contractors, and volunteers harmless from any and all liability, loss, expense (including reasonable attorneys' fees and other defense costs), or claims imposed for damages of any nature whatsoever, including but not limited to, bodily injury, death, personal injury, or property damage occurring by reason of any acts or omissions on the part of **UNION PACIFIC**, its Board, shareholders, officers, employees, agents, and contractors under or in connection with any work, authority or jurisdiction delegated to **UNION PACIFIC** under this Agreement. This indemnity shall survive termination of this Agreement.

6.03 By **CITY:** Neither **UNION PACIFIC** nor **ACE,** and any of their Board members, elected officials, shareholders, officers, employees, agents, or contractors shall be responsible for any damage or liability occurring by reason of any acts or omissions on the part of the **CITY** under or in connection with any work, authority or jurisdiction delegated to the **CITY** under this agreement. The parties understand and agree that the **CITY** shall fully indemnify, defend and hold **UNION PACIFIC**, **ACE,** their Board members, elected officials, shareholders, officers, employees, agents, and contractors harmless from any and all liability, loss, expense (including reasonable attorneys' fees and other defense costs), or claims imposed for damages of any nature whatsoever, including but not limited to, bodily injury, death, personal injury, or property damage occurring by reason of any acts or

omissions on the part of the **CITY**, its elected officials, officers, employees, agents, contractors, or volunteers under or in connection with any work, authority or jurisdiction delegated to the **CITY** under this Agreement. This indemnity shall survive termination of this Agreement.

ARTICLE 7. TERM

7.01 This Agreement shall become effective as the date herein first written, and shall continue in full force and effect until terminated by mutual consent by the parties.

ARTICLE 8. SUCCESSORS AND ASSIGNS

8.01 The covenants and provisions of the foregoing instrument shall be binding upon and inure to the benefit of the successors and assigns of **UNION PACIFIC, ACE** and the **CITY**.

ARTICLE 9. SEVERABILITY

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be amended to, and solely to, the extent necessary to cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

ARTICLE 10. COUNTERPARTS

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

ARTICLE 11. CAPTIONS

The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are descriptive only and shall have no significance in the interpretation of this Agreement.

ARTICLE 12. WAIVER

The waiver by UPRR, ACE or the CITY, of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by UPRR, ACE or the CITY unless in writing.

IN WITNESS WHEREOF the parties hereto have duly executed this agreement the day and year first above written.

CITY OF INDUSTRY

By: _____

Its _____

UNION PACIFIC RAILROAD COMPANY

By: _____

Its _____

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY

By: _____

Its _____

IN WITNESS WHEREOF the parties hereto have duly executed this agreement the day and year first above written.

CITY OF INDUSTRY

By: _____

Its _____

UNION PACIFIC RAILROAD COMPANY

By: John J Horanec

Its AVP-Design & Construction

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY

By: Mark Ainsell

Its CEO

LIST OF EXHIBITS TO BE ATTACHED TO FULLERTON ROAD UNDERPASS STANDARD FORM AGREEMENT

Exhibit A: Fifty Six (56)11" x 17" plan sheets prepared by **ACE** showing a general plan view, elevation view or views, typical superstructure cross-section and roadway cross-section or cross-sections, retaining walls and roadway profile grade lines with their spatial relationship to the bridge superstructure.

Exhibit A-1: Three (3) sheets showing right-of-way owned by or under the control of **UNION PACIFIC** needed for construction of the Underpass. These sheets show permanent encroachments required for the Underpass Project.

Exhibit A-2: Legal descriptions of **UNION PACIFIC** right-of-way shown in Exhibit A-1 required for the permanent encroachment of the Underpass Project. Ten (10) 8½" x 11"sheets.

Exhibit B: **UNION PACIFIC** "Public Highway Crossing" and "Right-of-Entry Form/Insurance standard exhibits.

Exhibit C: **UNION PACIFIC's** estimate of its force account, material and equipment costs for construction of the Underpass.

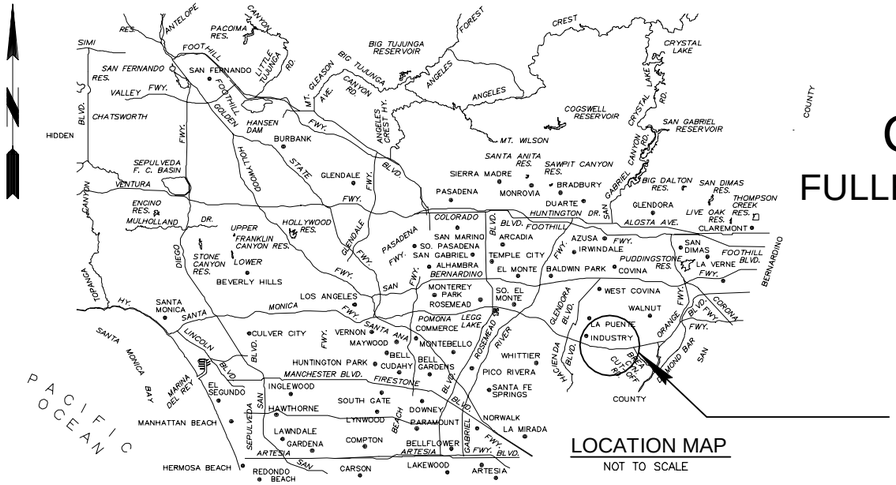
Exhibit C-1: **ACE's** estimate of those portions of the Underpass Project subject to railroad cost participation requirements under applicable California state statutes and Federal Aid Policy Guide as contained in 23 CFR 140, Subpart 1 and 23 CFR 646, Subparts A & B if federal funds are used . These portions include preliminary engineering, right-of-way acquisition, construction for an underpass structure and roadway approaches required to transition up to existing road profiles, for the number of lanes on the existing road and in accordance with current State of California design standards, construction management and program management.

Exhibit D Retaining Wall maintenance area and criteria for retaining wall replacement.

ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY

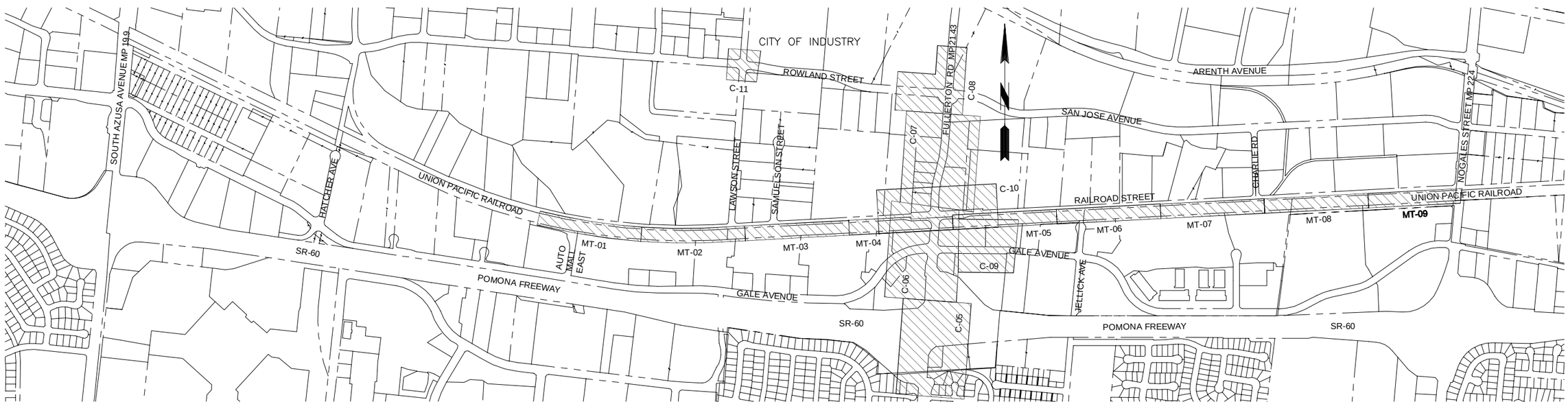
FULLERTON ROAD GRADE SEPARATION PROJECT

ACE CONTRACT NO. IFB 12-03B



LOCATION MAP
NOT TO SCALE

LEGEND:
PROJECT AREA



KEY MAP
NOT TO SCALE

BIGGS CARDOSA ASSOCIATES INC
500 SO. MAIN ST, SUITE 400
ORANGE, CALIFORNIA 92868
TEL (714) 550-4665

SUBMITTED: _____ DATE _____
PROJECT MANAGER

ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY
4900 RIVERGRADE ROAD, SUITE. A120
IRWINDALE, CA 91706
TEL (626) 962-9292

APPROVED: _____ DATE _____
PROJECT MANAGER

CITY OF INDUSTRY
15625 EAST STAFFORD STREET #100
CITY OF INDUSTRY, CA 91744
TEL (626) 333-2211

APPROVED: _____ DATE _____
CITY ENGINEER

UNION PACIFIC RAILROAD
1400 DOUGLAS STREET
OMAHA, NE 68179

APPROVED: _____ DATE _____
UPRR PERSONNEL

Union Pacific approval means the plans have been reviewed and generally conform to UP and AREMA standards. UP approval does not relieve the agency or the engineer of record for the adequacy of design and the satisfactory completion of the project.

100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

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REGISTERED PROFESSIONAL ENGINEER
DARREN J. ADRIAN
No. 53031
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER	DATE:
DRAWN BY: MLB	DATE:
CHECKED BY: AT	DATE:

UNDER THE SUPERVISION OF:

NAME DARREN J. ADRIAN RCE # 53031 DATE:

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
600 So. Main St, Suite 900
Orange, California 92868
714-550-4665

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION
TITLE SHEET

CONTRACT No. | DWG G-01 | SHEET 001 OF –

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
001	G-01	TITLE SHEET
GENERAL		
002	G-02	DRAWING INDEX
003	G-03	DRAWING INDEX
004	G-04	DRAWING INDEX
005	G-05	LEGEND, SYMBOLS & ABBREVIATIONS
STAGE CONSTRUCTION PLANS		
006	SC-01	LIMITS OF WORK
007	SC-02	STAGE 1
008	SC-03	STAGE 2
009	SC-04	STAGE 3
010	SC-05	STAGE 4
011	SC-06	STAGE 5
TRAFFIC HANDLING PLANS		
012	TH-01	STAGE 1A
013	TH-02	STAGE 1C - PHASE 1
014	TH-03	STAGE 1C - PHASE 1
015	TH-04	STAGE 1C - PHASE 2A
016	TH-05	STAGE 1C - PHASE 2A
017	TH-06	STAGE 1C - PHASE 2B
018	TH-07	STAGE 1C - PHASE 2B
019	TH-08	STAGE 1C - PHASE 2B
020	TH-09	STAGE 1C - PHASE 3
021	TH-10	STAGE 1C - PHASE 3
022	TH-11	STAGE 1C - PHASE 3
023	TH-12	STAGE 2A
024	TH-13	STAGE 2A
025	TH-14	STAGE 2A
026	TH-15	STAGE 2C - PHASE 1
027	TH-16	STAGE 2C - PHASE 1
028	TH-17	STAGE 2C - PHASE 2
029	TH-18	STAGE 2C - PHASE 2
030	TH-19	STAGE 3A
031	TH-20	STAGE 3A
032	TH-21	STAGE 3C
033	TH-22	STAGE 3C
034	TH-23	STAGE 3D - PHASE 1
035	TH-24	STAGE 3D - PHASE 1
036	TH-25	STAGE 3D - PHASE 1
037	TH-26	STAGE 3D - PHASE 1
038	TH-27	STAGE 3D - PHASE 2A
039	TH-28	STAGE 3D - PHASE 2B
040A	TH-29A	STAGE 3E
040B	TH-29B	STAGE 3E
041	TH-30	STAGE 3F
042	TH-31	STAGE 3F
043	TH-32	STAGE 3F
044	TH-33	STAGE 3F
REMOVAL PLANS		
045	DP-01	FULLERTON RD STA 90+77.53 TO STA 98+50
046	DP-02	FULLERTON RD STA 98+50 TO STA 108+00
047	DP-03	FULLERTON RD STA 108+00 TO STA 116+50
048	DP-04	FULLERTON RD STA 116+50 TO STA 123+00
049	DP-05	GALE AVE STA 72+50 TO STA 78+00
050	DP-06	RAILROAD ST STA 94+66.38 TO STA 105+66.38
051	DP-07	UPRR MAIN LINE 1 STA 1094+00 TO STA 1110+00
052	DP-08	UPRR MAIN LINE 1 STA 1110+00 TO STA 1127+00
053	DP-09	UPRR MAIN LINE 1 STA 1138+00 TO STA 1152+00
054	DP-10	UPRR MAIN LINE 1 STA 1152+00 TO STA 1172+00
055	DP-11	UPRR MAIN LINE 1 STA 1172+00 TO STA 1183+00
056	DP-12	INTERSECTION ROWLAND ST AND LAWSON ST
TYPICAL SECTIONS		
057	C-01	FULLERTON RD STA 90+77.53 TO STA 103+50
058	C-02	FULLERTON RD STA 103+50 TO STA 108+23
059	C-03	FULLERTON RD AND GALE AVE
060	C-04	RAILROAD ST AND ROWLAND ST

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
ROADWAY PLAN		
061	C-05	FULLERTON RD STA 90+77.53 TO STA 98+50
062	C-06	FULLERTON RD STA 98+50 TO STA 108+00
063	C-07	FULLERTON RD STA 108+00 TO STA 116+50
064	C-08	FULLERTON RD STA 116+50 TO STA 122+05.77
065	C-09	GALE AVE STA 72+50 TO STA 77+07.89
066	C-10	RAILROAD ST STA 95+18.37 TO STA 104+64.64
067	C-11	INTERSECTION ROWLAND ST AND LAWSON ST
ROADWAY PROFILES		
068	C-12	FULLERTON RD STA 90+77.53 TO STA 102+00
069	C-13	FULLERTON RD STA 102+00 TO STA 113+00
070	C-14	FULLERTON RD STA 113+00 TO STA 122+05.77
071	C-15	GALE AVE STA 66+10.00 TO STA 77+07.89
072	C-16	RAILROAD ST STA 95+18.37 TO STA 104+64.64
073	C-17	ROWLAND ST-SAN JOSE AVE AND FULLERTON RD
074	C-18	SR-60 WESTBOUND OFF RAMP
CONSTRUCTION DETAILS		
075	C-19	FULLERTON RD MEDIAN DETAILS
076	C-20	DRIVEWAY GRADING PLAN
077	C-21	DRIVEWAY GRADING PLAN
078	C-22	PAVEMENT AND DRIVEWAY DETAILS
079	C-23	EAST PEDESTRIAN RAMP
080	C-24	WEST PEDESTRIAN RAMP
081	C-25	CURB RAMP DETAILS
082	C-26	CURB RAMP DETAILS
083	C-27	CURB RAMP DETAILS
INTERSECTION DETAILS		
084	C-28	FULLERTON RD AND GALE AVE 1 OF 2
085	C-29	FULLERTON RD AND GALE AVE 2 OF 2
086	C-30	SR-60 WESTBOUND OFF RAMP
087	C-31	FULLERTON RD AND ROWLAND ST
088	C-32	FULLERTON RD AND SAN JOSE AVE
089	C-33	ROWLAND ST AND LAWSON ST 1 OF 2
090	C-34	ROWLAND ST AND LAWSON ST 2 OF 2
JOINT DETAILS		
091	C-35	FULLERTON RD STA 94+50 TO 102+00
092	C-36	FULLERTON RD STA 102+00 TO 108+00
093	C-37	FULLERTON RD STA 108+00 TO 117+00
094	C-38	FULLERTON RD STA 117+00 TO 122+10 GALE AVE STA 71+50 TO 74+00
095	C-39	SAN JOSE AVE AND ROWLAND ST GALE AVE 66+10 TO 69+00
SITE GRADING		
096	C-40	SITE GRADING (CATHAY BANK)
097	C-41	SITE GRADING (NGY STONE & CABINET)
098	C-42	SITE GRADING (FULLERTON STONE, RDD FREIGHT)
099	C-43	SITE GRADING (LEE & RO INC)
100	C-44	SITE GRADING (IHOP AND JACK-IN-THE-BOX)
GROUNDWATER COLLECTION SYSTEM		
101	C-45	FULLERTON RD PLAN AND PROFILE
102	C-46	FULLERTON RD DETAILS
SIGNING & STRIPING		
103	SS-01	FULLERTON RD STA 90+00 TO STA 100+00
104	SS-02	FULLERTON RD STA 100+00 TO STA 110+00
105	SS-03	FULLERTON RD STA 110+00 TO STA 122+05.75
106	SS-04	GALE AVE STA 63+00 TO STA 78+00
107	SS-05	RAILROAD ST STA 94+50 TO STA 106+00
108	SS-06	INTERSECTION ROWLAND ST AND LAWSON ST

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
UTILITY PLANS - SEWER		
109	US-01	PLAN & PROFILE - 54 IN SEWER SIPHON RAILROAD ST
110	US-02	PLAN & PROFILE - 30 IN TEMPORARY SEWER AIRLINE RAILROAD ST
111	US-03	PLAN & PROFILE - 30 IN SEWER AIRLINE RAILROAD ST
112	US-04	SEWER SIPHON CONSTRUCTION SEQUENCE
113	US-05	SIPHON & AIRLINE MANHOLE DETAILS
114	US-06	GENERAL NOTES AND SPECIAL PROVISIONS
115	US-07	PLAN & PROFILE 6 IN SEWER-RAILROAD ST EAST
116	US-08	PLAN & PROFILE 8 IN. SEWER-FULLERTON RD N.
117	US-09	PAGE 2 PLAN & PROFILE 8IN. SEWER - FULLERTON N.
118	US-10	PLAN & PROFILE 8 IN SEWER GALE AVE WEST
119	US-11	PLAN & PROFILE 6 IN PRIVATE SEWER-PUENTE HILLS PLAZA
120	US-12	PAGE 2 PLAN & PROFILE 6 IN PRIVATE SEWER-PUENTE HILLS PLAZA
121	US-13	PLAN & PROFILE 6 IN PRIVATE SEWER CATHAY BANK
UTILITY PLANS - EXISTING		
122	UE-01	FULLERTON RD STA 90+00 TO STA 98+50
123	UE-02	FULLERTON RD STA 98+50 TO STA 108+00
124	UE-03	FULLERTON RD STA 108+00 TO STA 116+50
125	UE-04	FULLERTON RD STA 116+50 TO STA 123+00
126	UE-05	GALE AVE STA 72+50 TO STA 78+00
127	UE-06	RAILROAD ST STA 94+50 TO STA 106+00
128	UE-07	UPRR MAIN LINE 1 STA 1094+00 TO STA 1110+00
129	UE-08	UPRR MAIN LINE 1 STA 1110+00 TO STA 1127+00
130	UE-09	UPRR MAIN LINE 1 STA 1138+00 TO STA 1152+00
131	UE-10	UPRR MAIN LINE 1 STA 1152+00 TO STA 1172+00
132	UE-11	UPRR MAIN LINE 1 STA 1172+00 TO STA 1183+00
UTILITY PLANS - PROPOSED		
133	UP-01	FULLERTON RD STA 90+00 TO STA 98+50
134	UP-02	FULLERTON RD STA 98+50 TO STA 108+00
135	UP-03	FULLERTON RD STA 108+00 TO STA 116+50
136	UP-04	FULLERTON RD STA 116+50 TO STA 123+00
137	UP-05	GALE AVE STA 72+50 TO STA 78+00
138	UP-06	RAILROAD ST STA 94+50 TO STA 106+00
139	UP-07	UPRR MAIN LINE 1 STA 1094+00 TO STA 1110+00
140	UP-08	UPRR MAIN LINE 1 STA 1110+00 TO STA 1127+00
141	UP-09	UPRR MAIN LINE 1 STA 1138+00 TO STA 1152+00
142	UP-10	UPRR MAIN LINE 1 STA 1152+00 TO STA 1172+00
143	UP-11	UPRR MAIN LINE 1 STA 1172+00 TO STA 1183+00
144	UP-12	TYPICAL SECTIONS
145	UP-13	TYPICAL SECTIONS
LANDSCAPE PLAN		
146	LS-01	FULLERTON RD STA 90+00 TO STA 98+50
147	LS-02	FULLERTON RD STA 98+50 TO STA 108+00
148	LS-03	FULLERTON RD STA 108+00 TO STA 116+50
149	LS-04	FULLERTON RD STA 116+50 TO STA 123+00
150	LS-05	GALE AVE STA 72+50 TO STA 78+00
151	LS-06	INTERSECTION ROWLAND ST AND LAWSON ST
152	LS-07	DETAILS
153	LS-08	DETAILS
154	LS-09	NOTES
IRRIGATION PLAN		
155	IR-01	FULLERTON RD STA 90+00 TO STA 98+50
156	IR-02	FULLERTON RD STA 98+50 TO STA 108+00
157	IR-03	FULLERTON RD STA 108+00 TO STA 116+50
158	IR-04	FULLERTON RD STA 116+50 TO STA 123+00
159	IR-05	GALE AVE STA 72+50 TO STA 78+00
160	IR-06	INTERSECTION ROWLAND ST AND LAWSON ST
161	IR-07	DETAILS
162	IR-08	DETAILS
163	IR-09	NOTES AND DETAILS
164	IR-10	CALCULATIONS
165	IR-11	IRRIGATION SCHEDULES

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REGISTERED PROFESSIONAL ENGINEER
ERIC REGUEIRO
78161
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER	DATE:
DRAWN BY: MLB	DATE:
CHECKED BY: AT	DATE:
UNDER THE SUPERVISION OF:	
NAME ERIC REGUEIRO RCE # 78161	DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

DRAWING INDEX

CONTRACT No. | DWG G-02 | SHEET 002 OF -

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
GENERAL PLANS TRACK		
166	GT-01	TITLE SHEET
167	GT-02	GENERAL NOTES AND PROJECT CONTACTS
168	GT-03	ABBREVIATIONS AND LEGEND
169	GT-04	INDEX OF DRAWING
170	GT-05	HORIZONTAL CURVE GEOMETRY
171	GT-06	SHOOFLY TRACK GEOMETRY DATA TABLES
172	GT-07	MAINLINE TRACK GEOMETRY DATA TABLES
UPRR TRACK PHASING PLAN		
173	PH-01	STAGE - 1
174	PH-02	STAGE - 2
175	PH-03	STAGE - 3
176	PH-04	STAGE - 4
177	PH-05	STAGE - 5
178	PH-06	STAGE - 6
179	PH-07	STAGE - 7
180	PH-08	STAGE - 8
UPRR TYPICAL SECTIONS (SHOOFLY TRACKS)		
181	TS-01	TYPICAL SECTIONS 1 OF 3
182	TS-02	TYPICAL SECTIONS 2 OF 3
183	TS-03	TYPICAL SECTIONS 3 OF 3
UPRR PLAN & PROFILE (SHOOFLY TRACKS)		
184	ST-01	SHF STA 1097+79.46 TO SHF STA 1104+00
185	ST-02	SHF STA 1104+00 TO SHF STA 1114+00
186	ST-03	SHF STA 1114+00 TO SHF STA 1124+00
187	ST-04	SHF STA 1124+00 TO SHF STA 1134+00
188	ST-05	SHF STA 1134+00 TO SHF STA 1144+00
189	ST-06	SHF STA 1144+00 TO SHF STA 1154+00
190	ST-07	SHF STA 1154+00 TO SHF STA 1165+00
191	ST-08	SHF STA 1165+00 TO SHF STA 1174+00
192	ST-09	SHF STA 1174+00 TO SHF STA 1182+00
UPRR GRADING (SHOOFLY TRACKS)		
193	SGD-01	SHF STA 1097+79.46 TO SHF STA 1104+00
194	SGD-02	SHF STA 1104+00 TO SHF STA 1114+00
195	SGD-03	SHF STA 1114+00 TO SHF STA 1124+00
196	SGD-04	SHF STA 1124+00 TO SHF STA 1134+00
197	SGD-05	SHF STA 1134+00 TO SHF STA 1144+00
198	SGD-06	SHF STA 1144+00 TO SHF STA 1154+00
199	SGD-07	SHF STA 1154+00 TO SHF STA 1165+00
200	SGD-08	SHF STA 1165+00 TO SHF STA 1174+00
201	SGD-09	SHF STA 1174+00 TO SHF STA 1182+00
UPRR TYPICAL SECTIONS (MAINLINE TRACKS)		
202	RTS-01	TYPICAL SECTIONS 1 OF 4
203	RTS-02	TYPICAL SECTIONS 2 OF 4
204	RTS-03	TYPICAL SECTIONS 3 OF 4
205	RTS-04	TYPICAL SECTIONS 4 OF 4

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
UPRR PLAN & PROFILE (MAINLINE TRACKS)		
206	MT-01	ML1 STA 1097+79.46 TO ML1 STA 1104+00
207	MT-02	ML1 STA 1104+00 TO ML1 STA 1114+00
208	MT-03	ML1 STA 1114+00 TO ML1 STA 1124+00
209	MT-04	ML1 STA 1124+00 TO ML1 STA 1134+00
210	MT-05	ML1 STA 1134+00 TO ML1 STA 1144+00
211	MT-06	ML1 STA 1144+00 TO ML1 STA 1154+00
212	MT-07	ML1 STA 1154+00 TO ML1 STA 1164+00
213	MT-08	ML1 STA 1164+00 TO ML1 STA 1174+00
214	MT-09	ML1 STA 1174+00 TO ML1 STA 1182+00
215	MT-10	TRACK 720 DETAILS
216	MT-11	TRACK 734 DETAILS
UPRR GRADING (MAINLINE TRACKS)		
217	MGD-01	ML1 STA 1097+79.46 TO ML1 STA 1104+00
218	MGD-02	ML1 STA 1104+00 TO ML1 STA 1114+00
219	MGD-03	ML1 STA 1114+00 TO ML1 STA 1124+00
220	MGD-04	ML1 STA 1124+00 TO ML1 STA 1134+00
221	MGD-05	ML1 STA 1134+00 TO ML1 STA 1144+00
222	MGD-06	ML1 STA 1144+00 TO ML1 STA 1154+00
223	MGD-07	ML1 STA 1154+00 TO ML1 STA 1164+00
224	MGD-08	ML1 STA 1164+00 TO ML1 STA 1174+00
225	MGD-09	ML1 STA 1174+00 TO ML1 STA 1182+00
UPRR CROSS SECTIONS (SHOOFLY TRACKS)		
226	SX-01	SHF STA 1097+89.87 TO SHF STA 1098+50
227	SX-02	SHF STA 1099+00 TO SHF STA 1100+50
228	SX-03	SHF STA 1101+00 TO SHF STA 1102+00
229	SX-04	SHF STA 1102+50 TO SHF STA 1103+50
230	SX-05	SHF STA 1104+00 TO SHF STA 1105+00
231	SX-06	SHF STA 1105+50 TO SHF STA 1107+00
232	SX-07	SHF STA 1107+50 TO SHF STA 1108+50
233	SX-08	SHF STA 1109+00 TO SHF STA 1110+50
234	SX-09	SHF STA 1111+00 TO SHF STA 1112+50
235	SX-10	SHF STA 1113+00 TO SHF STA 1114+50
236	SX-11	SHF STA 1115+00 TO SHF STA 1116+50
237	SX-12	SHF STA 1117+00 TO SHF STA 1118+50
238	SX-13	SHF STA 1119+00 TO SHF STA 1120+50
239	SX-14	SHF STA 1121+00 TO SHF STA 1122+50
240	SX-15	SHF STA 1123+00 TO SHF STA 1124+50
241	SX-16	SHF STA 1125+00 TO SHF STA 1126+50
242	SX-17	SHF STA 1127+00 TO SHF STA 1128+50
243	SX-18	SHF STA 1129+00 TO SHF STA 1130+50
244	SX-19	SHF STA 1131+00 TO SHF STA 1132+50
245	SX-20	SHF STA 1133+00 TO SHF STA 1134+50
246	SX-21	SHF STA 1135+00 TO SHF STA 1136+50
247	SX-22	SHF STA 1137+00 TO SHF STA 1138+50
248	SX-23	SHF STA 1139+00 TO SHF STA 1140+50
249	SX-24	SHF STA 1141+00 TO SHF STA 1142+50
250	SX-25	SHF STA 1143+00 TO SHF STA 1144+50
251	SX-26	SHF STA 1145+00 TO SHF STA 1146+50
252	SX-27	SHF STA 1147+00 TO SHF STA 1148+50
253	SX-28	SHF STA 1149+00 TO SHF STA 1150+50
254	SX-29	SHF STA 1151+00 TO SHF STA 1152+50
255	SX-30	SHF STA 1153+00 TO SHF STA 1154+50
256	SX-31	SHF STA 1155+00 TO SHF STA 1156+50
257	SX-32	SHF STA 1157+00 TO SHF STA 1158+50
258	SX-33	SHF STA 1159+00 TO SHF STA 1160+50
259	SX-34	SHF STA 1161+00 TO SHF STA 1162+50
260	SX-35	SHF STA 1163+00 TO SHF STA 1164+50
261	SX-36	SHF STA 1165+00 TO SHF STA 1166+50
262	SX-37	SHF STA 1167+00 TO SHF STA 1168+50
263	SX-38	SHF STA 1168+93.92 TO SHF STA 1170+00
264	SX-39	SHF STA 1170+33.92 TO SHF STA 1171+00
265	SX-40	SHF STA 1171+32.06 TO SHF STA 1172+50
266	SX-41	SHF STA 1171+72.06 TO SHF STA 1174+00
267	SX-42	SHF STA 1174+50 TO SHF STA 1176+00
268	SX-43	SHF STA 1176+50 TO SHF STA 1177+84.37
269	SX-44	SHF STA 1178+00 TO SHF STA 1179+24.37
270	SX-45	SHF STA 1179+50 TO SHF STA 1180+22.50
271	SX-46	SHF STA 1180+50 TO SHF STA 1181+62.50
272	SX-47	SHF STA 1182+00

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
UPRR CROSS SECTIONS (MAINLINE TRACKS)		
273	TX-01	ML1 STA 1097+79.46 TO ML1 STA 1098+50
274	TX-02	ML1 STA 1099+00 TO ML1 STA 1100+50
275	TX-03	ML1 STA 1100+99.46 TO ML1 STA 1102+00
276	TX-04	ML1 STA 1102+50 TO ML1 STA 1104+00
277	TX-05	ML1 STA 1104+24.80 TO ML1 STA 1105+50
278	TX-06	ML1 STA 1106+00 TO ML1 STA 1107+50
279	TX-07	ML1 STA 1107+50.14 TO ML1 STA 1109+50
280	TX-08	ML1 STA 1110+00 TO ML1 STA 1111+00
281	TX-09	ML1 STA 1111+50 TO ML1 STA 1113+00
282	TX-10	ML1 STA 1113+50 TO ML1 STA 1115+00
283	TX-11	ML1 STA 1115+50 TO ML1 STA 1117+00
284	TX-12	ML1 STA 1117+50 TO ML1 STA 1119+00
285	TX-13	ML1 STA 1119+50 TO ML1 STA 1121+00
286	TX-14	ML1 STA 1121+50 TO ML1 STA 1123+00
287	TX-15	ML1 STA 1123+50 TO ML1 STA 1125+00
288	TX-16	ML1 STA 1125+50 TO ML1 STA 1127+00
289	TX-17	ML1 STA 1127+50 TO ML1 STA 1129+00
290	TX-18	ML1 STA 1129+50 TO ML1 STA 1131+00
291	TX-19	ML1 STA 1131+50 TO ML1 STA 1133+00
292	TX-20	ML1 STA 1133+50 TO ML1 STA 1135+00
293	TX-21	ML1 STA 1135+50 TO ML1 STA 1137+00
294	TX-22	ML1 STA 1137+50 TO ML1 STA 1139+00
295	TX-23	ML1 STA 1139+50 TO ML1 STA 1141+00
296	TX-24	ML1 STA 1141+50 TO ML1 STA 1143+00
297	TX-25	ML1 STA 1143+50 TO ML1 STA 1145+00
298	TX-26	ML1 STA 1145+50 TO ML1 STA 1147+00
299	TX-27	ML1 STA 1147+50 TO ML1 STA 1149+00
300	TX-28	ML1 STA 1149+50 TO ML1 STA 1151+00
301	TX-29	ML1 STA 1151+50 TO ML1 STA 1153+00
302	TX-30	ML1 STA 1153+50 TO ML1 STA 1155+00
303	TX-31	ML1 STA 1155+50 TO ML1 STA 1157+00
304	TX-32	ML1 STA 1157+50 TO ML1 STA 1159+00
305	TX-33	ML1 STA 1159+50 TO ML1 STA 1161+00
306	TX-34	ML1 STA 1161+50 TO ML1 STA 1163+00
307	TX-35	ML1 STA 1163+50 TO ML1 STA 1165+00
308	TX-36	ML1 STA 1165+50 TO ML1 STA 1167+00
309	TX-37	ML1 STA 1167+50 TO ML1 STA 1169+00
310	TX-38	ML1 STA 1169+50 TO ML1 STA 1171+00
311	TX-39	ML1 STA 1171+50 TO ML1 STA 1173+00
312	TX-40	ML1 STA 1173+50 TO ML1 STA 1175+00
313	TX-41	ML1 STA 1175+50 TO ML1 STA 1177+00
314	TX-43	ML1 STA 1177+50 TO ML1 STA 1179+00
315	TX-43	ML1 STA 1179+50 TO ML1 STA 1181+00
316	TX-44	ML1 STA 1181+50 TO ML1 STA 1182+00

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
MOTORIST INFORMATION/DETOUR		
	DPL-01	MOTORIST INFORMATION PLAN - STAGE 1C-PHASE 2B
	DPL-02	MOTORIST INFORMATION PLAN - STAGE 1C-PHASE 3
	DPL-03	MOTORIST INFORMATION PLAN - STAGE 2A-2F
	DPL-04	MOTORIST INFORMATION PLAN - STAGE 3A-3D, 4A-4B & 5A
	DPL-05	MOTORIST INFORMATION PLAN - STAGE 3D
	DPL-06	MOTORIST INFORMATION PLAN - STAGE 3E
	DPL-07	MOTORIST INFORMATION PLAN - STAGE 3F
	DPL-08	MOTORIST INFORMATION PLAN - STAGE 4C
	DPL-09	DETOUR PLAN - MULTI-USE TRAIL DETOUR
	DPL-10	MOTORIST INFORMATION PLAN - STAGE 1
STREET LIGHTING		
	SL-01	FULLERTON ROAD & SR-60 RAMPS
	SL-02	FULLERTON ROAD & GALE AVENUE
	SL-03	FULLERTON ROAD & SAN JOSE AVENUE
	SL-04	FULLERTON ROAD & EB SR-60 RAMPS
	SL-05	FULLERTON ROAD UPRR BRIDGE
	SL-06	FULLERTON ROAD PEDESTRIAN BRIDGE
	SL-07	RAILROAD STREET & FULLERTON ROAD
	SL-08	RAILROAD STREET & FULLERTON ROAD
PARKING LOT LIGHTING		
	PLL-01	CATHAY BANK PROPERTY
	PLL-02	LEE AND RO PROPERTY
	PLL-03	JACK IN THE BOX PROPERTY
TEMPORARY STREET LIGHTING		
	TSL-01	ROWLAND ST & LAWSON ST - STAGE 1A
	TSL-02	FULLERTON RD & SR-60 EB RAMPS - STAGE 1C PHASE 1
	TSL-03	FULLERTON RD & RAILROAD ST - STAGE 2A
	TSL-04	FULLERTON RD & GALE AVE - STAGE 3D PHASE 1
	TSL-05	FULLERTON RD & GALE AVE - STAGE 3F
	TSL-06	FULLERTON RD & ROWLAND ST STAGE 2C PHASE 1
	TSL-07	FULLERTON RD & ROWLAND ST STAGE 2C PHASE 2
TEMPORARY SIGNING AND STRIPING		
	PDPL-01	GALE AVENUE AT AZUSA AVENUE
	PDPL-02	NOGALES STREET AT SAN JOSE AVENUE
	PDPL-03	NOGALES STREET AT COLIMA ROAD
TRAFFIC SIGNALS		
	TS-01	FULLERTON ROAD & SR-60 EB ON/OFF-RAMPS
	TS-02	FULLERTON ROAD & SR-60 WB ON/OFF-RAMPS
	TS-03	FULLERTON ROAD & GALE AVENUE
	TS-04	FULLERTON ROAD & ROWLAND ST/SAN JOSE AVENUE
	TS-05	ROWLAND STREET & LAWSON STREET
TEMPORARY TRAFFIC SIGNALS		
	TTS-01	FULLERTON RD & SR-60 EB ON/OFF-RAMPS STAGE 1C
	TTS-02	RAILTOAD ST & FULLERTON RD STAGE 2A
	TTS-03	FULLERTON RD & SR-60 WB ON/OFF-RAMPS STAGE 3C PHASE 1
	TTS-04	FULLERTON RD & SR-60 WB ON/OFF-RAMPS STAGE 3C PHASE 2A
	TTS-05	FULLERTON RD & SR-60 WB ON/OFF-RAMPS STAGE 3C PHASE 2B
	TTS-06	GALE AVE & FULLERTON RD STAGE 3C
	TTS-07	GALE AVE & FULLERTON RD STAGE 3D PHASE 1
	TTS-08	GALE AVE & FULLERTON RD STAGE 3F
RAMP METERING		
	RM-01	FULLERTON ROAD & SR-6- ON/OFF RAMPS
SIGNAL INTERCONNECT		
	SIC-01	FULLERTON ROAD & SR-60 ON/OFF RAMPS

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REGISTERED PROFESSIONAL ENGINEER
ERIC REGUEIRO
78161
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
DRAWN BY: MLB DATE:
CHECKED BY: AT DATE:
UNDER THE SUPERVISION OF:
NAME ERIC REGUEIRO RCE # 78161 DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR - EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

DRAWING INDEX

CONTRACT No. | DWG G-03 | SHEET 003 OF -

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
STORM DRAIN IMPROVEMENT PLANS		
	D-01	TITLE SHEET
	D-02	SD GENERAL NOTES
	D-03	IPD 170 – STA 23+63.81 TO STA 29+71.89
	D-04	IPD 170 – STA 29+71.89 BC TO STA 37+09.89
	D-05	IPD 167 – STA 84+52.35 TO STA 90+99.68
	D-06	IPD 167 – STA 90+99.68 TO STA 96+94.29
	D-07	LINE A
	D-08	LINE A PROFILES
	D-09	LINE G
	D-10	LINE F
	D-11	DETAILS C1, E1 & F
	D-12	LINE J & B-4
	D-13	DRAINAGE DETAILS
	D-14	DETAILS F, G, & H
SURVEY CONTROL PLANS		
	CS-01	SURVEY CONTROL PLAN
EXISTING RIGHT OF WAY PLANS		
	RWE-01	EXISTING RIGHT OF WAY PLANS – SHEET 1
	RWE-02	EXISTING RIGHT OF WAY PLANS – SHEET 2
	RWE-03	EXISTING RIGHT OF WAY PLANS – SHEET 3
	RWE-04	EXISTING RIGHT OF WAY PLANS – SHEET 4
	RWE-05	EXISTING RIGHT OF WAY PLANS – SHEET 5
PROPOSED RIGHT OF WAY PLANS		
	RW-01	PROPOSED RIGHT OF WAY PLANS – SHEET 1
	RW-02	PROPOSED RIGHT OF WAY PLANS – SHEET 2
	RW-03	PROPOSED RIGHT OF WAY PLANS – SHEET 3
	RW-04	PROPOSED RIGHT OF WAY PLANS – SHEET 4
	RW-05	PROPOSED RIGHT OF WAY PLANS – SHEET 5
PUMP STATION SITE IMPROVEMENT PLANS		
	PS-01	PUMP STATION GENERAL SITE IMPROVEMENT PLAN
	PS-02	PUMP STATION SITE IMPROVEMENT PLAN
	PS-03	PUMP STATION SITE IMPROVEMENT SECTIONS
	PS-04	CIVIL DETAILS LINE E PROFILE STA 1+00 TO STA 1+07.51
	PS-05	LINE A – STA 1+00.00 TO STA 2+01.23
		LINE B – STA 1+00.00 TO STA 1+92.57
		LINE C – STA 1+00.00 TO STA 1+85.12
		LINE D – STA 1+00.00 TO STA 1+77.68
		LINE E – STA 1+00.00 TO STA 1+07.51
	PS-06	LINE C PROFILE – STA 1+00.00 TO STA 1+85.12
		LINE D PROFILE – STA 1+00.00 TO STA 1+77.68

DRAWING INDEX

SHT NO.	DWG NO.	DRAWING DESCRIPTION
	M-01	MECHANICAL SYMBOLS, ABBREVIATIONS, AND NOTES
	M-02	PUMP STATION PLAN
	M-03	PUMP STATION SECTIONS
	M-04	MECHANICAL DETAILS
	M-05	MECHANICAL DETAILS
	M-06	HVAC EQUIPMENT SCHEDULES
	M-07	HVAC PLANS – PUMP STATION
	M-08	HVAC DETAILS
	M-09	PLUMBING GENERAL NOTES, LEGEND & SYMBOLS
	M-10	PLUMBING PLAN – PUMP STATION
	E-01	STANDARD ELECTRICAL SYMBOLS & ABBREVIATIONS
	E-02	ELECTRICAL SITE PLAN
	E-03	SINGLE LINE DIAGRAM
	E-04	PUMP STATION POWER AND SIGNAL PLAN
	E-05	PUMP STATION LIGHTING AND RECEPTACLE PLAN
	E-06	WET WELL LIGHTING PLAN
	E-07	ELECTRICAL SCHEDULES
	E-08	ELECTRICAL DETAILS
	E-09	TYPICAL SSRV CONTROL DIAGRAM
	E-10	SUMP PUMP AND BUBBLER CONTROL DIAGRAMS
	E-11	INTRUSION ALARM AND FLOAT SWITCHES SCHEMATIC DIAGRAM
	E-12	COMMUNICATION SYSTEM ARCHITECTURE
	E-13	VENTILATION CONTROL DIAGRAMS
	I-1	INSTRUMENTATION LEGEND
	I-2	PROCESS PIPING & INSTRUMENTATION DIAGRAM
	I-3	ANNUNCIATOR WIRING DIAGRAM
	I-4	ANNUNCIATOR PLC SOFTWARE LOGIC DIAGRAM
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	GW-02	GROUNDWATER SUBMERSIBLE PUMP PLAN & SECTION
	GW-03	GROUNDWATER PIPELINE DETAILS

DRAWING INDEX

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	S-100	GENERAL PLAN
	S-101	GENERAL NOTES No. 1
	S-102	GENERAL NOTES No. 2
	S-103	CONSTRUCTION STAGING
	S-104	FOUNDATION PLAN
	S-105	ABUTMENT 1 PLAN AND ELEVATION
	S-106	ABUTMENT 3 PLAN AND ELEVATION
	S-107	ABUTMENT DETAILS No. 1
	S-108	ABUTMENT DETAILS No. 2
	S-109	ABUTMENT DETAILS No. 3
	S-110	BENT PLAN AND ELEVATION
	S-111	BENT DETAILS
	S-112	TYPICAL SECTION
	S-113	GIRDER LAYOUT
	S-114	GIRDER DETAILS No. 1
	S-115	GIRDER DETAILS No. 2
	S-116	BEARING DETAILS
	S-117	WALKWAY DETAILS
	S-118	WATERPROOFING DETAILS
	S-119	DECK DRAIN DETAILS
	S-120	ARCHITECTURAL DETAILS No. 1
	S-121	ARCHITECTURAL DETAILS No. 2
	S-122	ARCHITECTURAL DETAILS No. 3
	S-123	APPROACH SLAB DETAILS
	S-124	APPROACH SLAB DRAINAGE DETAILS
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	S-200	GENERAL PLAN
	S-201	GENERAL NOTES AND DECK CONTOURS
	S-202	FOUNDATION PLAN
	S-203	ABUTMENT 1 PLAN AND ELEVATION
	S-204	ABUTMENT 3 PLAN AND ELEVATION
	S-205	ABUTMENT DETAILS No. 1
	S-206	ABUTMENT DETAILS No. 2
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	S-208	BENT DETAILS No. 1
	S-209	BENT DETAILS No. 2
	S-210	TYPICAL SECTION
	S-211	GIRDER LAYOUT
	S-212	GIRDER DETAILS No. 1
	S-213	GIRDER DETAILS No. 2
	S-214	STRUCTURE APPROACH TYPE N(30S)
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	S-300	GENERAL PLAN
	S-301	GENERAL NOTES
	S-302	FOUNDATION PLAN
	S-303	ABUTMENT PLAN AND ELEVATION
	S-304	ABUTMENT DETAILS
	S-305	JOINT AND BEARING DETAILS
	S-306	MISCELLANEOUS DETAILS
FULLERTON ROAD UNDERCROSSING		
	S-310	SLOPE PAVING PLAN
	S-311	SLOPE PAVING DETAILS
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	S-400	RETAINING WALL KEY PLAN
	S-401	RETAINING WALL GENERAL NOTES
	S-402	RETAINING WALL No. 1 – GENERAL PLAN No. 1
	S-403	RETAINING WALL No. 1 – GENERAL PLAN No. 2
	S-404	RETAINING WALL No. 2 – GENERAL PLAN
	S-405	RETAINING WALL No. 3 – GENERAL PLAN
	S-406	RETAINING WALL No. 4 – GENERAL PLAN
	S-407	RETAINING WALL No. 5A – GENERAL PLAN
	S-408	RETAINING WALL No. 5B – GENERAL PLAN
	S-409	RETAINING WALL No. 5C – GENERAL PLAN
	S-410	RETAINING WALL No. 5D – GENERAL PLAN
	S-411	RETAINING WALL No. 6 – GENERAL PLAN
	S-412	RETAINING WALL No. 7 – GENERAL PLAN
	S-413	RETAINING WALL No. 8 – GENERAL PLAN

DRAWING INDEX

SHT. NO.	DWG NO.	DRAWING DESCRIPTION
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	S-430	TYPE 1 (MOD) RETAINING WALL DETAILS
	S-431	TYPE 5 (MOD) RETAINING WALL DETAILS
	S-432	TYPE 6A (MOD) RETAINING WALL DETAILS
	S-433	TYPE 7B (MOD) RETAINING WALL AND SLOUGH WALL DETAILS
	S-434	RETAINING WALL No. 2 & 6 DETAILS
	S-435	SOLDIER PILE WALL DETAILS No. 1
	S-436	SOLDIER PILE WALL DETAILS No. 2
	S-437	U-CHANNEL WALL DETAILS No. 1
	S-438	U-CHANNEL WALL DETAILS No. 2
	S-439	RETAINING WALL DRAINAGE DETAILS
	S-440	RETAINING WALL ARCHITECTURAL DETAILS
	S-441	RETAINING WALL FENCE AND RAILING DETAILS
	S-442	RETAINING WALL GLASS RAILING DETAILS
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	S-445	T-WALLS No. 1-5 NOMENCLATURE AND TYPICAL DETAILS NO. 1
	S-446	T-WALLS No. 1-5 NOMENCLATURE AND TYPICAL DETAILS NO. 2
	S-447	T-WALLS No. 1-5 GENERAL NOTES
	S-448	T-WALL No. 1 – GENERAL PLAN No. 1
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	S-450	T-WALL No. 1 – GENERAL PLAN No. 3
	S-451	T-WALL No. 1 – GENERAL PLAN No. 4
	S-452	T-WALL No. 1 – GENERAL PLAN No. 5
	S-453	T-WALL No. 1 – GENERAL PLAN No. 6
	S-454	T-WALL No. 1 – GENERAL PLAN No. 7
	S-455	T-WALL No. 1 – GENERAL PLAN No. 8
	S-456	T-WALL No. 2 – GENERAL PLAN No. 1
	S-457	T-WALL No. 2 – GENERAL PLAN No. 2
	S-458	T-WALL No. 2 – GENERAL PLAN No. 3
	S-459	T-WALL No. 2 – GENERAL PLAN No. 4
	S-460	T-WALL No. 2 – GENERAL PLAN No. 5
	S-461	T-WALL No. 2 – GENERAL PLAN No. 6
	S-462	T-WALL No. 2 – GENERAL PLAN No. 7
	S-463	T-WALL No. 2 – GENERAL PLAN No. 8
	S-464	T-WALL No. 2 – GENERAL PLAN No. 9
	S-465	T-WALL No. 2 – GENERAL PLAN No. 10
	S-466	T-WALL No. 2 – GENERAL PLAN No. 11
	S-467	T-WALL No. 2 – GENERAL PLAN No. 12
	S-468	T-WALL No. 2 – GENERAL PLAN No. 13
	S-469	T-WALL No. 2 – GENERAL PLAN No. 14
	S-470	T-WALL No. 2 – GENERAL PLAN No. 15
	S-471	T-WALL No. 2 – GENERAL PLAN No. 16
	S-472	T-WALL No. 3 – GENERAL PLAN No. 1
	S-473	T-WALL No. 3 – GENERAL PLAN No. 2
	S-474	T-WALL No. 3 – GENERAL PLAN No. 3
	S-475	T-WALL No. 3 – GENERAL PLAN No. 4
	S-476	T-WALL No. 3 – GENERAL PLAN No. 5
	S-477	T-WALL No. 3 – GENERAL PLAN No. 6
	S-478	T-WALL No. 3 – GENERAL PLAN No. 7
	S-479	T-WALL No. 4 – GENERAL PLAN No. 1
	S-480	T-WALL No. 4 – GENERAL PLAN No. 2
	S-481	T-WALL No. 4 – GENERAL PLAN No. 3
	S-482	T-WALL No. 4 – GENERAL PLAN No. 4
	S-483	T-WALL No. 4 – GENERAL PLAN No. 5
	S-484	T-WALL No. 4 – GENERAL PLAN No. 6
	S-485	T-WALL No. 4 – GENERAL PLAN No. 7
	S-486	T-WALL No. 4 – GENERAL PLAN No. 8
	S-487	T-WALL No. 4 – GENERAL PLAN No. 9
	S-488	T-WALL No. 4 – GENERAL PLAN No. 10
	S-489	T-WALL No. 5 – GENERAL PLAN No. 1
	S-490	T-WALL No. 5 – GENERAL PLAN No. 2
	S-491	T-WALL CONSTRUCTION STAGING NO. 1
	S-492	T-WALL CONSTRUCTION STAGING NO. 2
	S-493	T-WALLS NO. 1-5 – T-WALL DETAILS NO. 1
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DRAWING INDEX

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	S-501	TYPICAL PLANS
	S-502	TYPICAL SECTIONS
	S-503	STRUCTURAL PLAN AND SECTIONS
	S-504	STRUCTURAL SECTIONS
	S-505	GROUND FLOOR PLAN, SECTIONS AND DETAILS
	S-506	TYPICAL CONCRETE DETAILS
	S-507	PLATFORM PLAN AND DETAILS
	S-508	TRASH RACK DETAILS
	S-509	MISCELLANEOUS STEEL DETAILS
	S-510	PUMP HOUSE ELEVATIONS
	S-511	PUMP HOUSE ROOF FRAMING PLAN & STEEL DETAILS
	S-512	TYPICAL METAL DECK AND ROOF DETAILS
	S-513	TYPICAL MASONRY DETAILS
	S-514	ACCESS STAIR PLANS AND ELEVATION
	S-515	ACCESS STAIR DETAILS
	S-516	COVERED STORAGE AREA PLAN AND DETAILS
	S-517	PERIMETER CMU WALL PLAN AND DETAILS
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	S-600	STORM DRAIN STRUCTURAL DETAILS No. 1
	S-601	STORM DRAIN STRUCTURAL DETAILS No. 2
SEWER SIPHON JUNCTION STRUCTURE		
	S-610	GENERAL NOTES AND TYPICAL DETAILS
	S-611	JUNCTION STRUCTURE 1 DETAILS
	S-612	JUNCTION STRUCTURE 2 DETAILS
	S-613	JUNCTION STRUCTURE PRECAST CHANNEL DETAILS
	S-614	JUNCTION STRUCTURE MISCELLANEOUS DETAILS
	S-615	STOPLOG AND STOPLOG NOTCH DETAILS
	S-616	PLASTIC LINER DETAILS No. 1
	S-617	PLASTIC LINER DETAILS No. 2
	S-618	RAILROAD STREET OVERCROSSING AIRLINE DETAILS
	S-619	SPECIAL PROVISIONS
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	S-620	JUNCTION STRUCTURE DETAILS No. 1
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	S-631	DETAILS NO. 2
	S-632	DETAILS NO. 3
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	S-635	STRUCTURAL STAIR DETAILS No. 1
	S-636	STRUCTURAL STAIR DETAILS No. 2
	S-637	STRUCTURAL STAIR DETAILS No. 3
	S-638	STRUCTURAL STAIR DETAILS No. 4

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ERIC REGUEIRO
78161
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY:	DATE:
DRAWN BY:	DATE:
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME ERIC REGUEIRO RCE # 78161 DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

DRAWING INDEX

CONTRACT No. | DWG G-04 | SHEET 004 OF –

CONSTRUCTION NOTES:

(3) CONSTRUCT 0.95'JOINTED PLAIN CONCRETE PAVEMENT (JPCP) OVER 1.30'CLASS 2 AGGREGATE BASE (CL 2 AB) OVER 1.00'CLASS 2 AGGREGATE SUBBASE (CL 2 AS).

(4) CONSTRUCT CURB AND GUTTER PER CITY OF INDUSTRY STD PLAN 112, TYPE A2. CF=8" UNLESS OTHERWISE NOTED.

(8) CONSTRUCT PCC SIDEWALK PER CITY OF INDUSTRY STD PLAN 115.

(14) CONSTRUCT RETAINING WALL OR ABUTMENT, SEE STRUCTURAL PLANS.

(16) CONSTRUCT CHAIN LINK FENCE PER CALTRANS STD PLAN RSP A85. HEIGHT OF FENCE = 6'(UNLESS OTHERWISE SHOWN ON PLANS)

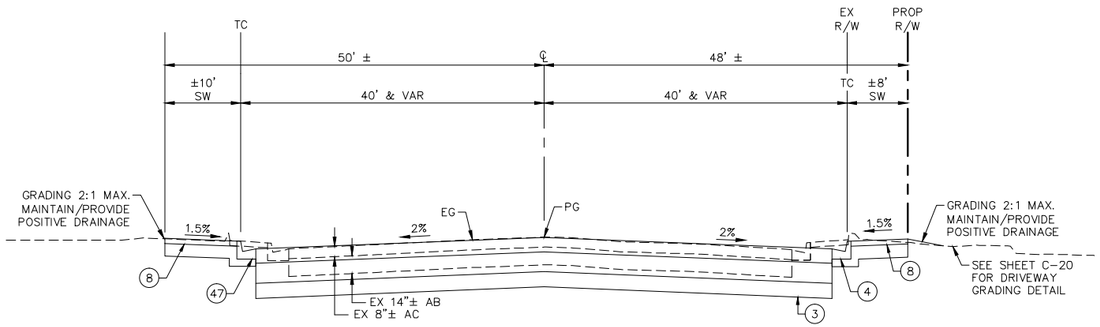
(32) SEE LANDSCAPE PLANS FOR DETAILS.

(38) CONSTRUCT SLOPE PAVING, SEE STRUCTURE PLANS.

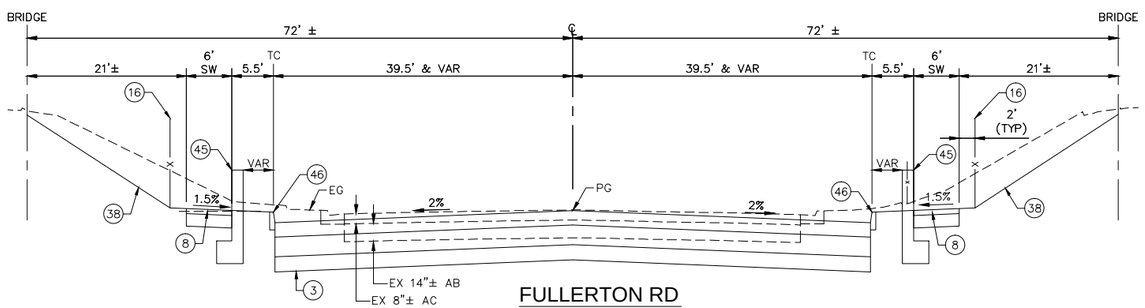
(45) CONSTRUCT CONCRETE BARRIER TYPE 60SD PER CALTRANS BRIDGE STANDARD DETAIL SHEET XS16-092-1 & XS16-092-2.

(46) CONSTRUCT CURB PER CALTRANS STD PLAN RSP A87A (07/19/13) TYPE A1-8.

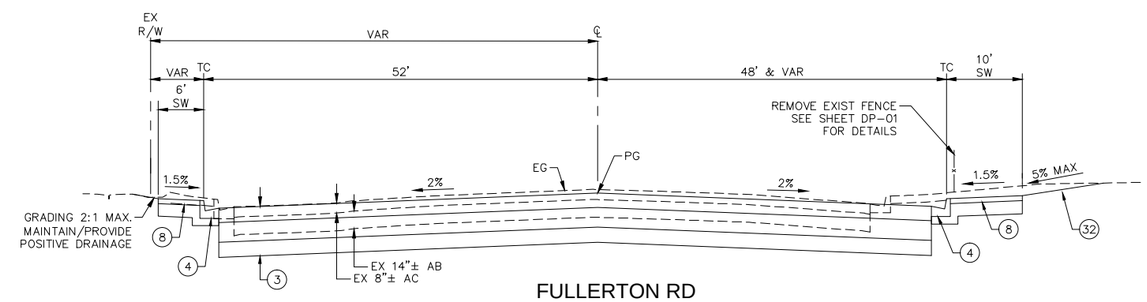
(47) CONSTRUCT CURB AND GUTTER PER CALTRANS STD PLAN RSP A87A (07/19/13) TYPE A2-8.



FULLERTON RD
STA 90+77.53 TO 93+83
NOT TO SCALE



FULLERTON RD
STA 94+50 TO 95+00, AND STA 97+00 TO 97+75
NOT TO SCALE



FULLERTON RD
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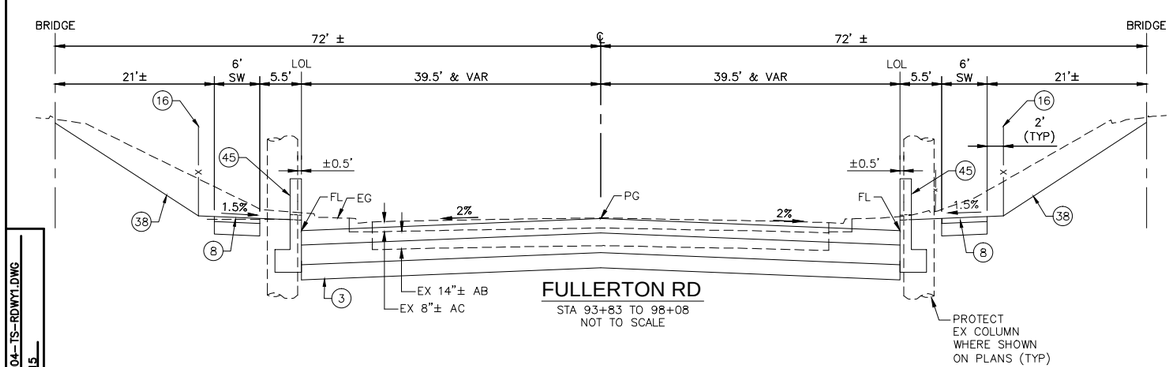
NOT TO SCALE



FULLERTON RD
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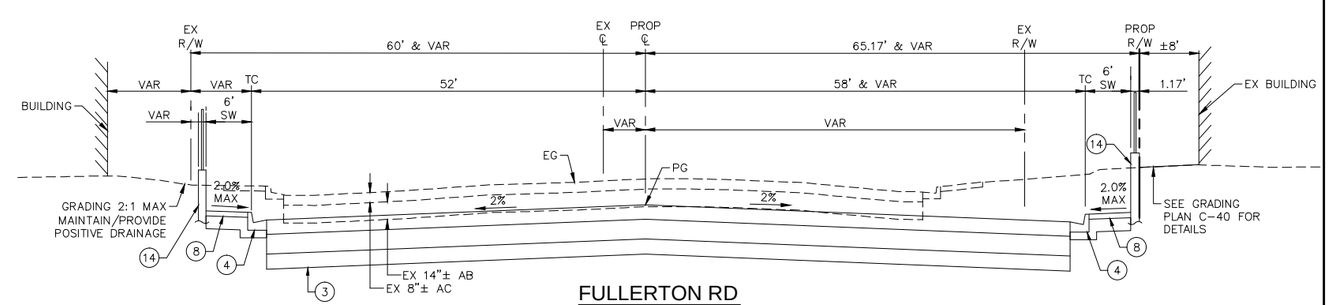
NOT TO SCALE



FULLERTON RD
STA 100+50 TO 103+50
NOT TO SCALE

100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-004-TS-RDWY1.DWG
TIME: 12:31:30 AM DATE: 7/22/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER ERIC REGUERO 78161 CIVIL STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER	DATE:
DRAWN BY: MLB	DATE:
CHECKED BY: FH	DATE:

UNDER THE SUPERVISION OF:

NAME ERIC REGUERO RCE # 78161 DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400 Orange, California 92868 714-550-4665

ALAMEDA CORRIDOR EAST ACE CONSTRUCTION AUTHORITY

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

TYPICAL SECTIONS
FULLERTON RD STA 90+77.53 TO STA 103+50

CONTRACT No. | DWG C-01 | SHEET 057 OF –

CONSTRUCTION NOTES:

(3) CONSTRUCT 0.95' JOINTED PLAIN CONCRETE PAVEMENT (JPCP) OVER 1.30' CLASS 2 AGGREGATE BASE (CL 2 AB) OVER 1.00' CLASS 2 AGGREGATE SUBBASE (CL 2 AS).

(4) CONSTRUCT CURB AND GUTTER PER CITY OF INDUSTRY STD PLAN 112, TYPE A2. CF=8" UNLESS OTHERWISE NOTED.

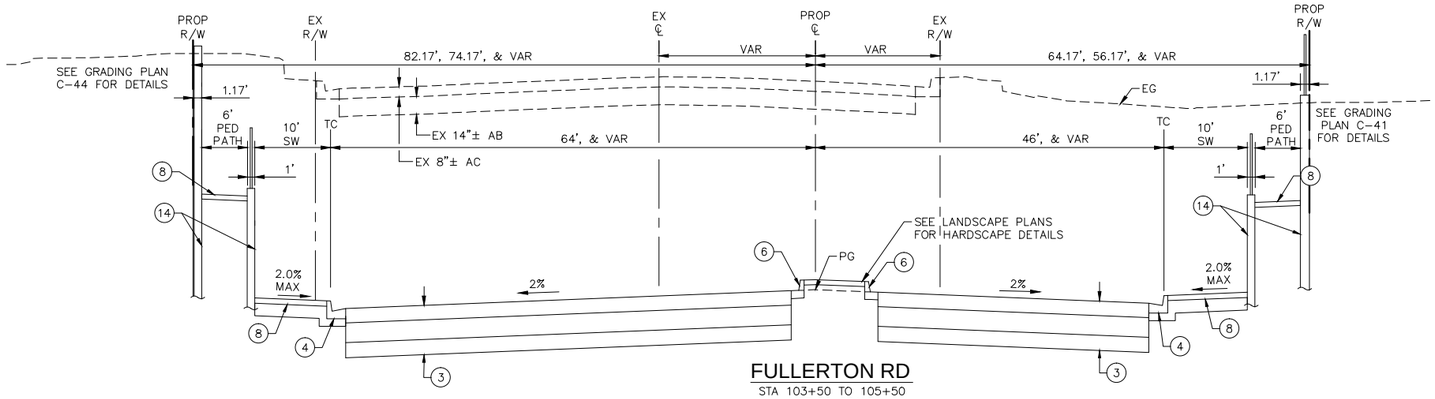
(6) CONSTRUCT 6" CURB AND GUTTER PER MODIFIED CITY OF INDUSTRY STD PLAN 112, TYPE A3. SEE DETAILS C-19.

(8) CONSTRUCT PCC SIDEWALK PER CITY OF INDUSTRY STD PLAN 115.

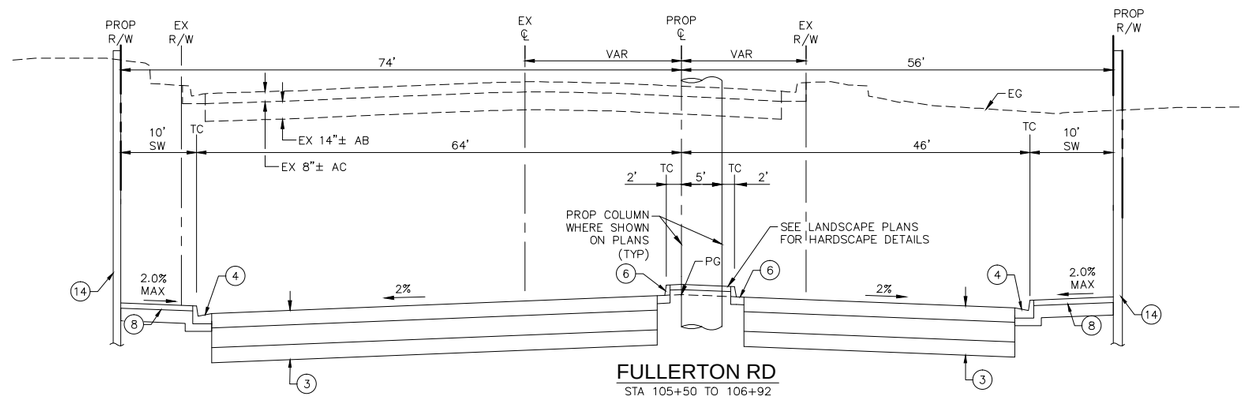
(13) CONSTRUCT VALLEY GUTTER PER CITY OF INDUSTRY STD 112, TYPE V.

(14) CONSTRUCT RETAINING WALL OR ABUTMENT, SEE STRUCTURAL PLANS.

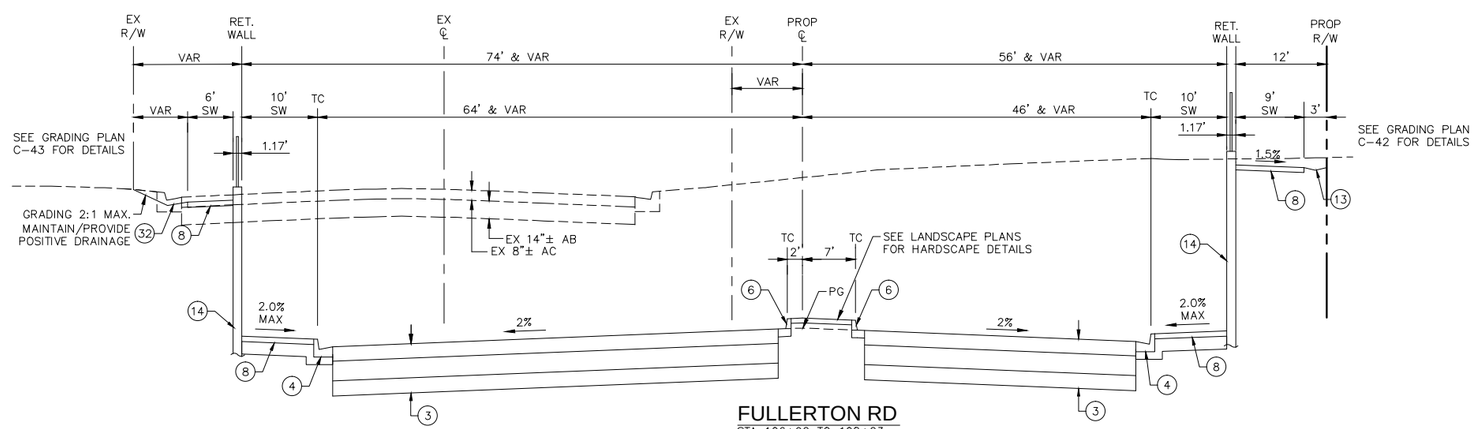
(32) SEE LANDSCAPE PLANS FOR DETAILS.



FULLERTON RD
STA 103+50 TO 105+50
NOT TO SCALE



FULLERTON RD
STA 105+50 TO 106+92
NOT TO SCALE



FULLERTON RD
STA 106+92 TO 108+23
NOT TO SCALE

100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-004-TS-RDWY2.DWG
TIME: 12:31:47 AM DATE: 7/22/2015

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REGISTERED PROFESSIONAL ENGINEER
ERIC REGUEIRO
78161
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
DRAWN BY: MLB DATE:
CHECKED BY: FH DATE:
UNDER THE SUPERVISION OF:
NAME ERIC REGUEIRO RCE # 78161 DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

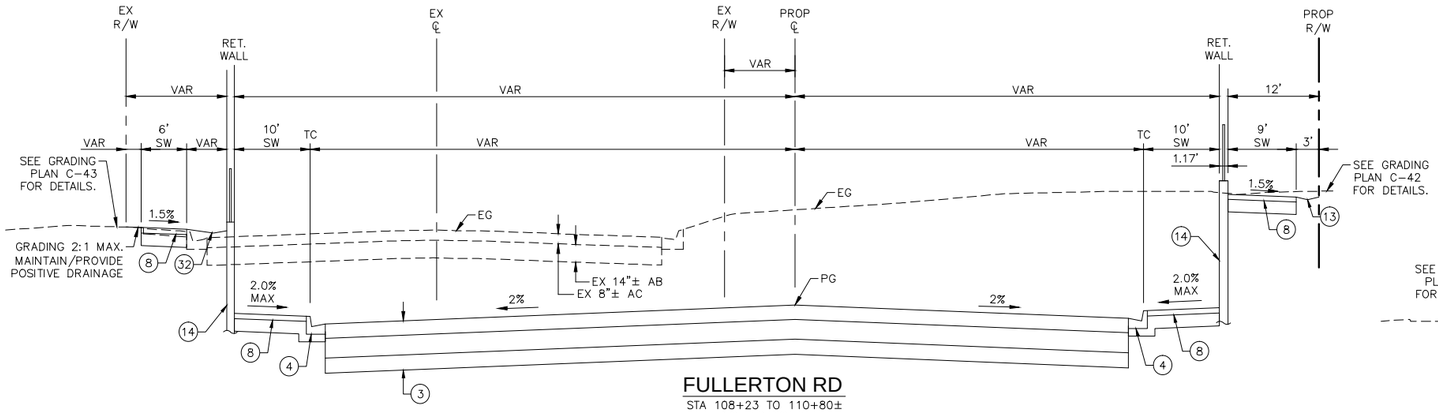
ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

TYPICAL SECTIONS
FULLERTON RD STA 103+50 TO STA 108+23

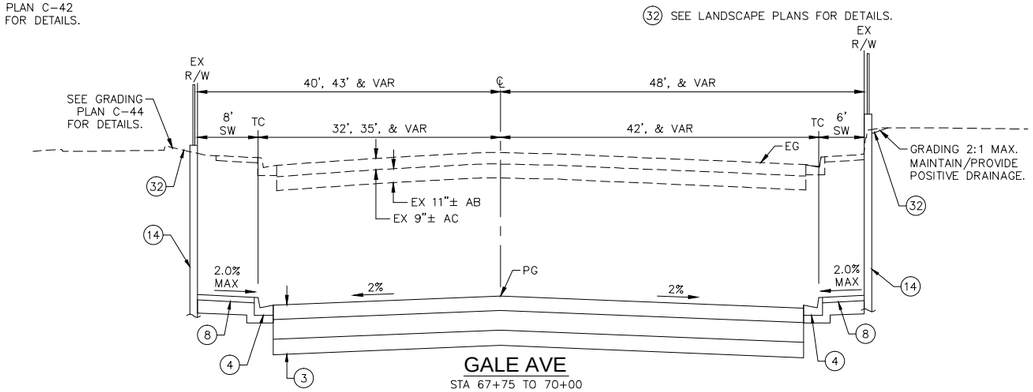
CONTRACT No. | DWG C-02 | SHEET 058 OF –

CONSTRUCTION NOTES:

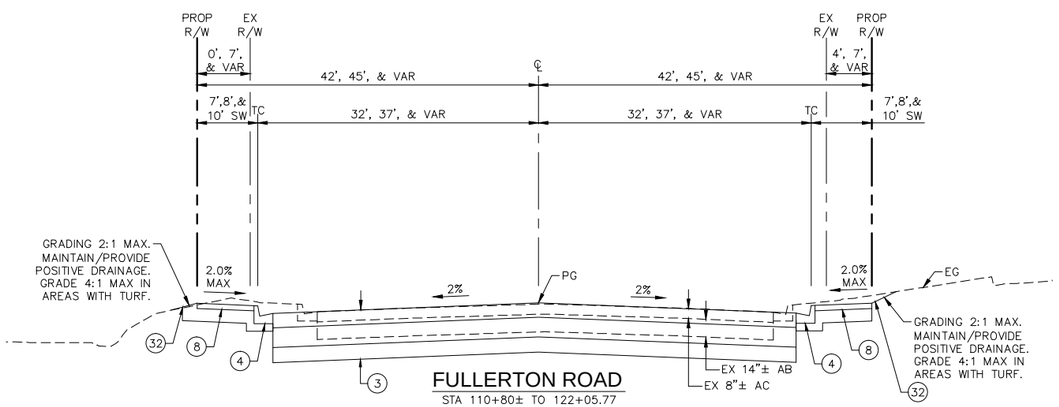
1. CONSTRUCT 0.20'RUBBERIZED HOT MIX ASPHALT–TYPE G (RHMA–G) OVER 0.35' HOT MIX ASPHALT –TYPE A (HMA–A) OVER 0.90'CLASS 2 AGGREGATE BASE (CL2 AB) OVER 2.25'CLASS 2 AGGREGATE SUBBASE (CL2 ASB).
3. CONSTRUCT 0.95'JOINTED PLAIN CONCRETE PAVEMENT (JPCP) OVER 1.30'CLASS 2 AGGREGATE BASE (CL 2 AB) OVER 1.00'CLASS 2 AGGREGATE SUBBASE (CL 2 AS).
4. CONSTRUCT CURB AND GUTTER PER CITY OF INDUSTRY STD PLAN 112, TYPE A2. CF=8" UNLESS OTHERWISE NOTED.
8. CONSTRUCT PCC SIDEWALK PER CITY OF INDUSTRY STD PLAN 115.
13. CONSTRUCT VALLEY GUTTER PER CITY OF INDUSTRY STD 112, TYPE V.
14. CONSTRUCT RETAINING WALL OR ABUTMENT, SEE STRUCTURAL PLANS.
32. SEE LANDSCAPE PLANS FOR DETAILS.



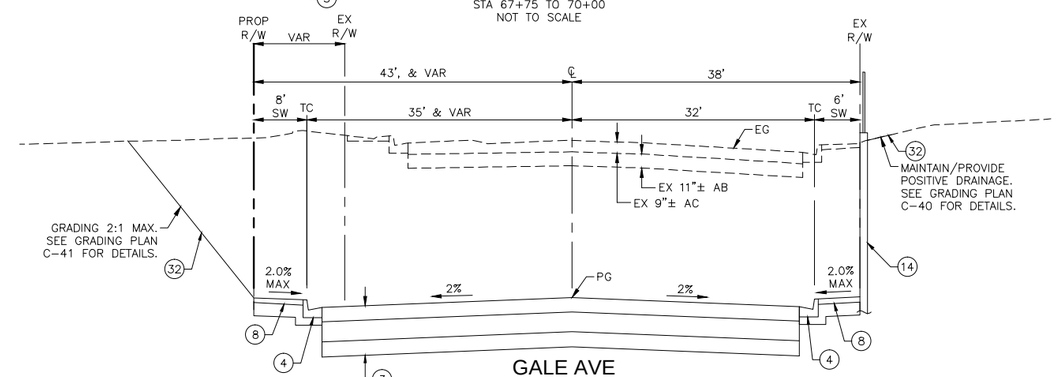
FULLERTON RD
STA 108+23 TO 110+80±
NOT TO SCALE



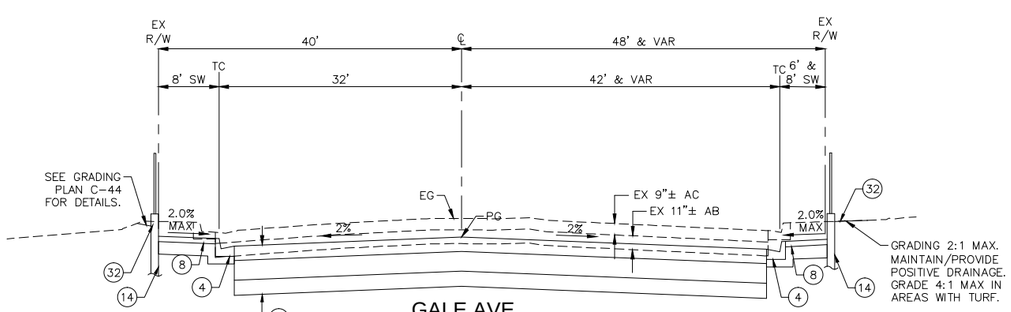
GALE AVE
STA 67+75 TO 70+00
NOT TO SCALE



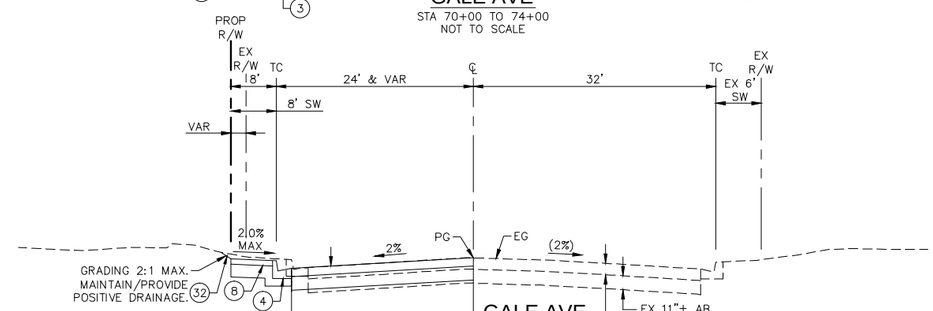
FULLERTON ROAD
STA 110+80± TO 122+05.77
NOT TO SCALE



GALE AVE
STA 70+00 TO 74+00
NOT TO SCALE



GALE AVE
STA 66+16.68 TO 67+75
NOT TO SCALE



GALE AVE
STA 74+00 TO 77+07.88
NOT TO SCALE

100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-004-TS-RDWY3.DWG
TIME: 12:32:03 AM DATE: 7/22/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER ERIC REGUEIRO 78161 CIVIL STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
DRAWN BY: MLB DATE:
CHECKED BY: FH DATE:
UNDER THE SUPERVISION OF:
NAME ERIC REGUEIRO RCE # 78161 DATE: 07/22/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BM R-3 ELEVATION 430.455' NGVD29
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BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
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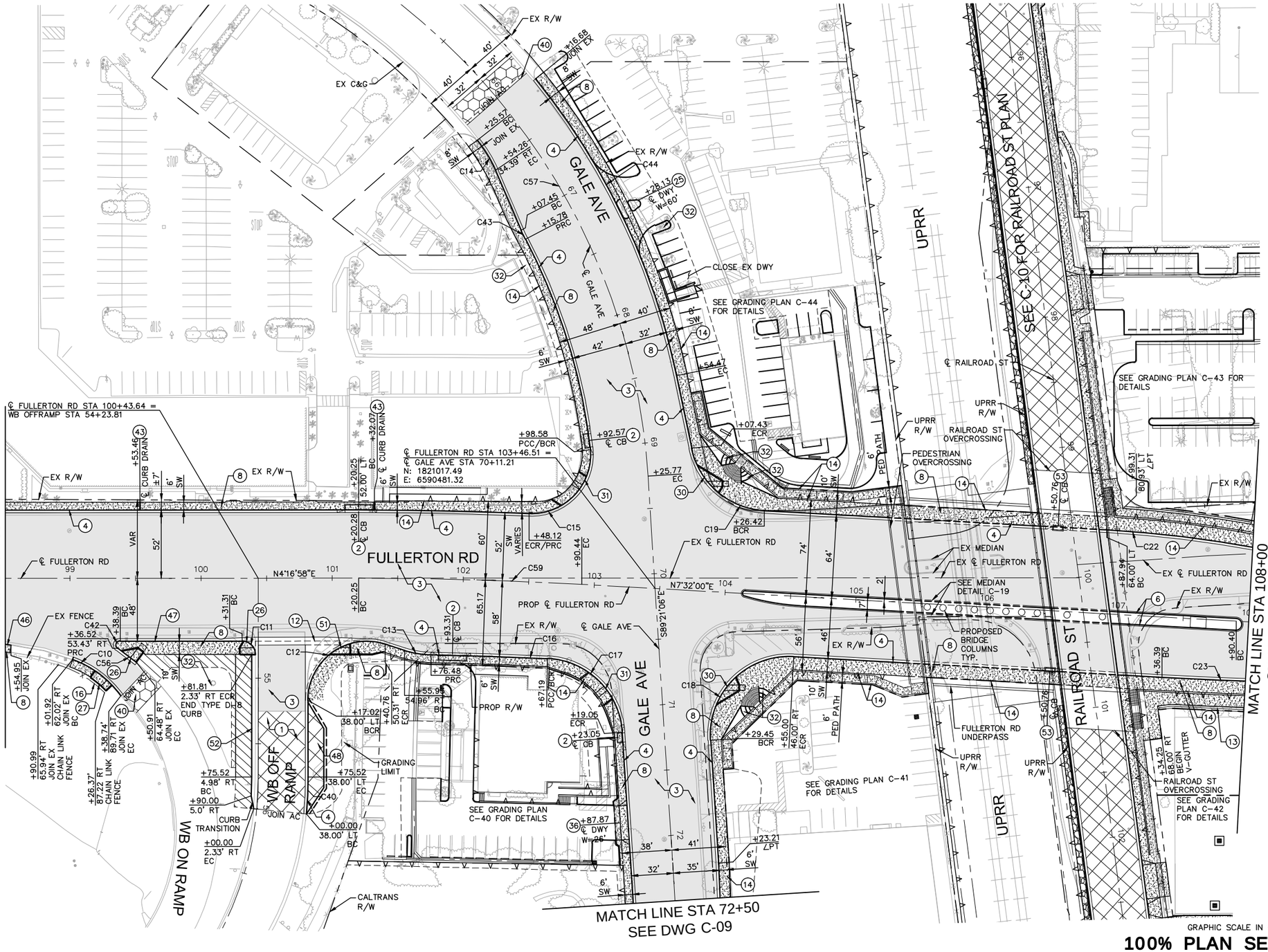
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

TYPICAL SECTIONS FULLERTON RD AND GALE AVE

CONTRACT No. | DWG C-03 | SHEET 059 OF –



LEGEND:

- CONSTRUCT HMA PAVEMENT
- CONSTRUCT HARDSCAPE
- CONSTRUCT PCC SIDEWALK
- CONSTRUCT AC OVERLAY
- CONSTRUCT PCC PAVEMENT

CONSTRUCTION NOTES:

1. CONSTRUCT 0.20'RUBBERIZED HOT MIX ASPHALT–TYPE G (RHMA–G) OVER 0.35' HOT MIX ASPHALT –TYPE A (HMA–A) OVER 0.90'CLASS 2 AGGREGATE BASE (CL2 AB) OVER 2.25'CLASS 2 AGGREGATE SUBBASE (CL2 ASB).
2. CONSTRUCT LOCAL DEPRESSION PER CITY OF INDUSTRY STD PLAN 212 CASE 1. CONSTRUCT CATCH BASIN PER DRAINAGE PLAN.
3. CONSTRUCT 0.95'JOINTED PLAIN CONCRETE PAVEMENT (JPCP) OVER 1.30'CLASS 2 AGGREGATE BASE (CL 2 AB) OVER 1.00'CLASS 2 AGGREGATE SUBBASE (CL 2 AS).
4. CONSTRUCT CURB AND GUTTER PER CITY OF INDUSTRY STD PLAN 112, TYPE A2. CF=8" UNLESS OTHERWISE NOTED.
6. CONSTRUCT 6" CURB AND GUTTER PER MODIFIED CITY OF INDUSTRY STD PLAN 112, TYPE A3. SEE DETAILS C–19.
8. CONSTRUCT PCC SIDEWALK PER CITY OF INDUSTRY STD PLAN 115.
12. CONSTRUCT CROSS GUTTER PER MODIFIED CITY OF INDUSTRY STD PLAN 113; 0.95' PCC OVER 1.30' (CL 2 AB) OVER 1.00' (CL 2 AB).
13. CONSTRUCT VALLEY GUTTER PER CITY OF INDUSTRY STD 112, TYPE V.
14. CONSTRUCT RETAINING WALL OR ABUTMENT, SEE STRUCTURAL PLANS.
16. CONSTRUCT CHAIN LINK FENCE PER CALTRANS STD PLAN RSP A85. HEIGHT OF FENCE = 6'(UNLESS OTHERWISE SHOWN ON PLANS)
25. CONSTRUCT MODIFIED DRIVEWAY APPROACH TYPE C PER SPPWC 110–2. W PER PLAN. SEE DRIVEWAY GRADING SHEETS FOR DETAILS.
26. CONSTRUCT CURB RAMP PER CALTRANS STD PLAN RSP A88A (03/21/14) CASE G. SEE CURB RAMP DETAILS.
27. CONSTRUCT CURB RAMP PER CALTRANS STD PLAN RSP A88A (03/21/14) CASE C. SEE CURB RAMP DETAILS.
30. CONSTRUCT CURB RAMP PER SPPWC STD 111–5, CASE C.
31. CONSTRUCT CURB RAMP PER SPPWC STD 111–5, CASE B TYPE 1.
32. SEE LANDSCAPE PLANS FOR DETAILS.
36. CONSTRUCT MODIFIED DRIVEWAY APPROACH TYPE B PER SPPWC 110–2. W PER PLAN. SEE CONSTRUCTION DETAILS SHEET C–22.
40. CONSTRUCT HMA PAVEMENT PER LONGITUDINAL JOIN TRANSITION DETAIL, SEE SHEET C–22.
43. CONSTRUCT CURB DRAIN PER CITY OF INDUSTRY STD 214.
46. CONSTRUCT CURB PER CALTRANS STD PLAN RSP A87A (07/19/13) TYPE A1–8.
47. CONSTRUCT CURB AND GUTTER PER CALTRANS STD PLAN RSP A87A (07/19/13) TYPE A2–8.
48. CONSTRUCT MAINTENANCE VEHICLE PULLOUT PER CALTRANS STD PLAN RSP H9A.
51. CONSTRUCT CURB RAMP PER CALTRANS STD PLAN RSP A88A (03/21/14) CASE B.
52. CONSTRUCT CURB AND GUTTER TYPE D–8 PER CONSTRUCTION DETAIL SHEET C–21.
53. CONSTRUCT LOCAL DEPRESSION PER CITY OF INDUSTRY STD PLAN 212 CASE 2. CONSTRUCT CATCH BASIN PER DRAINAGE PLAN.

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA
C10	76.50'	46.79'	35°02'48"
C11	10.00'	15.71'	90°00'00"
C12	45.00'	84.69'	107°49'26"
C13	70.00'	20.46'	16°45'00"
C14	100.00'	26.96'	15°26'47"
C15	45.00'	77.88'	99°09'33"
C16	2942.00'	88.96'	1°43'57"
C17	60.00'	87.50'	83°33'33"
C18	60.00'	101.46'	96°53'06"
C19	60.00'	78.52'	74°58'48"

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA
C23	3044.00'	274.12'	5°09'35"
C39	253.67'	24.26'	5°28'44"
C40	292.00'	28.11'	5°30'59"
C42	3.00'	7.54'	144°01'44"
C43	100.00'	7.65'	4°22'60"
C44	532.00'	253.02'	27°15'00"
C56	340.08'	18.15'	3°03'28"
C57	499.79'	518.54'	59°26'43"
C59	3000.00'	170.19'	3°15'02"

100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER ERIC REGUEIRO 78161 CIVIL STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
DRAWN BY: MLB DATE:
CHECKED BY: AT DATE:
UNDER THE SUPERVISION OF:
NAME ERIC REGUEIRO RCE # 78161 DATE: 08/11/15

BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714–550–4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

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PROJECT MANAGER		

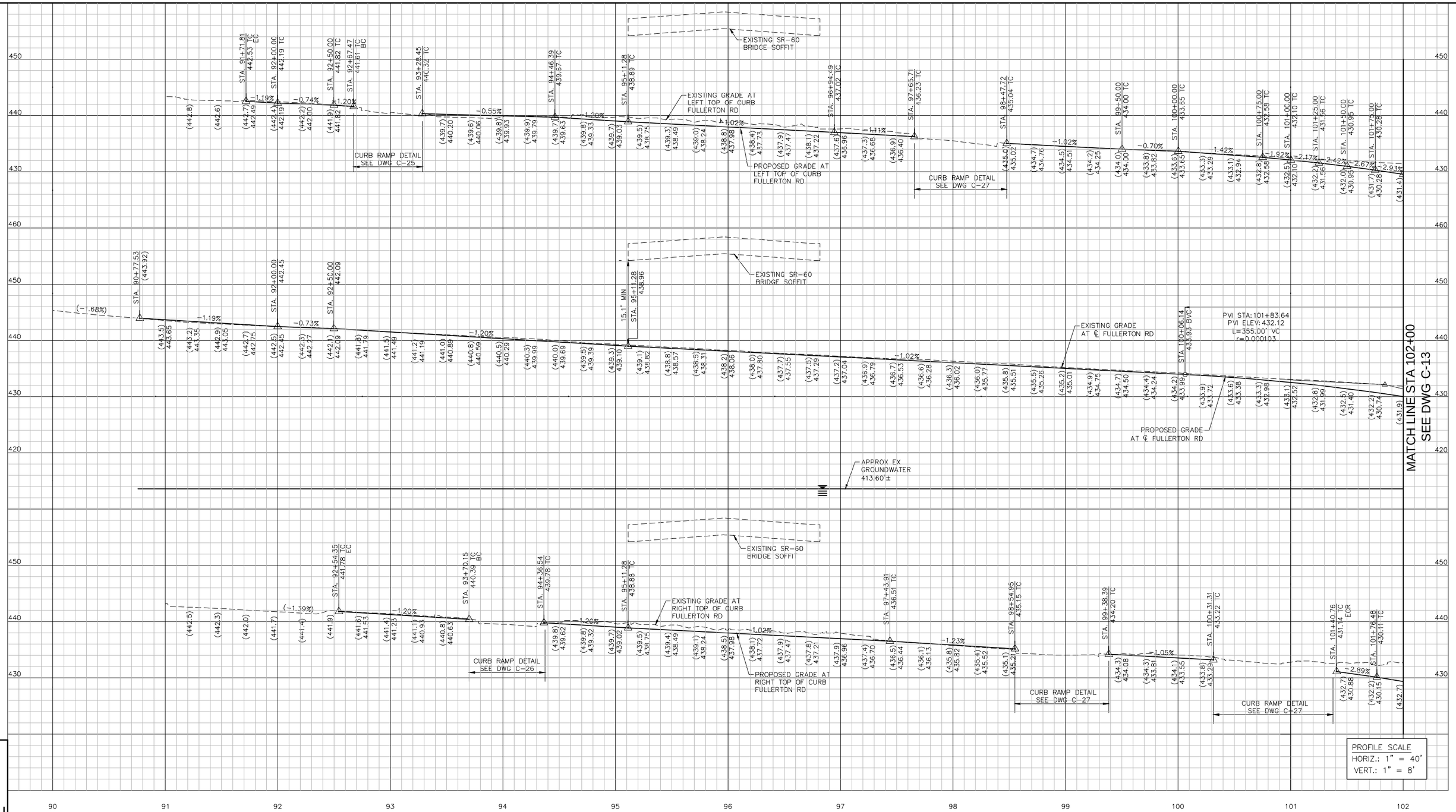
APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

ROADWAY PLAN
FULLERTON RD STA 98+50 TO STA 108+00

CONTRACT No. DWG C–06 SHEET 62 OF –

CADD PROJECT FILE NAME: P-207-014-C-RDWY2.DWG
TIME: 6:00:18 PM DATE: 8/19/2015



100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-014-C-RDWY8.DWG
TIME: 6:10:33 PM DATE: 8/19/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER ERIC REGUEIRO 78161 CIVIL STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
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CHECKED BY: FH DATE:
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NAME ERIC REGUEIRO RCE # 78161 DATE: 08/11/15

BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS
BCA
600 So. Main St, Suite 900 Orange, California 92868 714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

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APPROVALS

DIVISION	BY	DATE
DESIGN		
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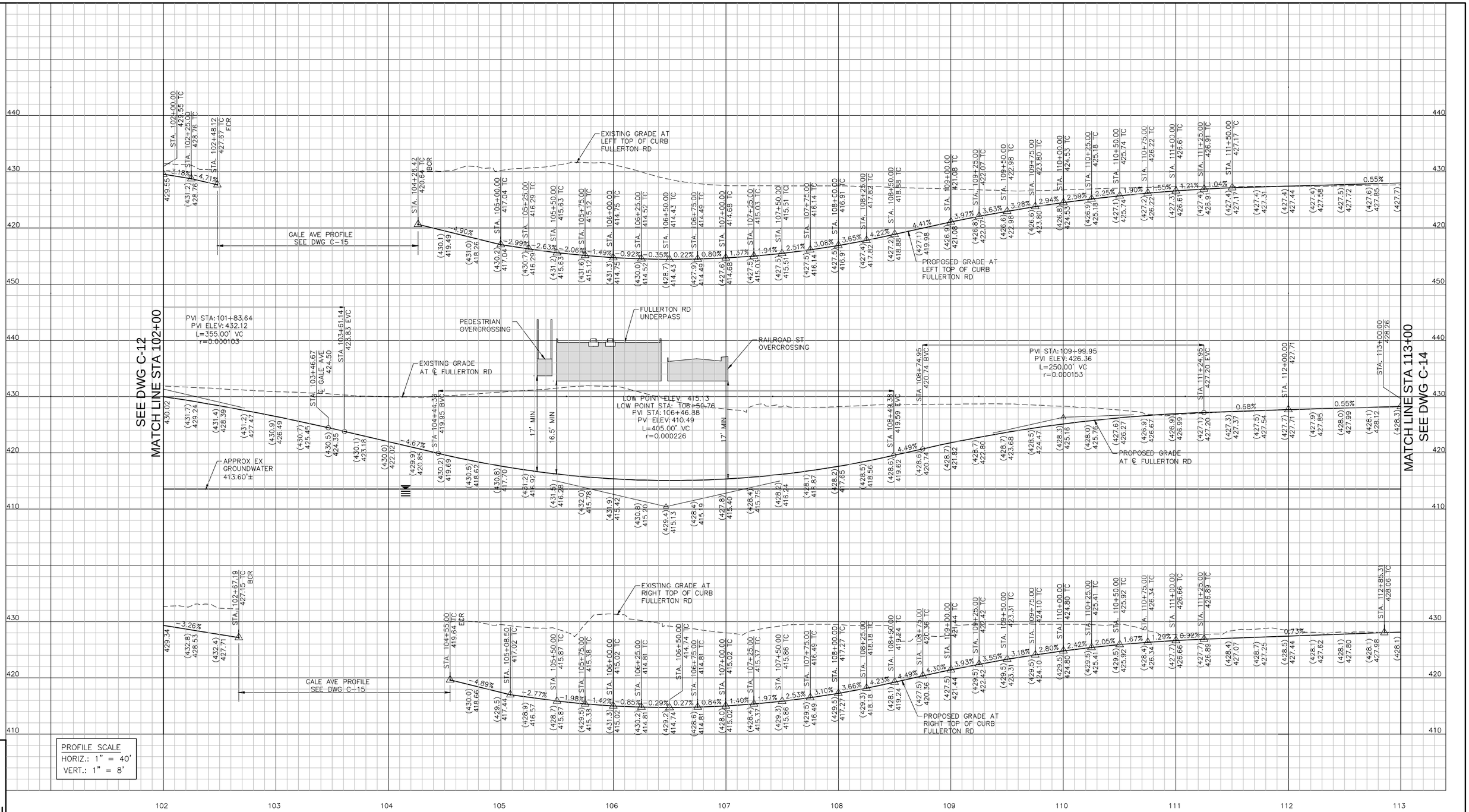
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

ROADWAY PROFILES
FULLERTON RD STA 90+77.53 TO STA 102+00

CONTRACT No. | DWG C-12 | SHEET 68 OF –



100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-014-C-RDWY9.DWG
TIME: 6:11:11 PM DATE: 8/19/2015

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REGISTERED PROFESSIONAL ENGINEER
ERIC REGUEIRO
78161
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
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BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
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ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY
ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT 1-026 AND 1-025 N04°23'04"E

APPROVALS

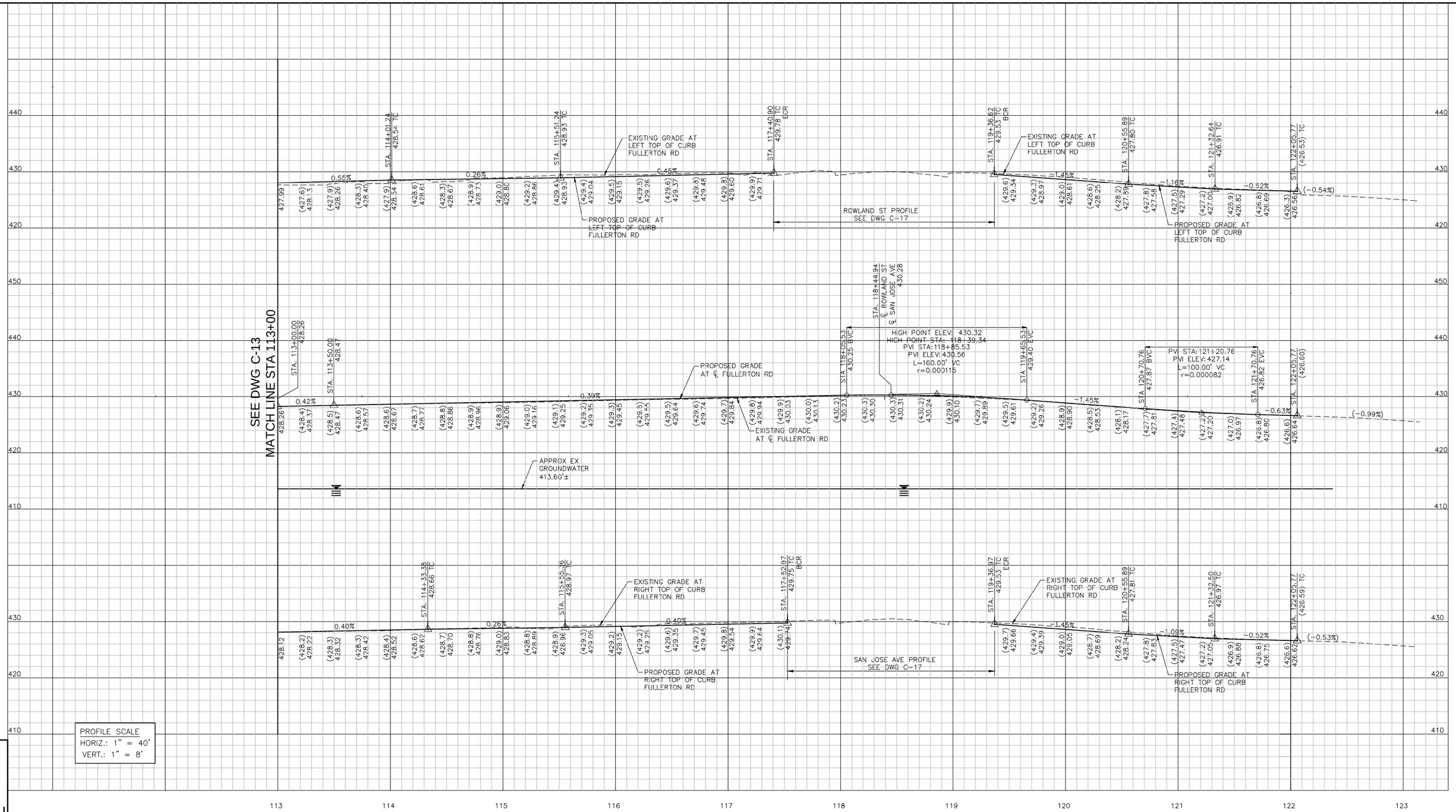
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

ROADWAY PROFILES
FULLERTON RD STA 102+00 TO STA 113+00

CONTRACT No. | DWG C-13 | SHEET 69 OF –



100% PLAN SET - NOT FOR CONSTRUCTION 8/21/15

CADD PROJECT FILE NAME: P-207-014-C-RDWY10.DWG
TIME: 6:11:50 PM DATE: 8/19/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER ERIC REGUEIRO 78161 CIVIL STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: ER DATE:
DRAWN BY: MLB DATE:
CHECKED BY: FH DATE:
UNDER THE SUPERVISION OF:
NAME ERIC REGUEIRO RCE # 78161 DATE: 08/11/15

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
600 So. Main St, Suite 900
Orange, California 92868
714-550-4665

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BASIS OF BEARING:
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APPROVALS

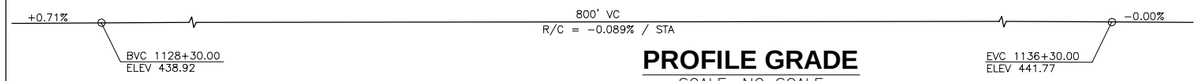
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

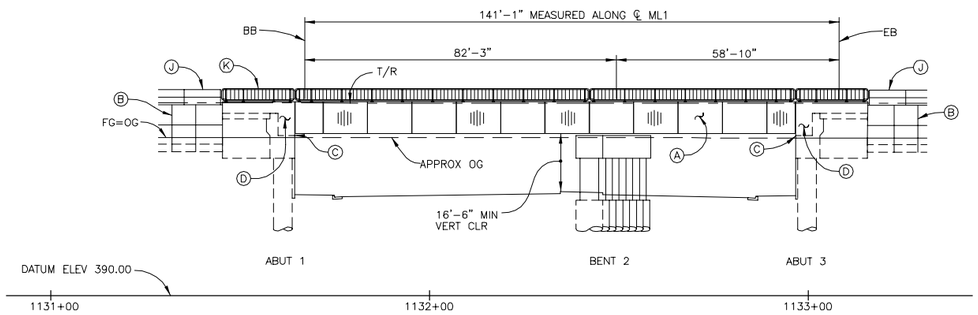
ROADWAY PROFILES
FULLERTON RD STA 113+00 TO STA 122+05.77

CONTRACT No. | DWG C-14 | SHEET 70 OF –



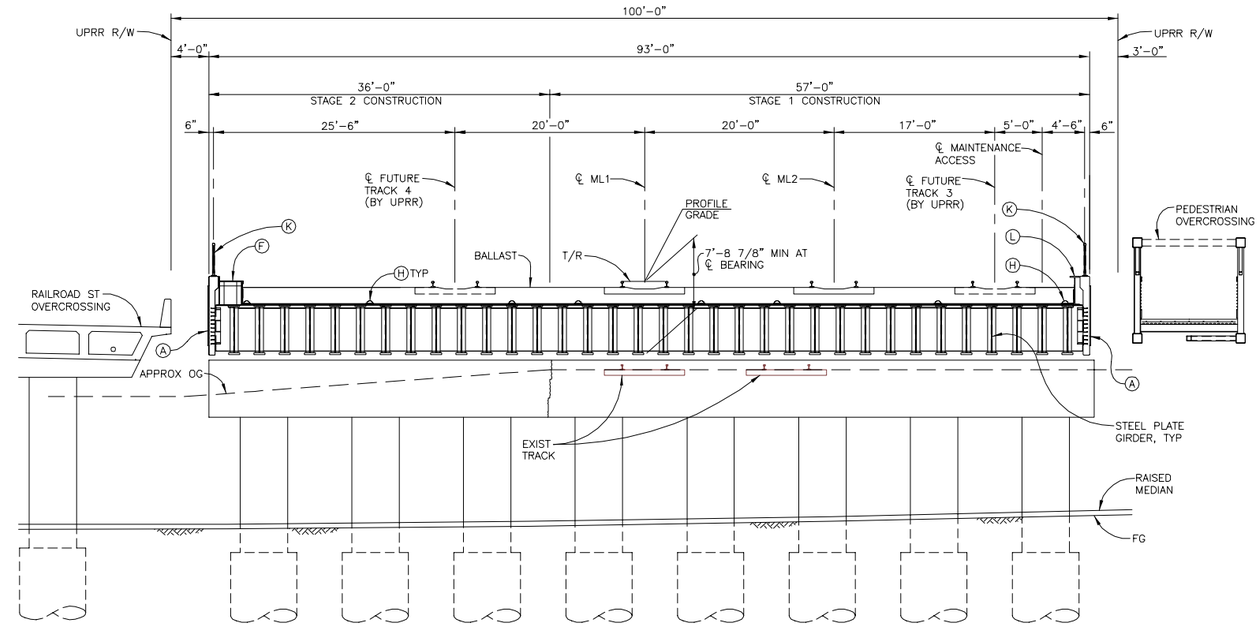
PROFILE GRADE

SCALE: NO SCALE



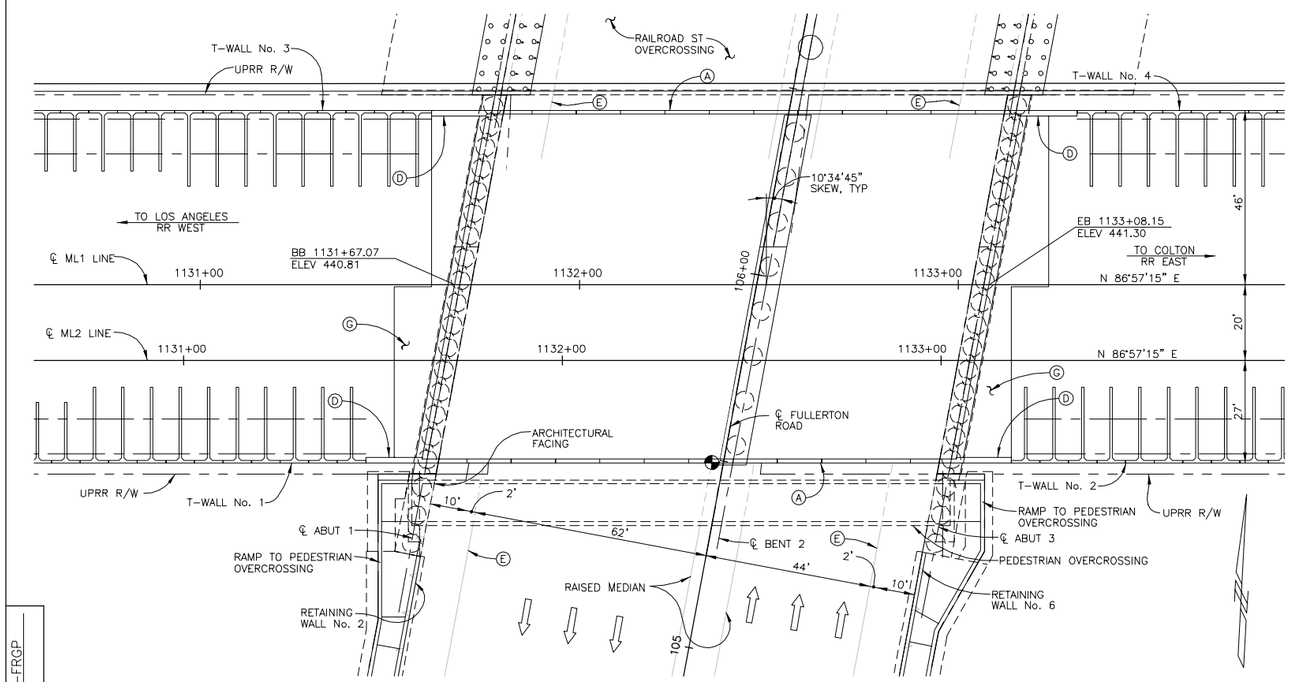
ELEVATION

SCALE: 1" = 20'



TYPICAL SECTION

SCALE: 1/8" = 1'-0"



PLAN

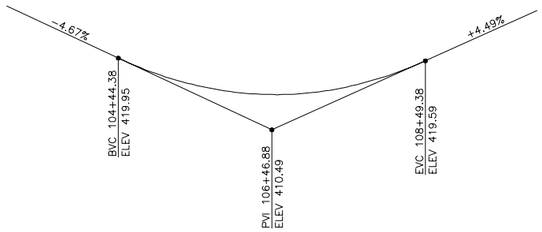
SCALE: 1" = 20'

LEGEND:

- Ⓐ PRECAST FACADE PANELS
- Ⓑ RAILROAD RETAINING WALL, SEE "RAILROAD RETAINING WALL" SHEETS
- Ⓒ LIGHTING, SEE "LIGHTING PLANS"
- Ⓓ WINGWALL
- Ⓔ CURB AND GUTTER, SEE "ROAD PLANS"
- Ⓕ WALKWAY
- Ⓖ APPROACH SLAB
- Ⓗ DECK DRAIN
- Ⓙ CABLE RAILING, SEE "T-WALL" SHEETS
- Ⓚ UPRR HAND RAILING
- Ⓛ STEEL CURB
- POINT OF MINIMUM VERTICAL CLEARANCE
- TRAFFIC LANE OR DIRECTION

NOTES:

1. FOR STAGED CONSTRUCTION, SEE "CONSTRUCTION STAGING" PLANS
2. FOR "PILE DATA" SEE "FOUNDATION PLAN" SHEET
3. MIN 13" BALLAST SHALL BE PLACED WITHIN THE LIMITS OF WATERPROOFING ON THE BRIDGE AS DIRECTED BY THE ENGINEER
4. 8'-0 5/8" STRUCTURE DEPTH USED FOR VERTICAL CLEARANCE CALCULATION
5. FOR "INDEX TO PLANS" AND "2010 CALTRANS STANDARD PLANS" SEE "GENERAL NOTES No. 1" SHEET.



FULLERTON ROAD PROFILE

NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL

1-800-227-2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp.12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA
DESIGNED BY: EJP DATE: 05/15/14
DRAWN BY: TEH DATE: 05/15/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

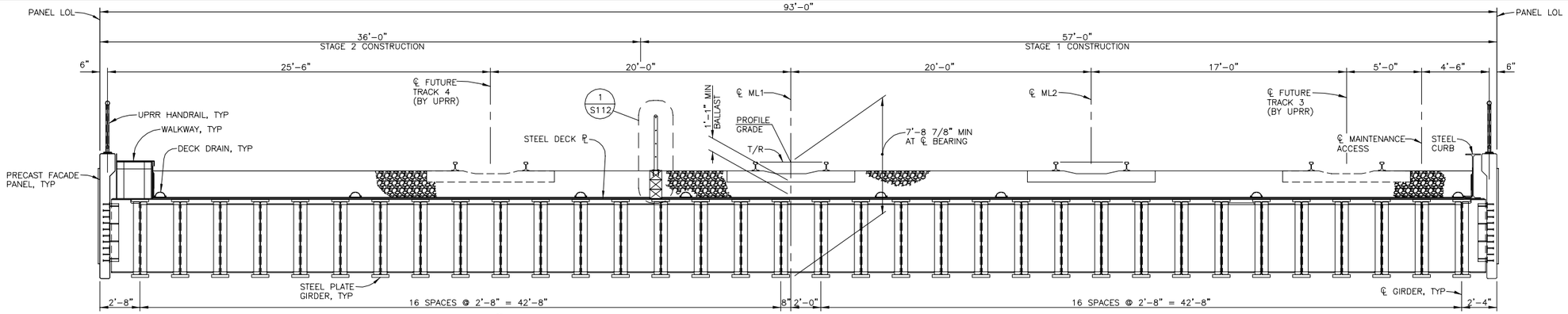
MP 21.43 LOS ANGELES SUBDIVISION

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

FULLERTON ROAD UNDERPASS
GENERAL PLAN

CONTRACT No. | DWG S-100 | SHEET OF

CADD PROJECT FILE NAME: P-207-100-S-FRGP
TIME: 3:14pm DATE: 8/12/2015

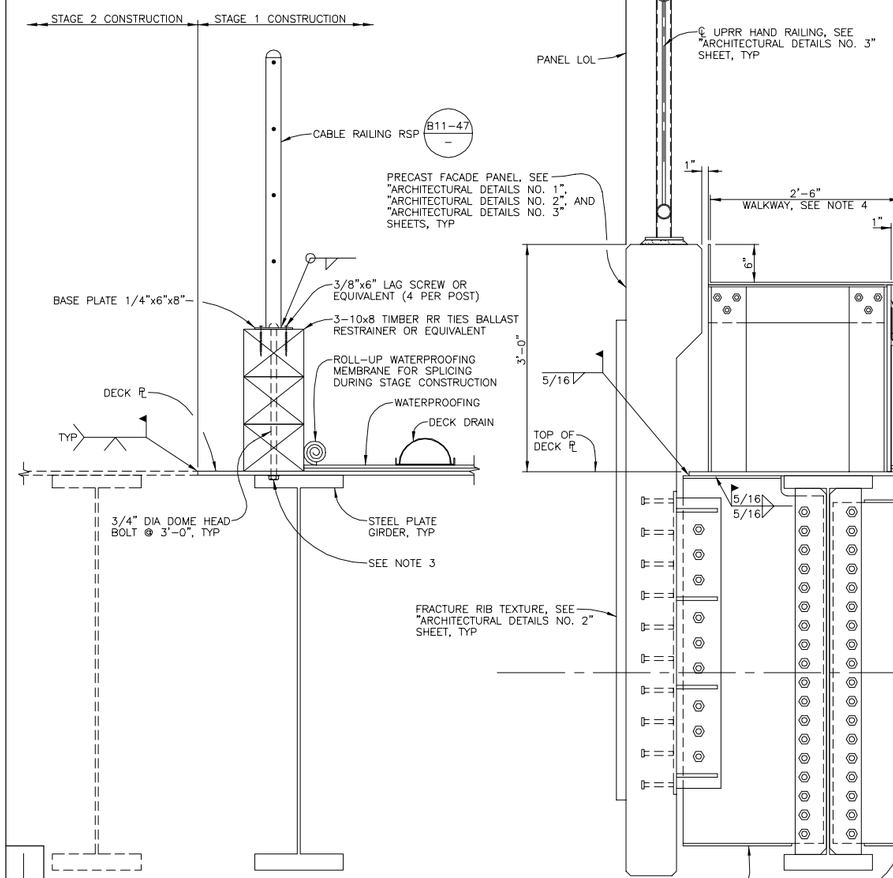


TYPICAL SECTION

SCALE: 1/4" = 1'-0"

NOTES:

1. ALL DIMENSIONS ARE MEASURED NORMAL TO ℄ ML1.
2. FOR WATERPROOFING AND FLASHING DETAILS, SEE "WATERPROOFING DETAILS" SHEET.
3. SEAL HOLE WITH PLUG WELD PRIOR TO APPLYING WATERPROOFING.
4. FOR WALKWAY DETAILS, SEE "WALKWAY DETAILS" SHEET.
5. FOR DECK PL SPLICE DETAIL, SEE "GIRDER DETAILS No. 2" SHEET.

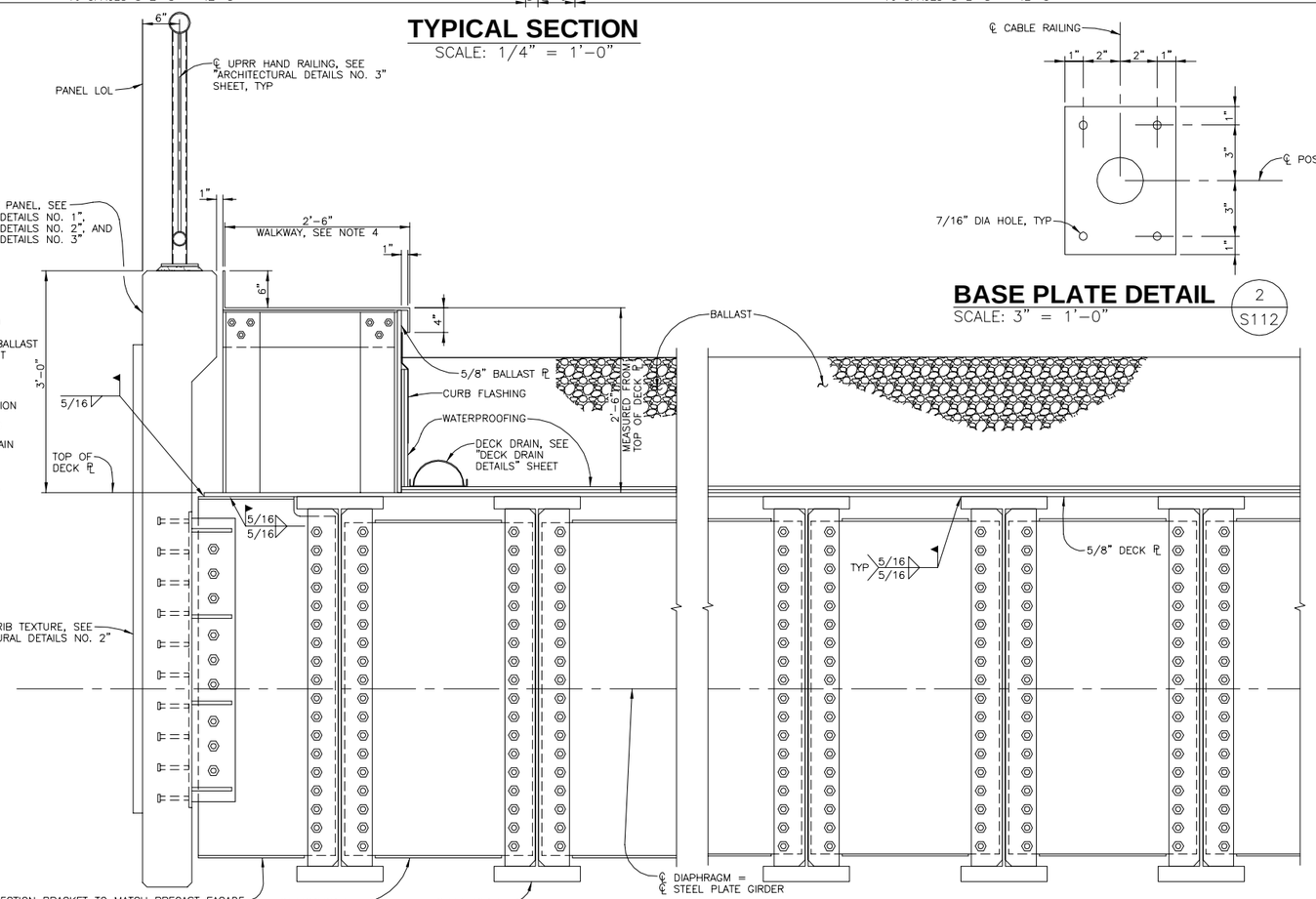


DETAIL

SCALE: 1" = 1'-0"

1 S112

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL



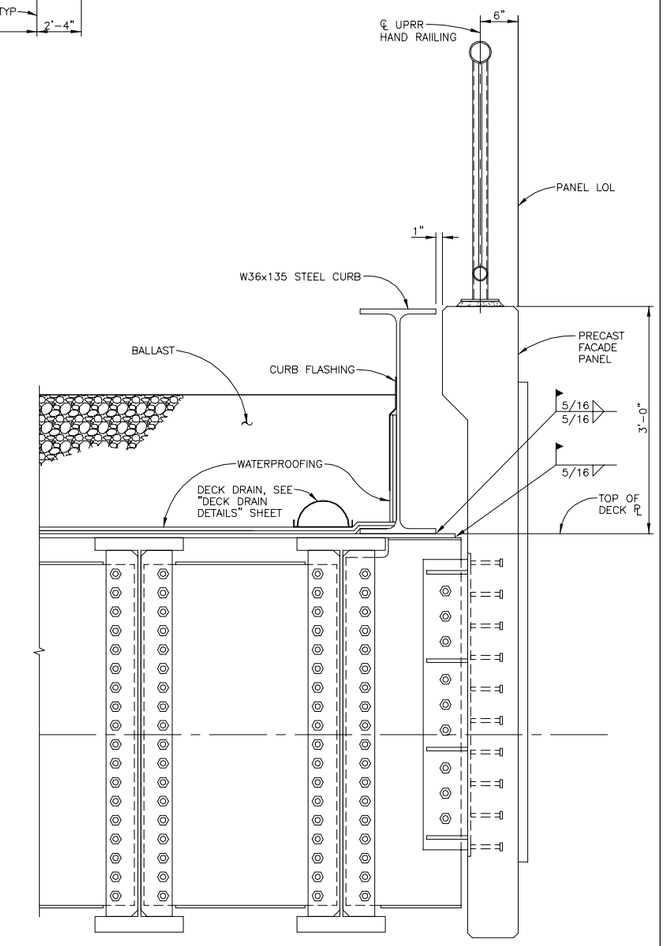
PARTIAL TYPICAL SECTION

SCALE: 1" = 1'-0"

BASE PLATE DETAIL

SCALE: 3" = 1'-0"

2 S112



CADD PROJECT FILE NAME: P-207-112-S-FRTS
TIME: 3:14pm DATE: 8/12/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: SGS	DATE: 10/4/13
DRAWN BY: AR	DATE: 12/31/13
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED

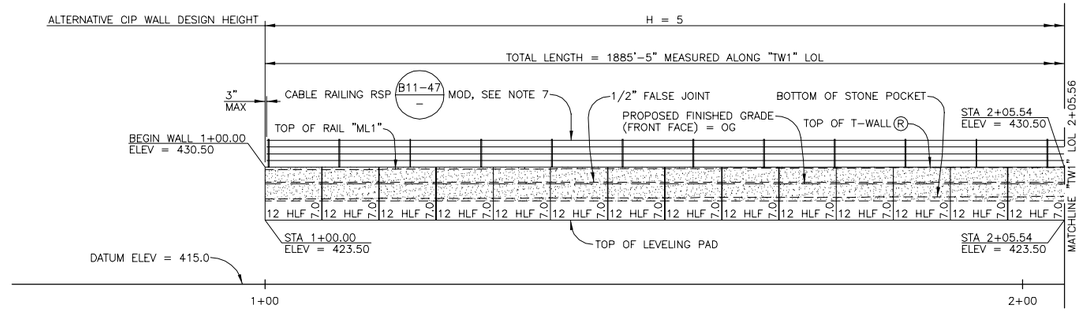
CHIEF ENGINEER RCE # DATE

MP 21.43 LOS ANGELES SUBDIVISION

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

FULLERTON ROAD UNDERPASS TYPICAL SECTION

CONTRACT No. | DWG S-112 | SHEET OF

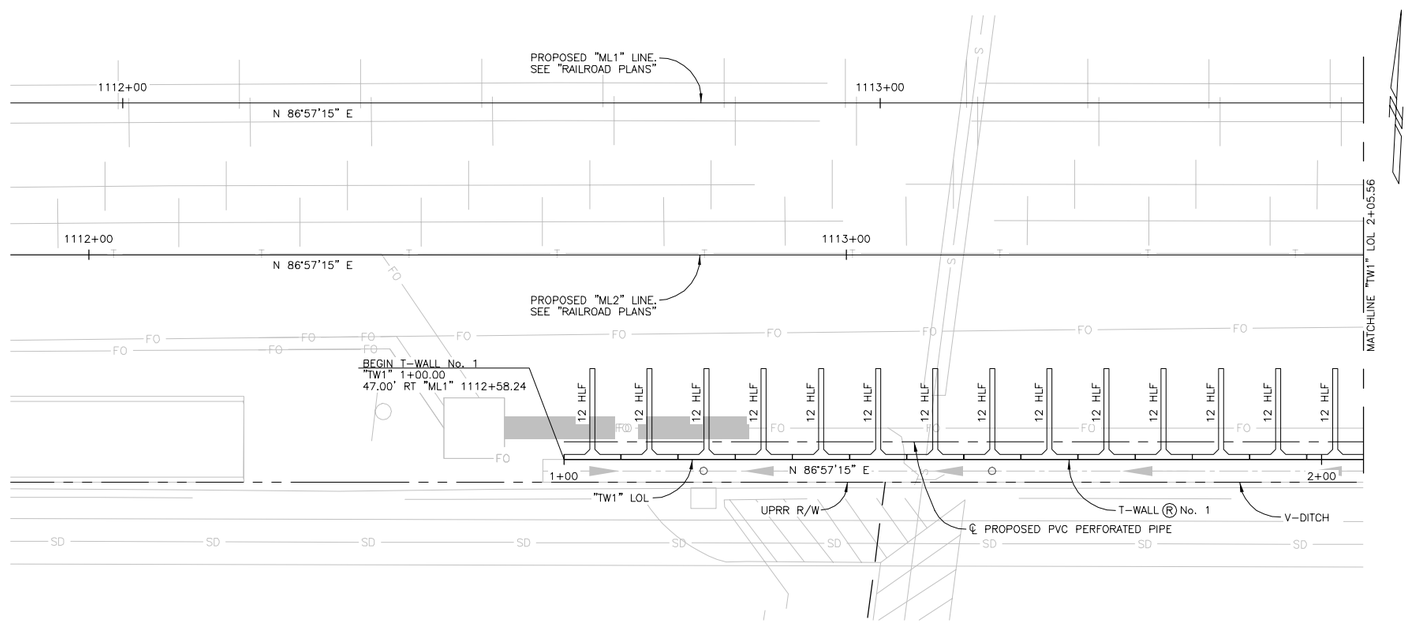


ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
3. T-WALL® No. 1 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL® No. 1 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-448-S-TW1GP1
TIME: 9:42am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

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APPROVALS		
DIVISION	BY	DATE
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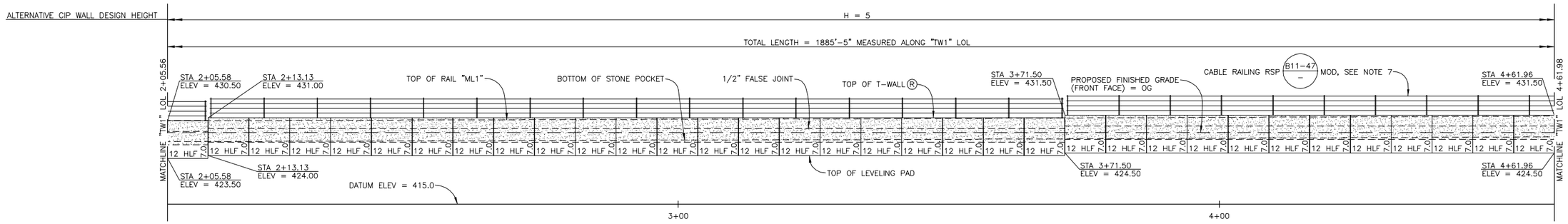
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 1

CONTRACT No. | DWG S-448 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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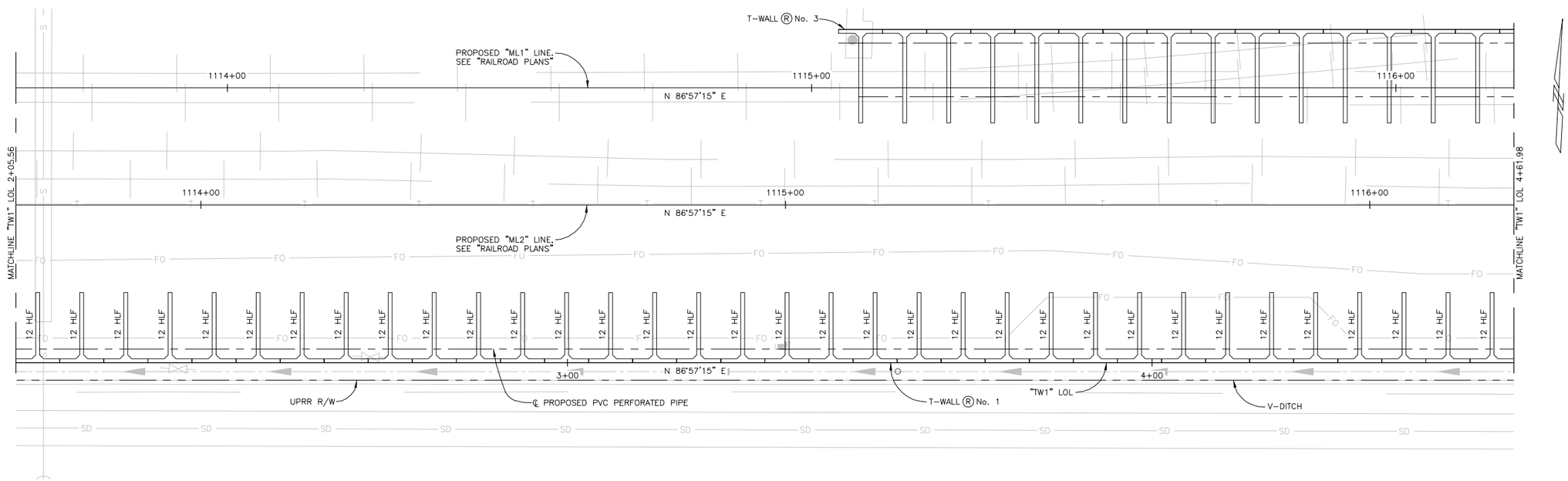

GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-449-S-TW1GP2
TIME: 9:43am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

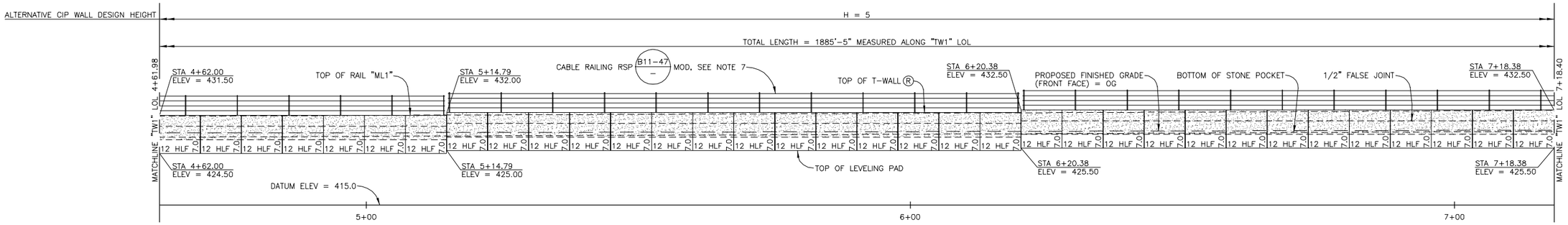
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 2

CONTRACT No. | DWG S-449 | SHEET OF



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SCALE: 1" = 10'

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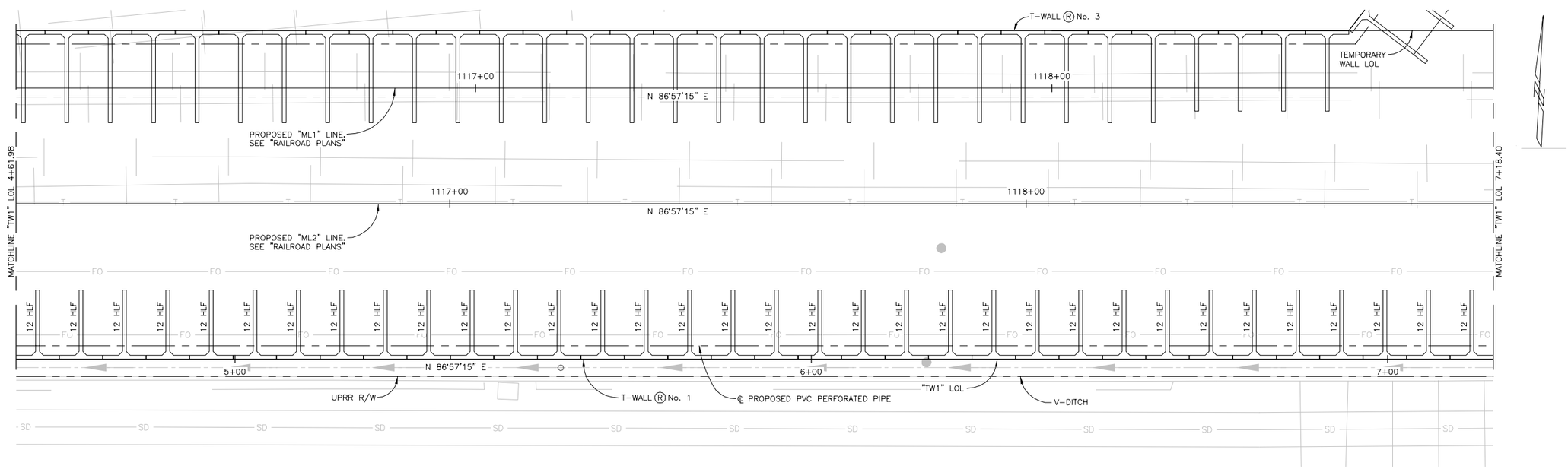
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-450-S-TW1GP3
TIME: 9:43am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BASIS OF BEARING:
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APPROVALS

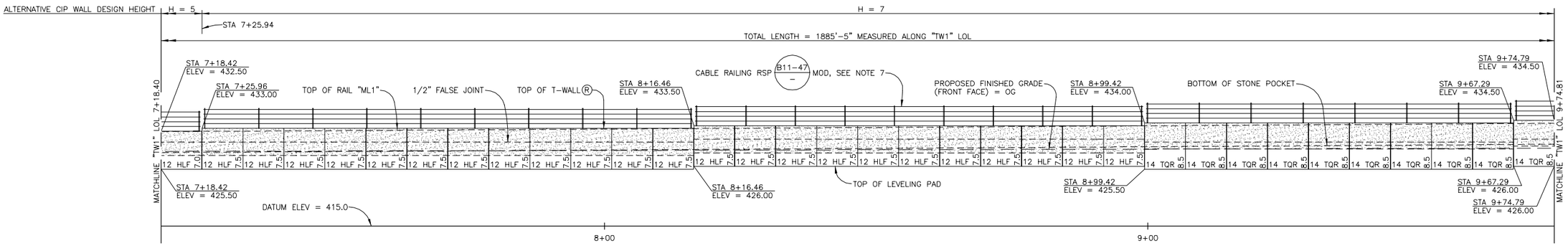
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 3

CONTRACT No. | DWG S-450 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
3. T-WALL® No. 1 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
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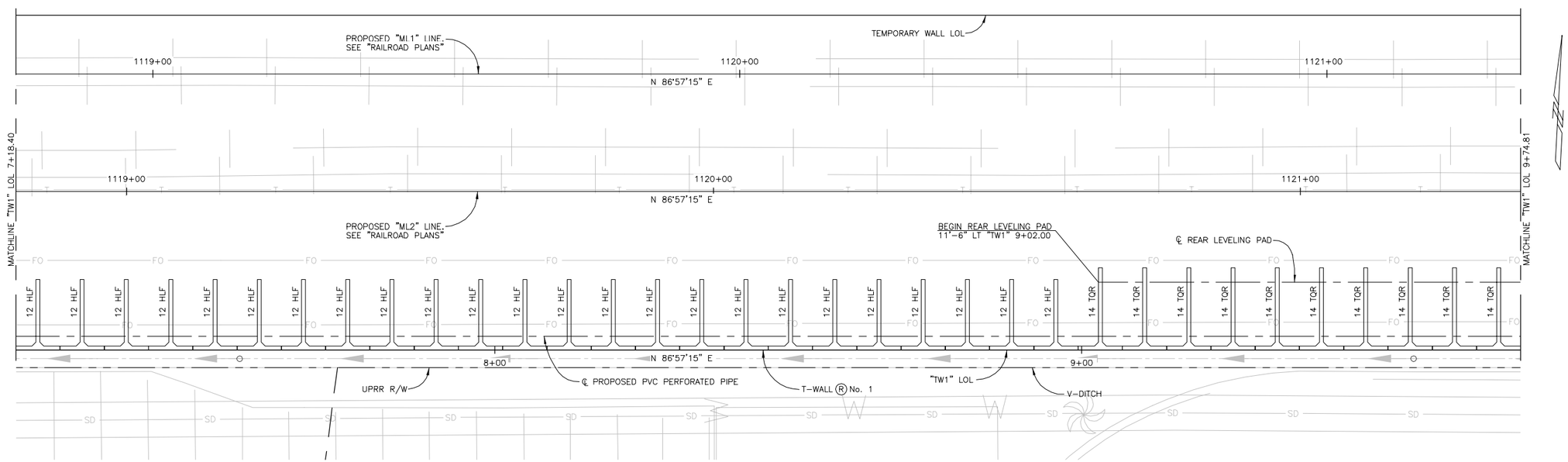


GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-451-S-TW1GP4
TIME: 9:44am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

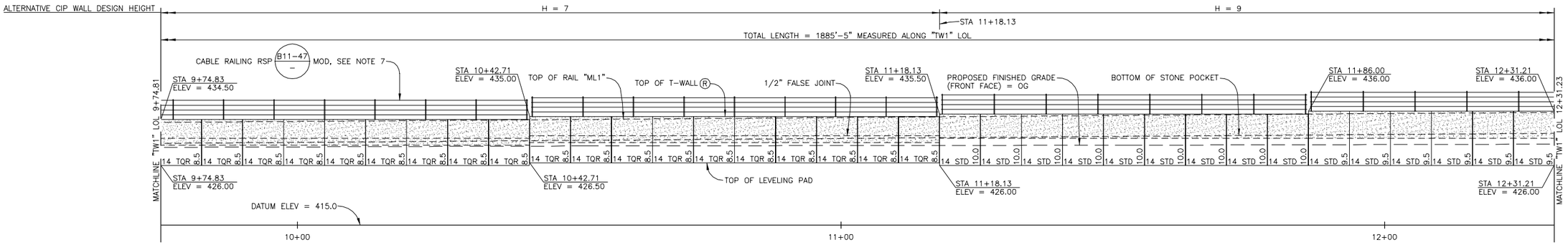
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 4

CONTRACT No. | DWG S-451 | SHEET OF

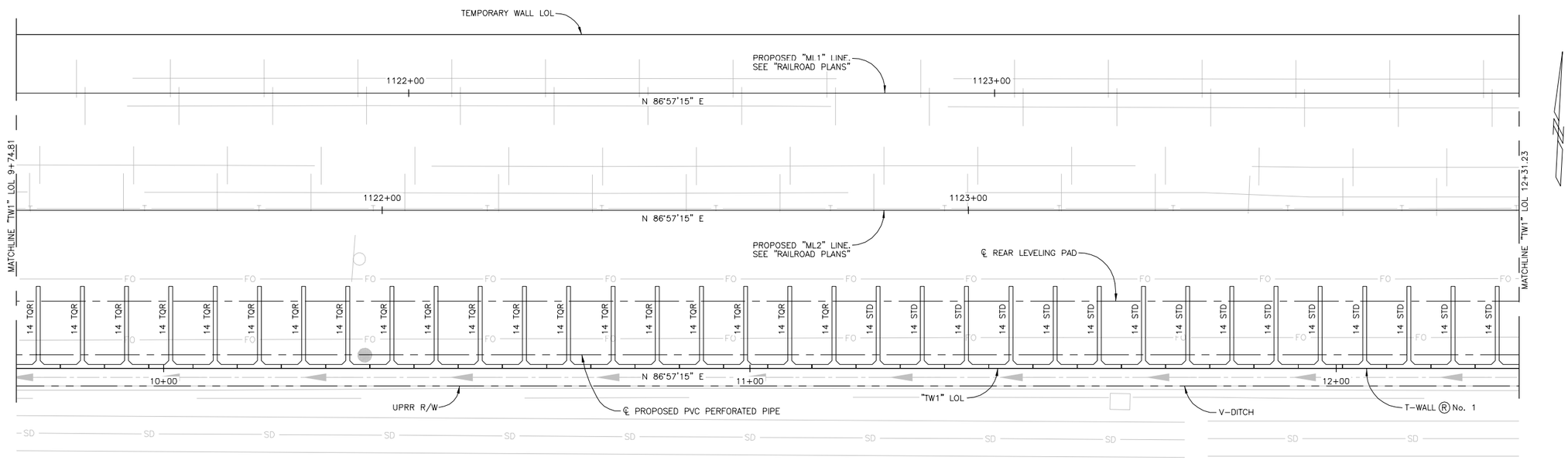


ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL ® CONSTRUCTION.
3. T-WALL® No. 1 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL® No. 1 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-452-S-TW1GP5
TIME: 9:44am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG! USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

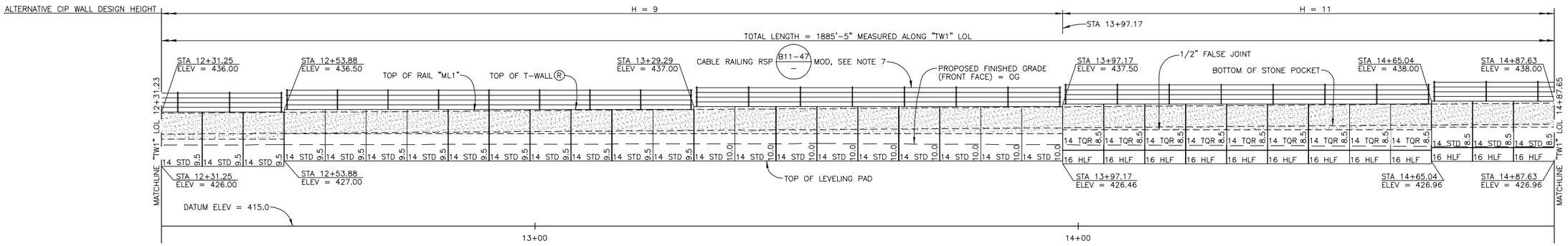
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 5

CONTRACT No. | DWG S-452 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
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4. T-WALL® No. 1 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
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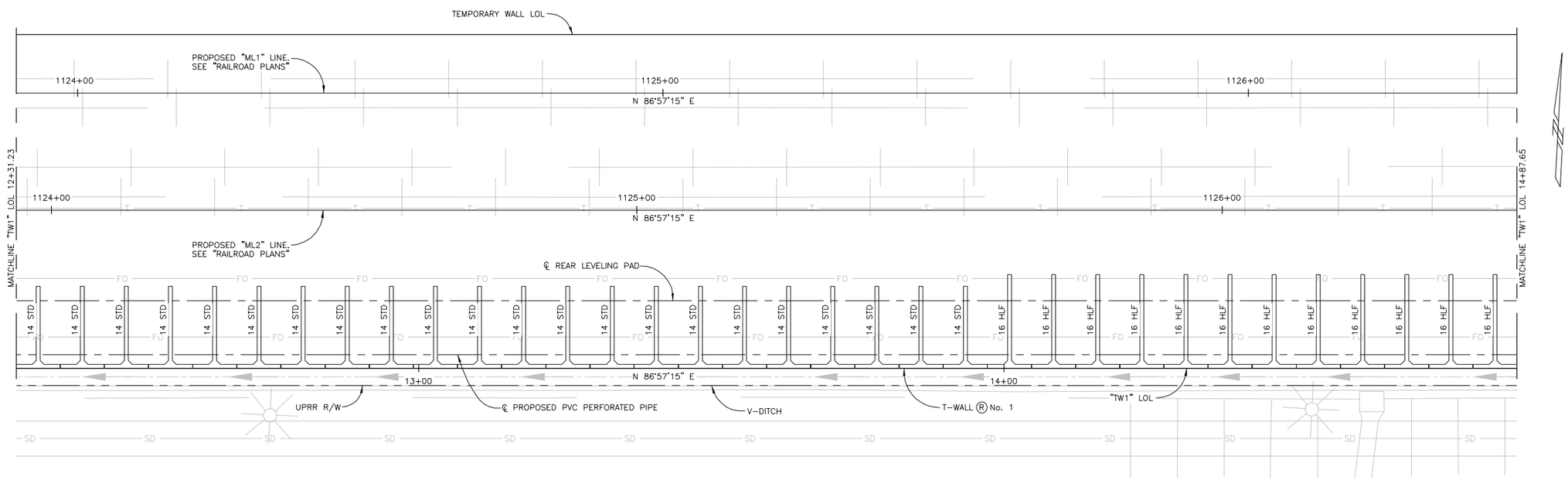


GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-453-S-TW1GP6
TIME: 9:45am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

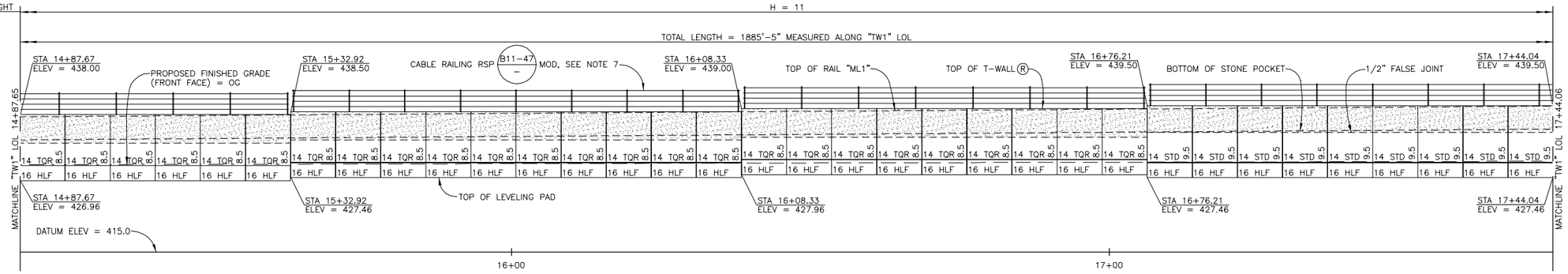
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 6

CONTRACT No. | DWG S-453 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL R CONSTRUCTION.
3. T-WALL R No. 1 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL R No. 1 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
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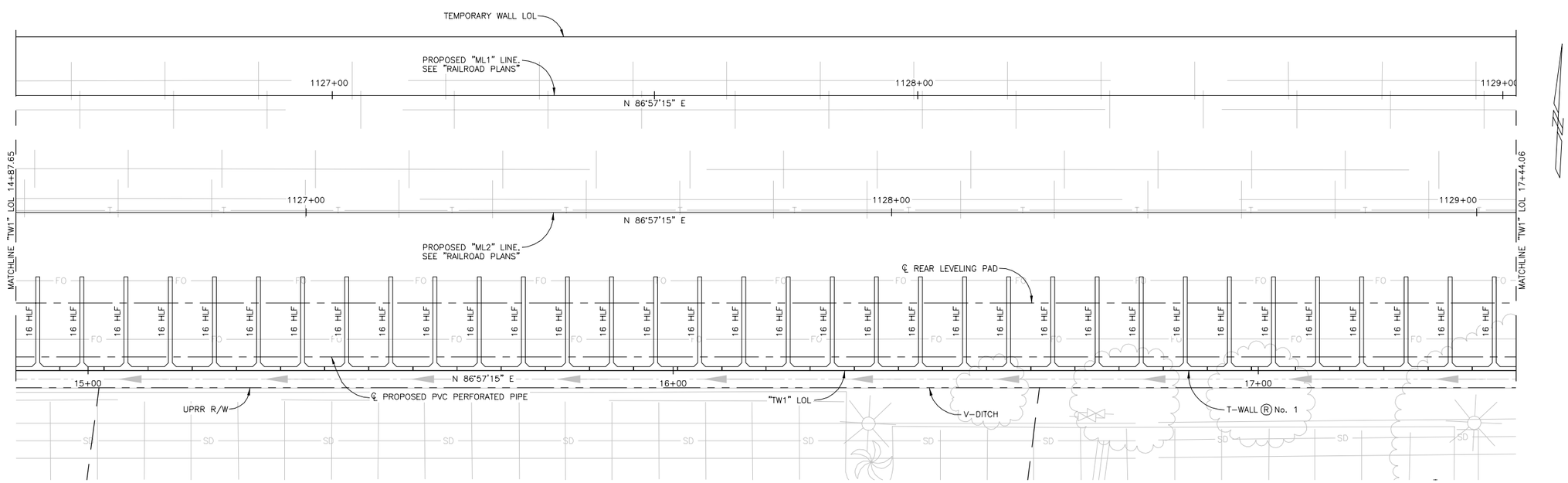
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL R DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-454-S-TW1GP7
TIME: 9:45am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ACE ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

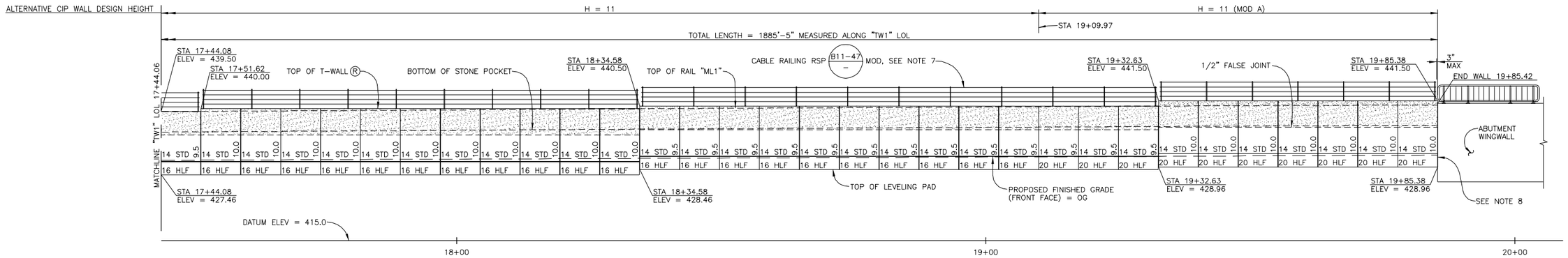
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 7

CONTRACT No. | DWG S-454 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL Ⓡ CONSTRUCTION.
3. T-WALL Ⓡ No. 1 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL Ⓡ No. 1 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
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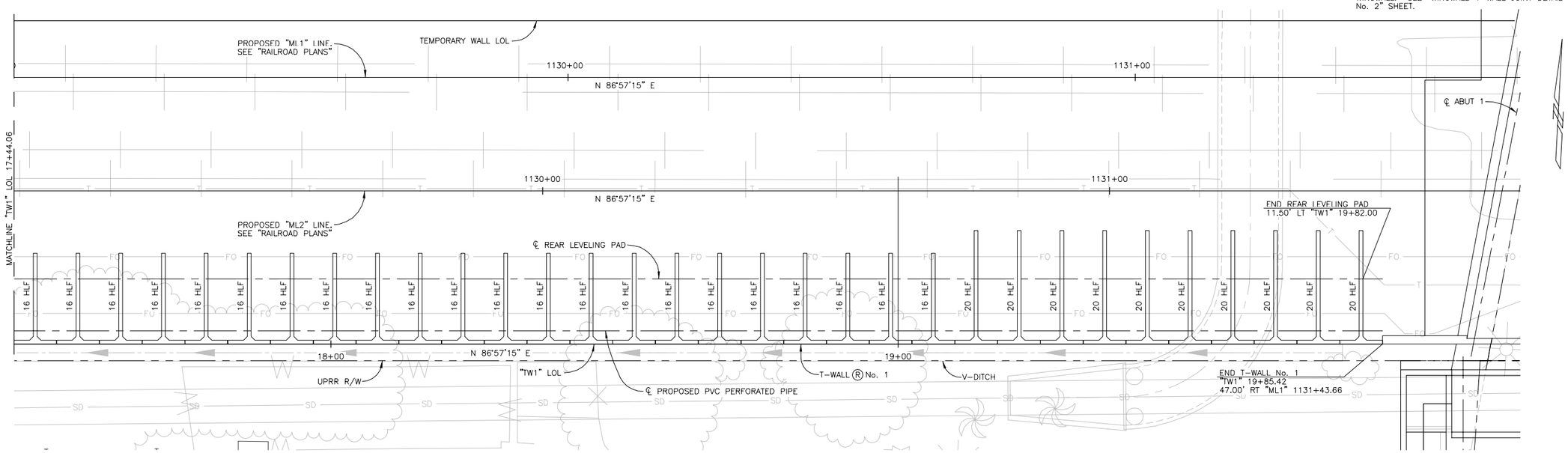
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS No. 1" SHEET.
8. APPLY 1/2" VERTICAL JOINT BETWEEN T-WALL Ⓡ PANEL AND ABUTMENT WINGWALL. SEE "WINGWALL-T-WALL JOINT DETAIL" ON "T-WALL Ⓡ DETAILS No. 2" SHEET.



GENERAL PLAN - T-WALL® No. 1

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-455-S-TW1GP8
TIME: 9:46am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

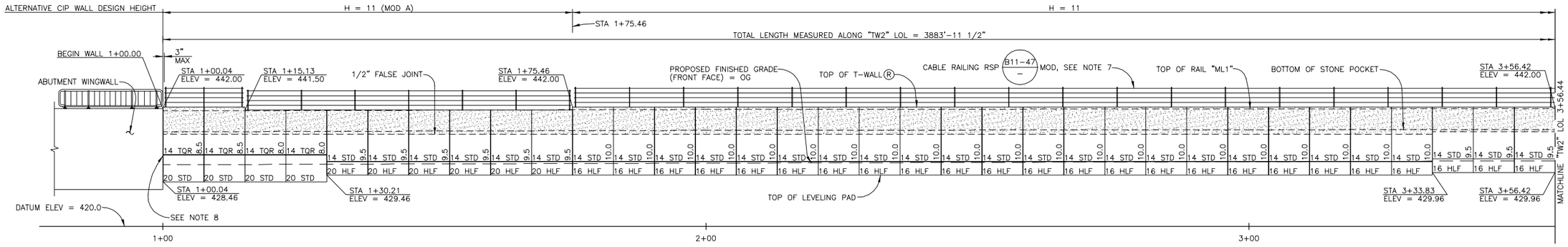
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 1
GENERAL PLAN No. 8

CONTRACT No. | DWG S-455 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
3. T-WALL® No. 2 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
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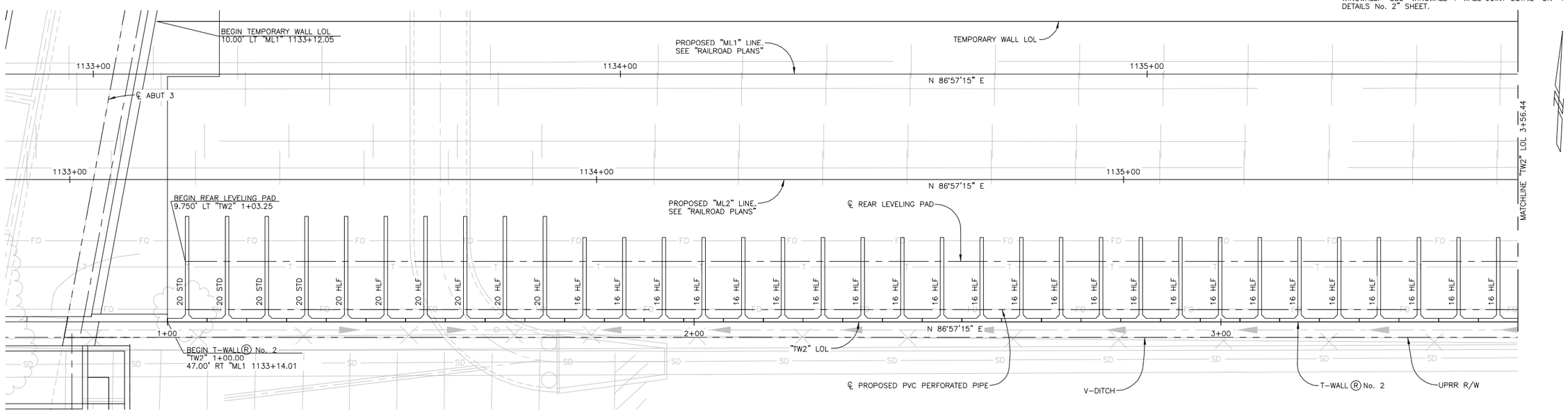
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.
8. APPLY 1/2" VERTICAL JOINT BETWEEN T-WALL® PANEL AND ABUTMENT WINGWALL. SEE "WINGWALL-T-WALL JOINT DETAIL" ON "T-WALL® DETAILS No. 2" SHEET.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-456-S-TW2GP1
TIME: 12:56pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG! UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

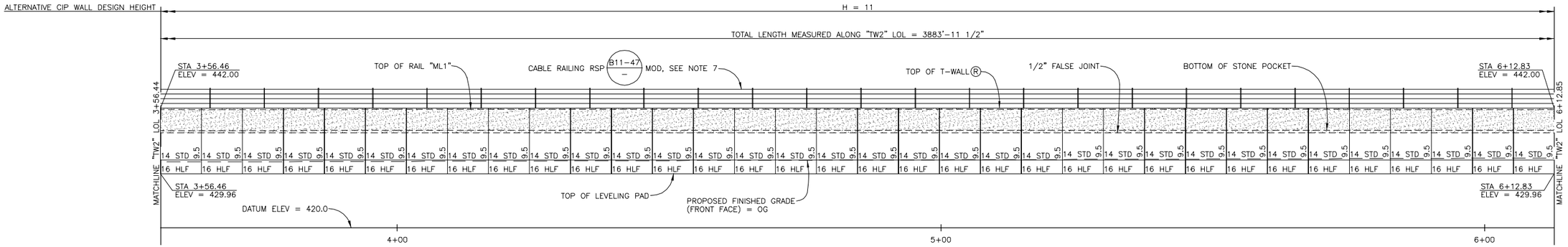
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 1

CONTRACT No. | DWG S-456 | SHEET OF



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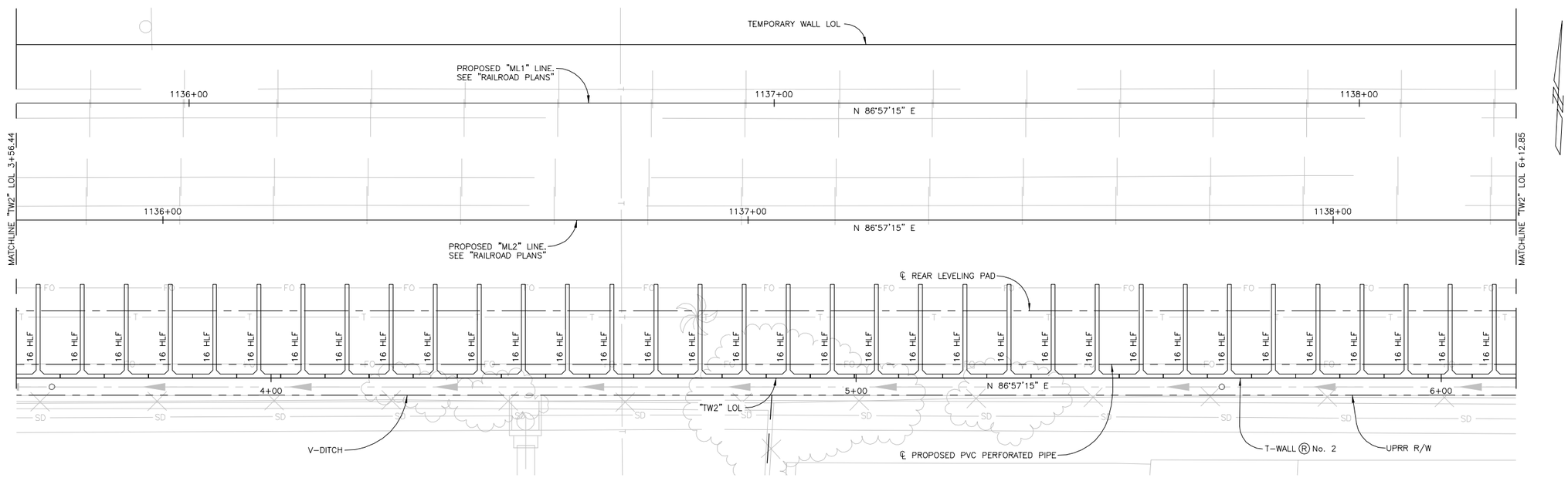


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-457-S-TW2GP2
TIME: 9:47am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

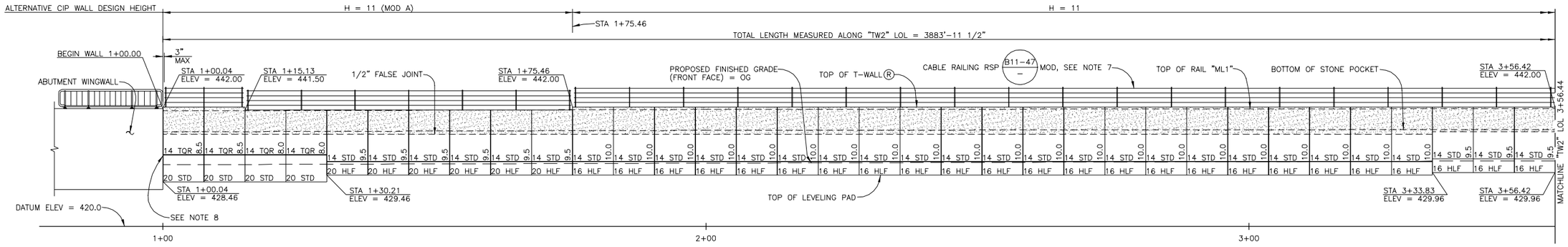
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 2

CONTRACT No. | DWG S-457 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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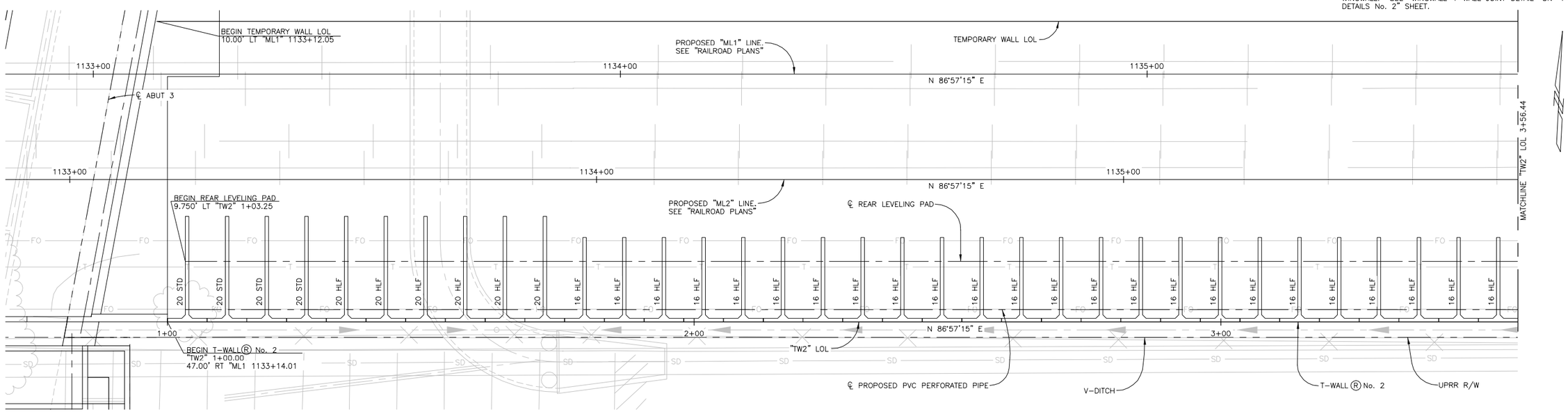


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-456-S-TW2GP1
TIME: 12:56pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG! UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

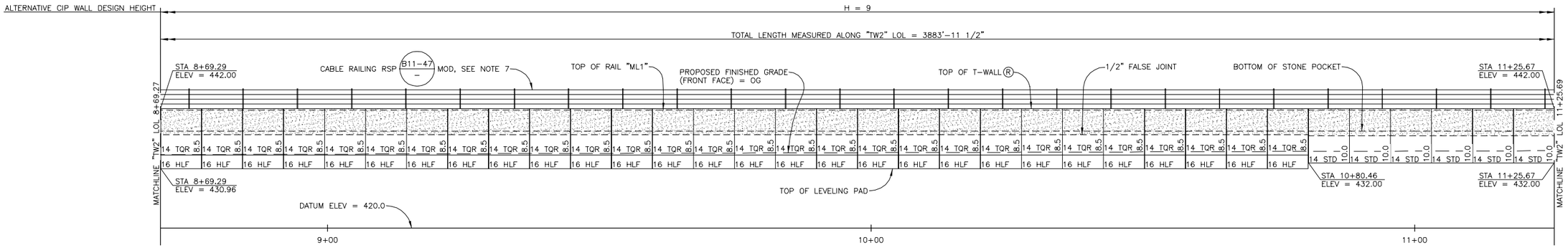
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 1

CONTRACT No. | DWG S-456 | SHEET OF

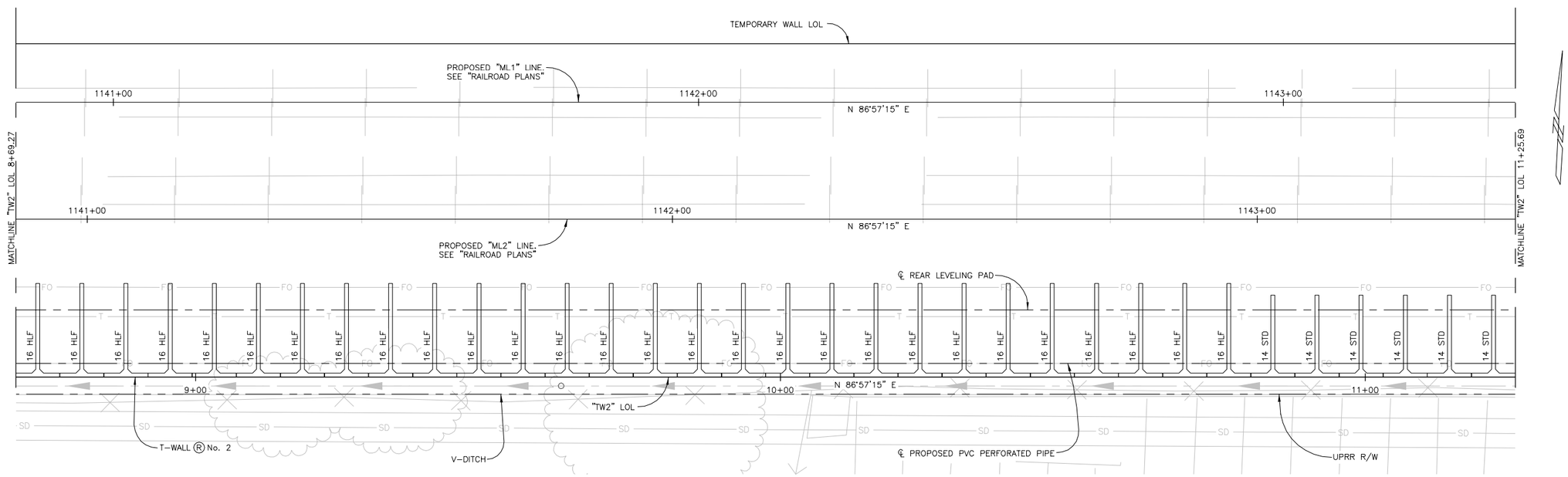


ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL Ⓡ CONSTRUCTION.
3. T-WALL Ⓡ No. 2 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL Ⓡ No. 2 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-459-S-TW2GP4
TIME: 9:48am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

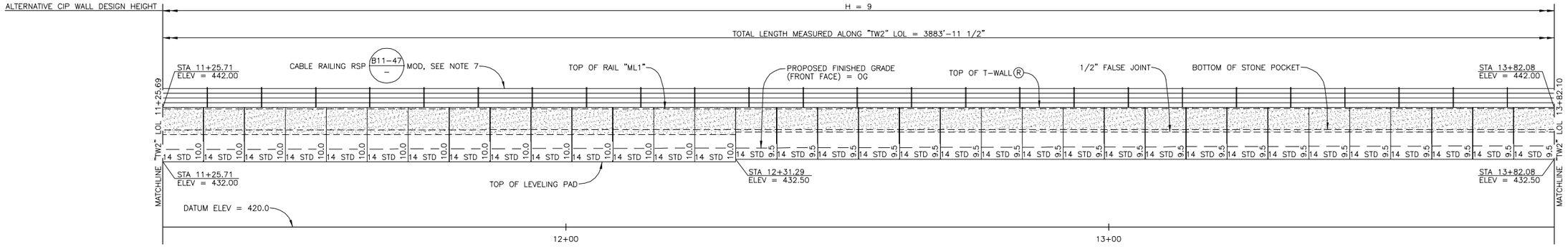
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 4

CONTRACT No. | DWG S-459 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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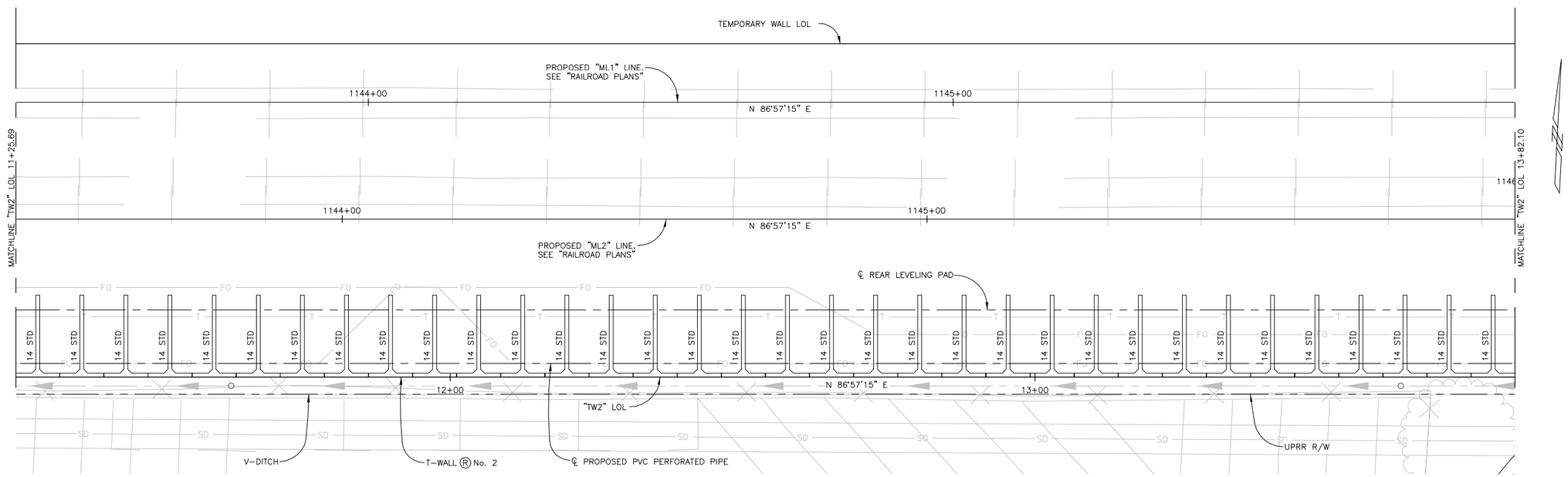


GENERAL PLAN - T-WALL Ⓡ No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-460-S-TW2GP5
TIME: 9:49am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG! USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

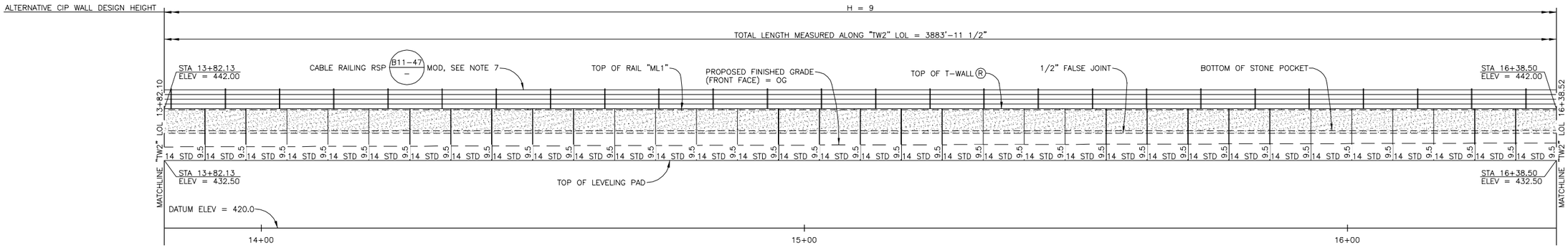
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 5

CONTRACT No. | DWG S-460 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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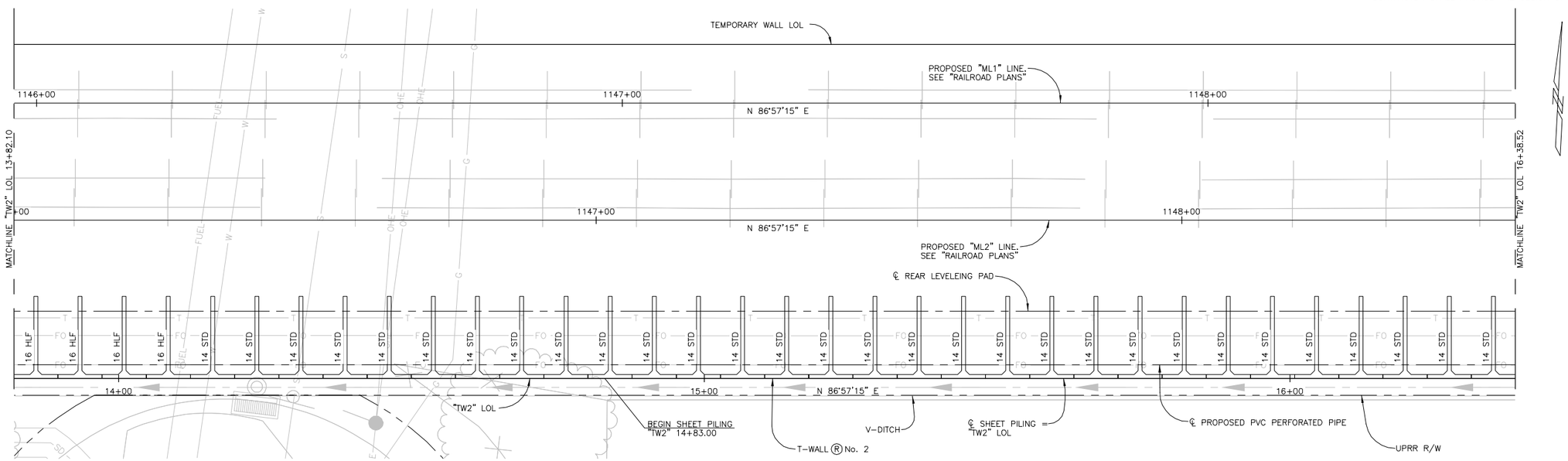
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS No. 1" SHEET.
8. FOR SHEET PILING DETAILS, SEE "T-WALL Ⓡ DETAILS" SHEET.
9. COMPONENTS OF THE SHEET PILING SHOWN ON THE PLANS MAY BE UTILIZED FOR TEMPORARY SHORING OF EXCAVATIONS. THESE COMPONENTS HAVE NOT BEEN DESIGNED TO MEET THE REQUIREMENTS FOR TEMPORARY SHORING. THE CONTRACTOR SHALL PROVIDE THE DESIGN OF ALL TEMPORARY SHORING.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-461-S-TW2GP6
TIME: 9:49am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

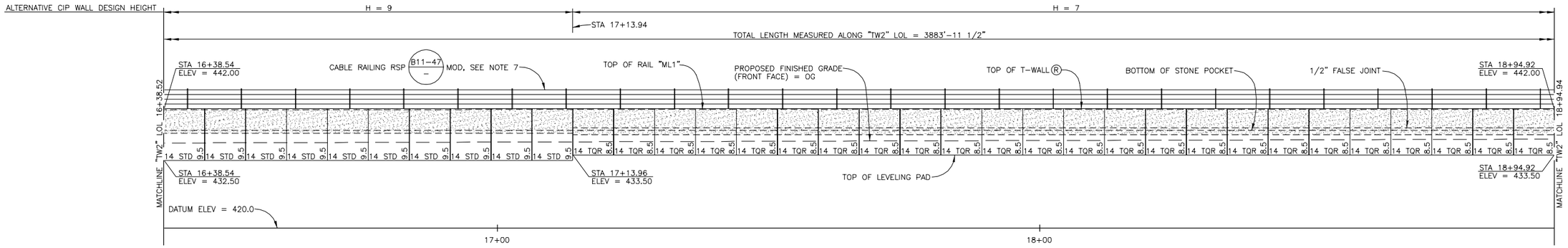
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 6

CONTRACT No. | DWG S-461 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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8. FOR SHEET PILING DETAILS, SEE "T-WALL® DETAILS" SHEET.
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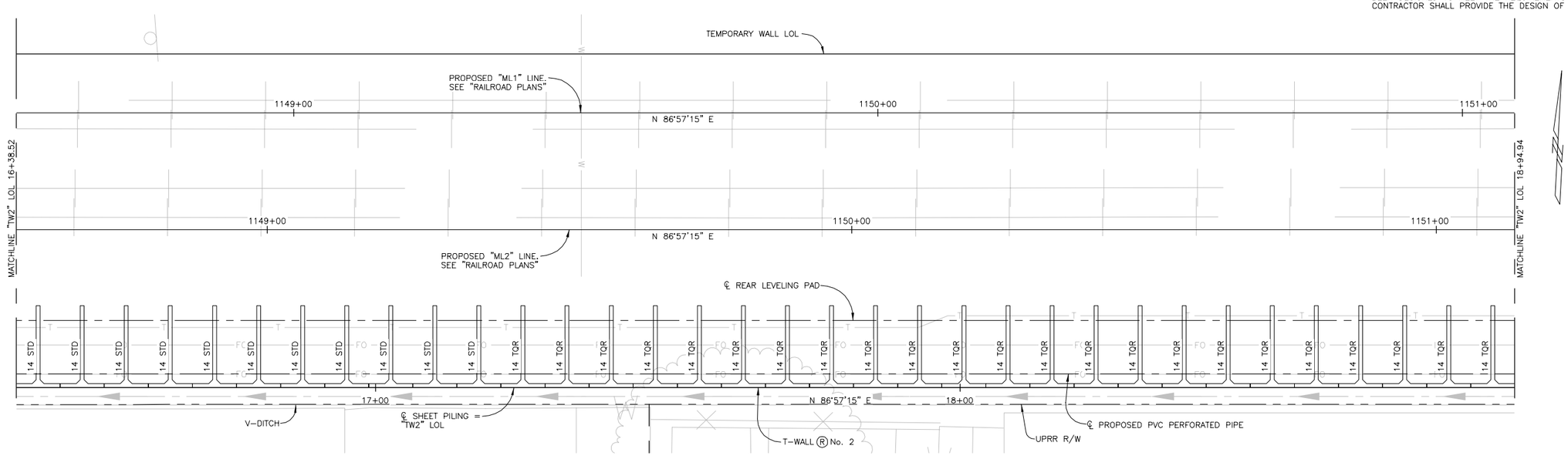


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-462-S-TW2GP7
TIME: 9:50am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A. CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4685

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

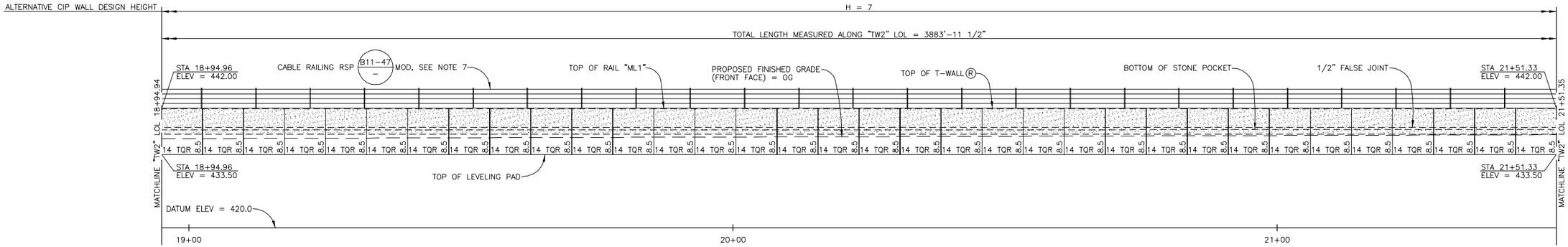
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 7

CONTRACT No. | DWG S-462 | SHEET OF



ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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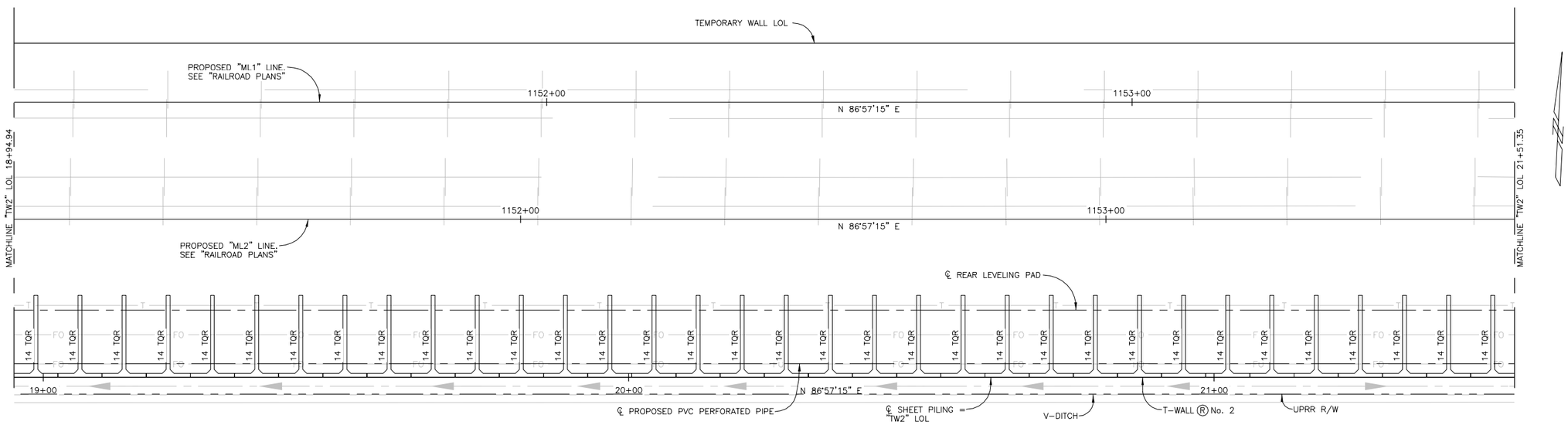

GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-463-S-TW2GP8
TIME: 9:51am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BASIS OF BEARING:
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N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

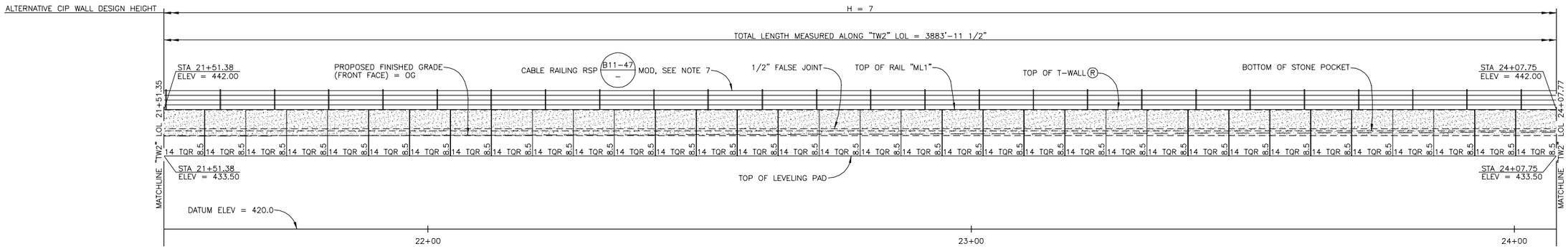
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 8

CONTRACT No. | DWG S-463 | SHEET OF



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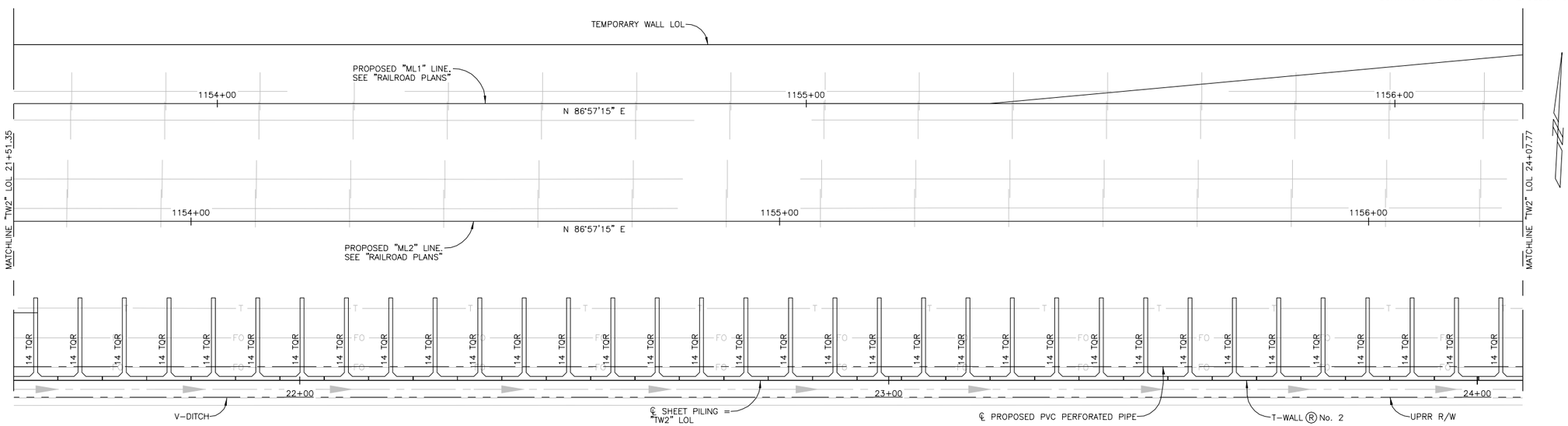

GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-464-S-TW2GP9
TIME: 9:51am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
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714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
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NAME RCE # 70531 DATE: 8/12/15

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BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

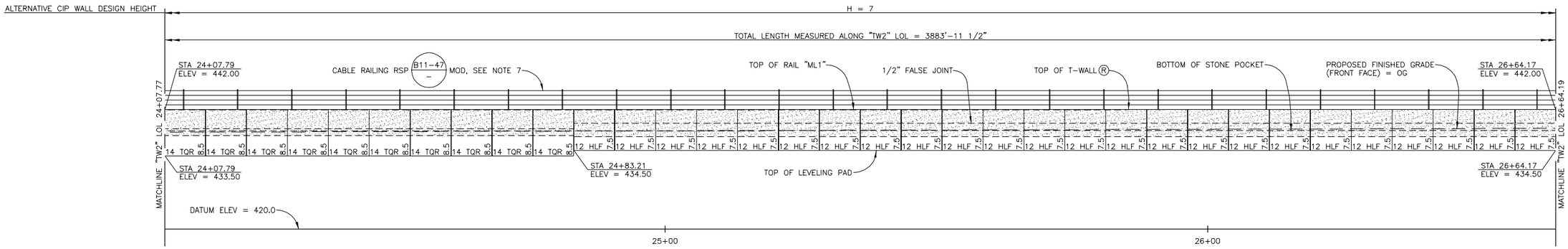
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 9

CONTRACT No. | DWG S-464 | SHEET OF



ELEVATION (FRONT FACE)

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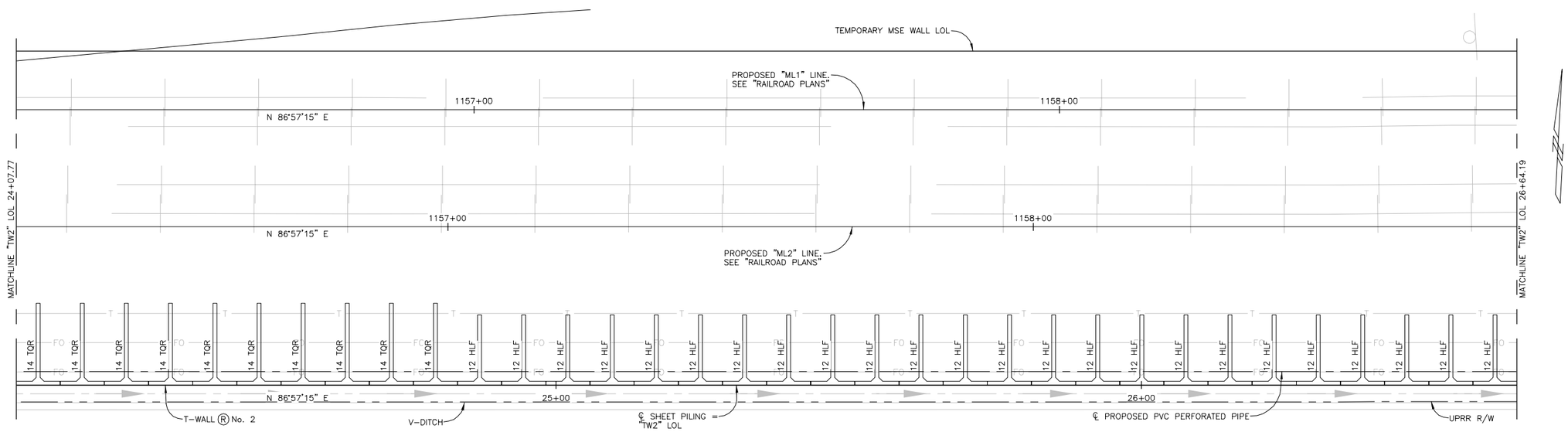
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.
8. FOR SHEET PILING DETAILS, SEE "T-WALL® DETAILS" SHEET.
9. COMPONENTS OF THE SHEET PILING SHOWN ON THE PLANS MAY BE UTILIZED FOR TEMPORARY SHORING OF EXCAVATIONS. THESE COMPONENTS HAVE NOT BEEN DESIGNED TO MEET THE REQUIREMENTS FOR TEMPORARY SHORING. THE CONTRACTOR SHALL PROVIDE THE DESIGN OF ALL TEMPORARY SHORING.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-465-S-TW2GP10
TIME: 9:52am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

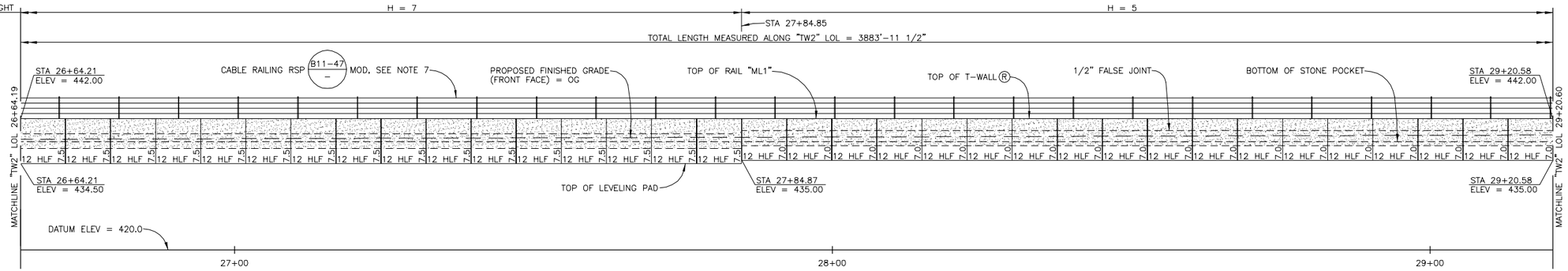
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 10

CONTRACT No. | DWG S-465 | SHEET OF

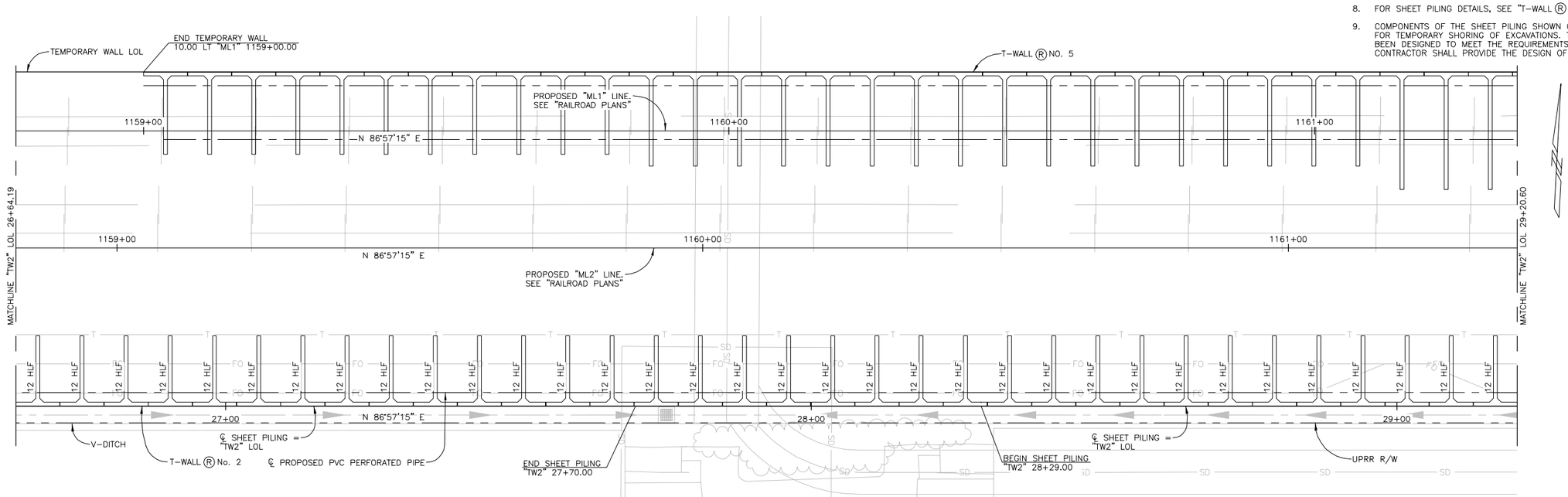


DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL Ⓡ CONSTRUCTION.
3. T-WALL Ⓡ No. 2 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL Ⓡ No. 2 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS No. 1" SHEET.
8. FOR SHEET PILING DETAILS, SEE "T-WALL Ⓡ DETAILS" SHEET.
9. COMPONENTS OF THE SHEET PILING SHOWN ON THE PLANS MAY BE UTILIZED FOR TEMPORARY SHORING OF EXCAVATIONS. THESE COMPONENTS HAVE NOT BEEN DESIGNED TO MEET THE REQUIREMENTS FOR TEMPORARY SHORING. THE CONTRACTOR SHALL PROVIDE THE DESIGN OF ALL TEMPORARY SHORING.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-466-S-TW2GP11
TIME: 9:52am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4685

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

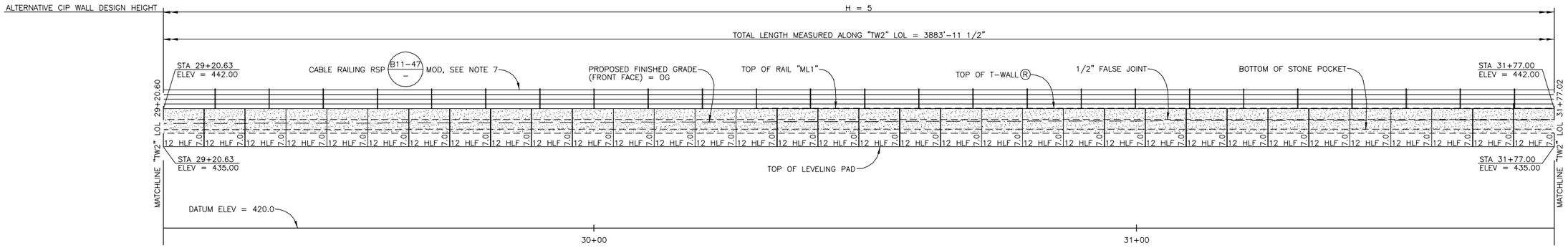
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 11

CONTRACT No. | DWG S-466 | SHEET OF



DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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3. T-WALL Ⓡ No. 2 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
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6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
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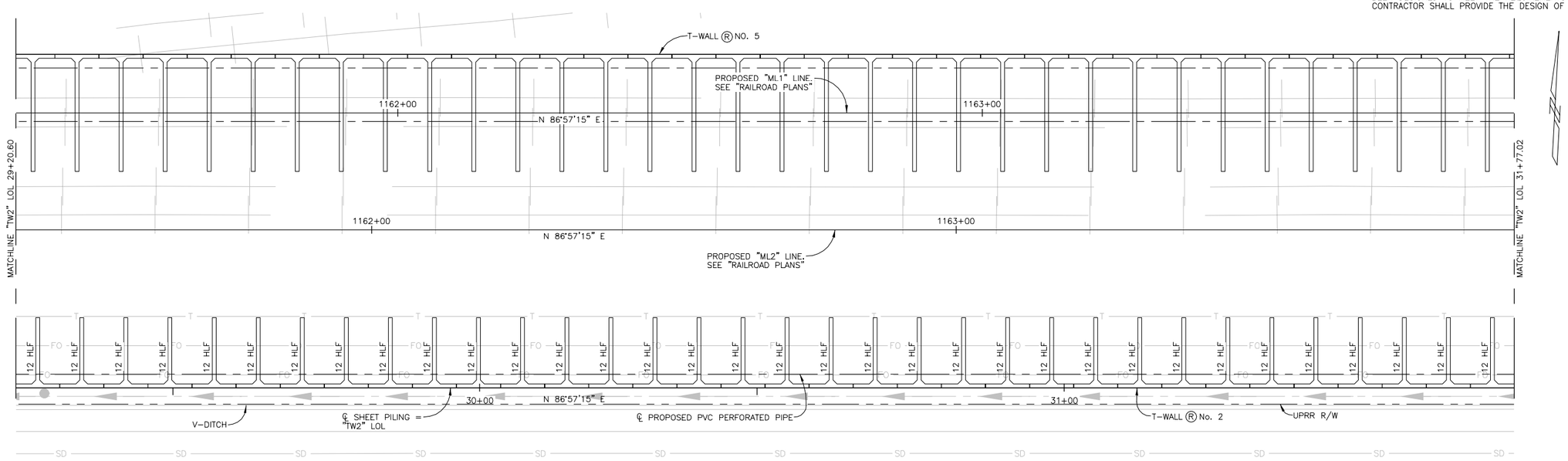


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-467-S-TW2GP12
TIME: 9:53am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

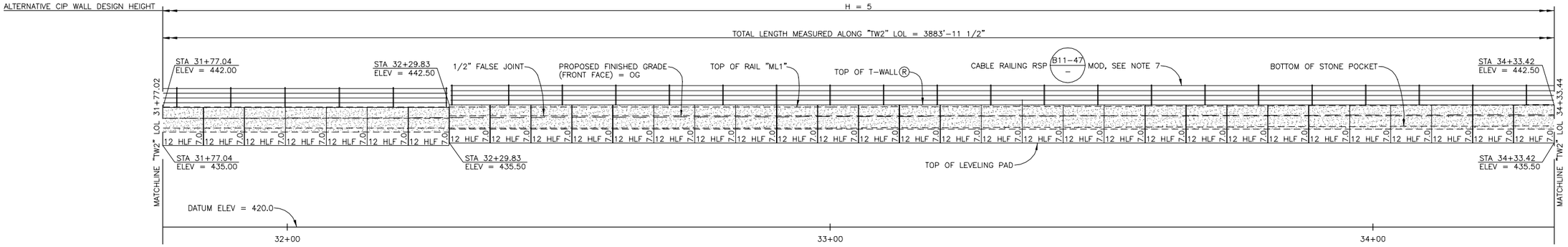
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 12

CONTRACT No. | DWG S-467 | SHEET OF



DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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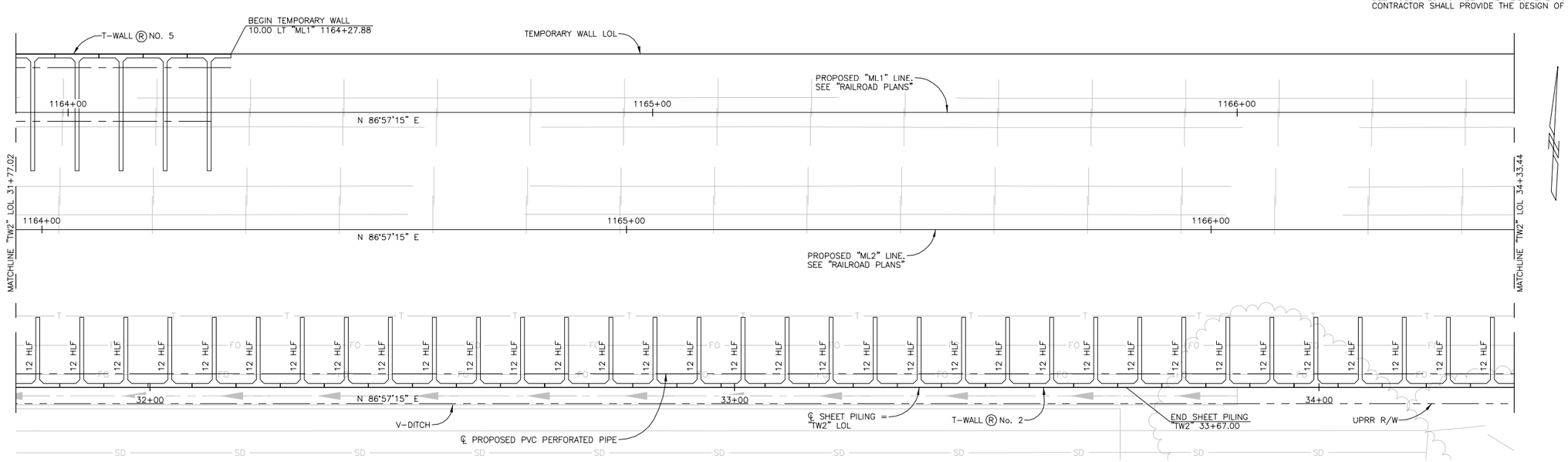


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-468-S-TW2GP13
TIME: 9:54am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:
UNDER THE SUPERVISION OF:	
NAME RCE # 70531	DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

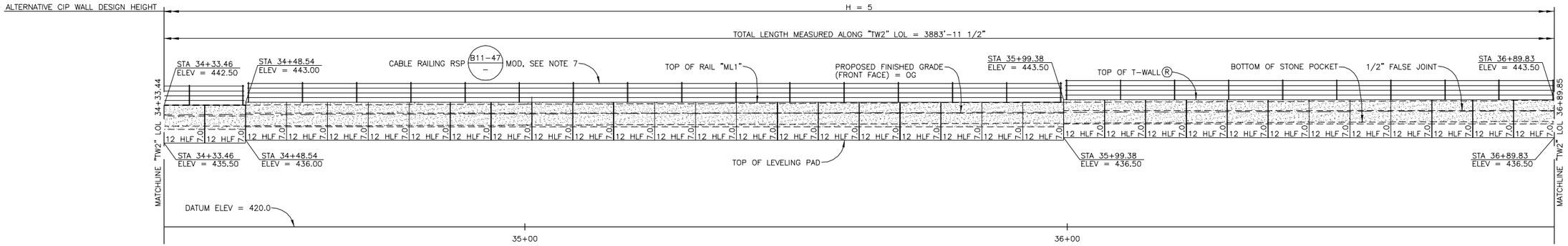
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 13

CONTRACT No. | DWG S-468 | SHEET OF



DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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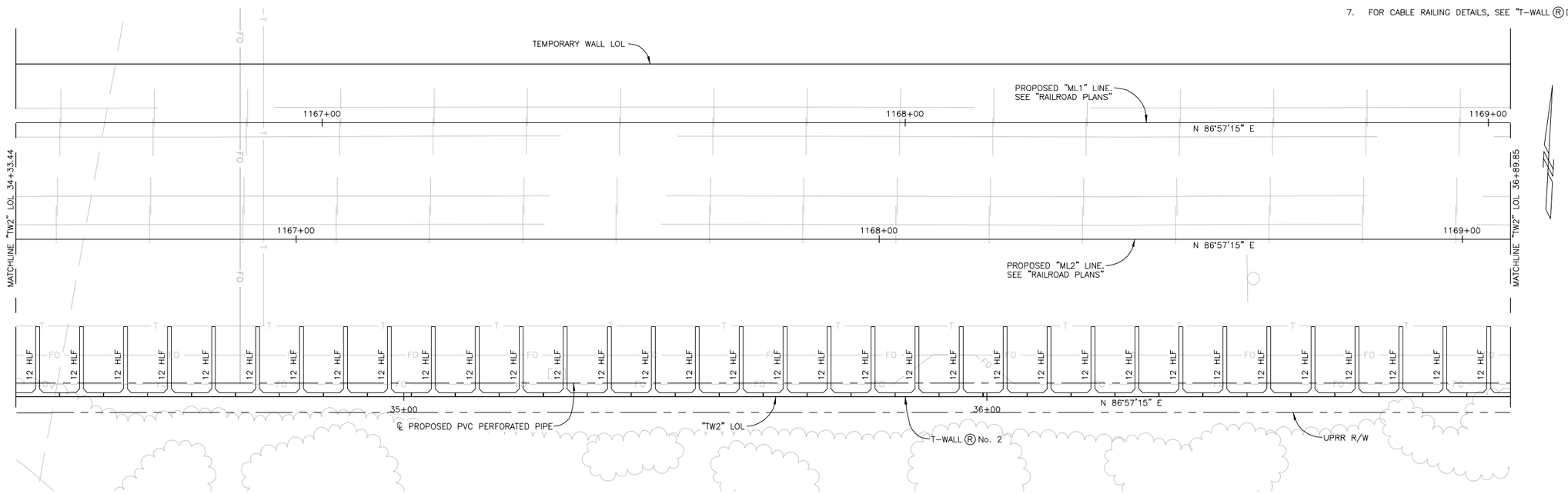
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-469-S-TW2GP14
TIME: 12:56pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

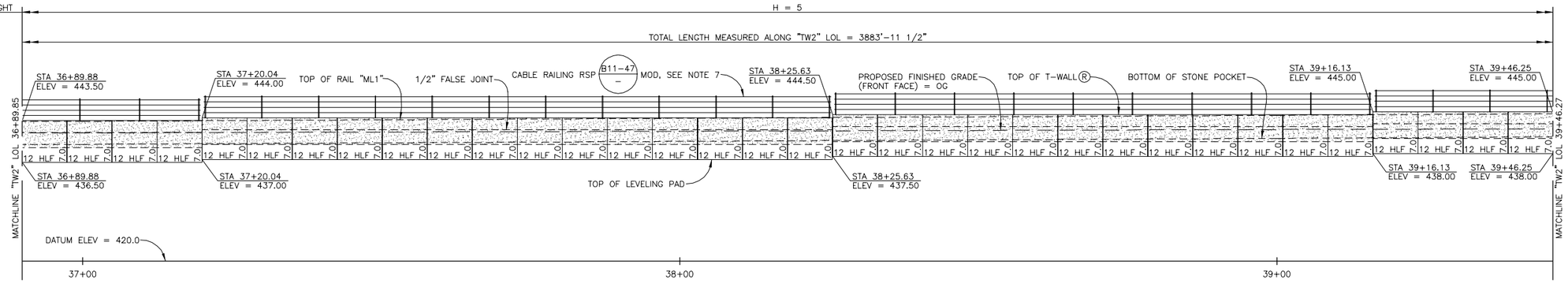
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 14

CONTRACT No. | DWG S-469 | SHEET OF



DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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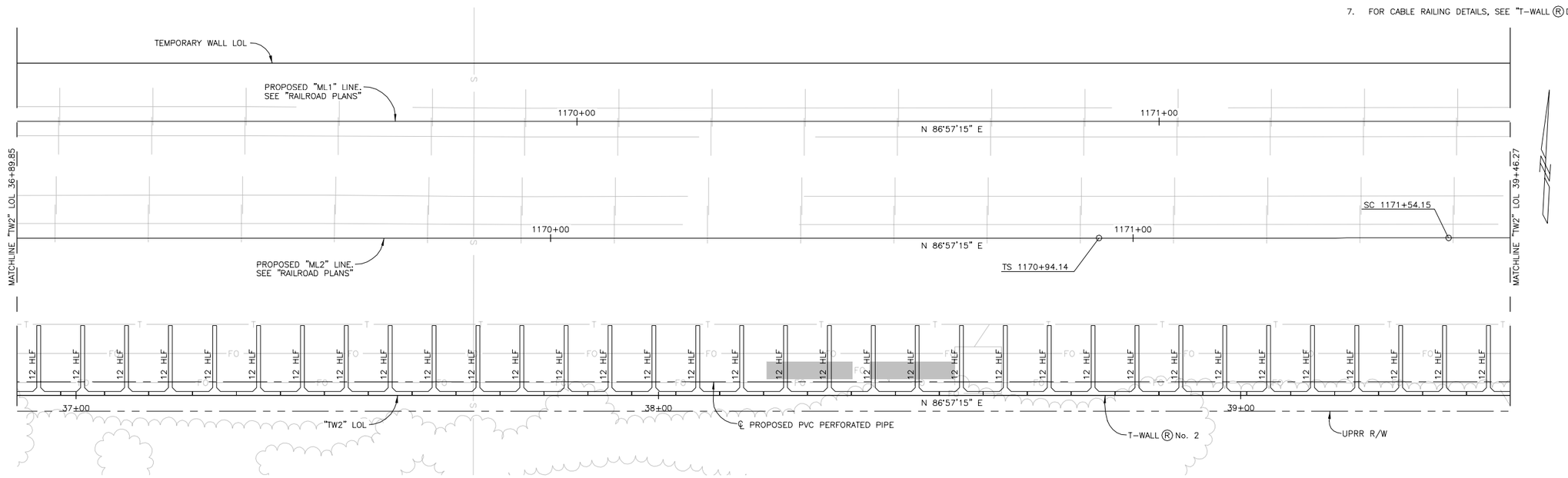


GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-470-S-TW2GP15
TIME: 9:55am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

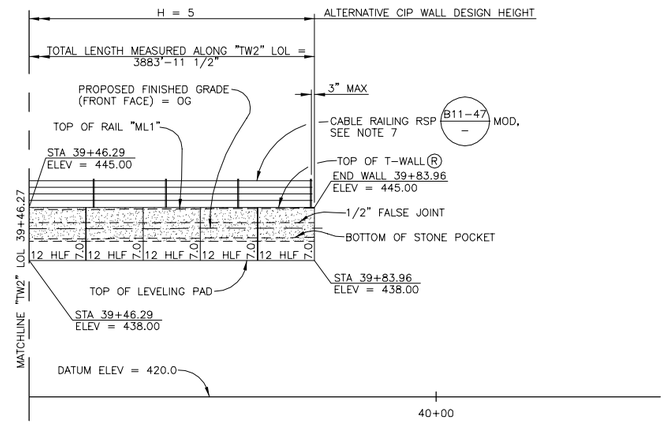
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

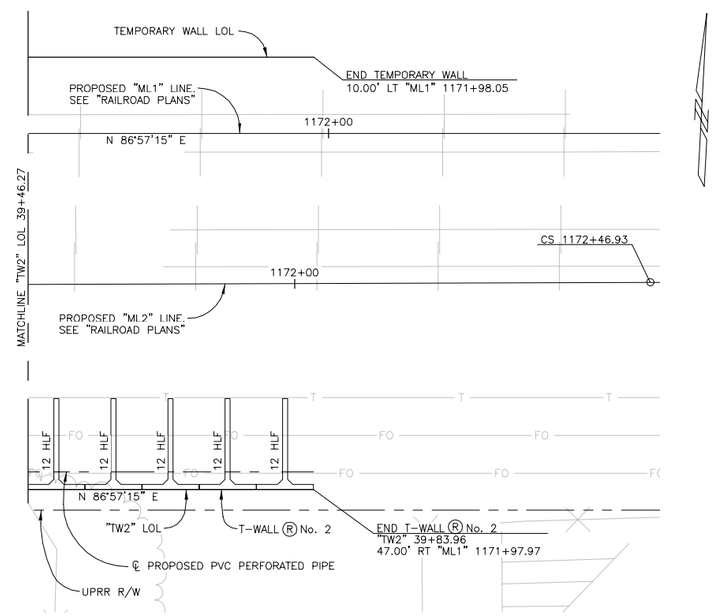
T-WALL® No. 2
GENERAL PLAN No. 15

CONTRACT No. | DWG S-470 | SHEET OF



DEVELOPED ELEVATION (FRONT FACE)

SCALE: 1" = 10'



GENERAL PLAN - T-WALL® No. 2

SCALE: 1" = 10'

NOTES:

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6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS No. 1" SHEET.

CADD PROJECT FILE NAME: P-207-471-S-TW2GP16
TIME: 9:55am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG! USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

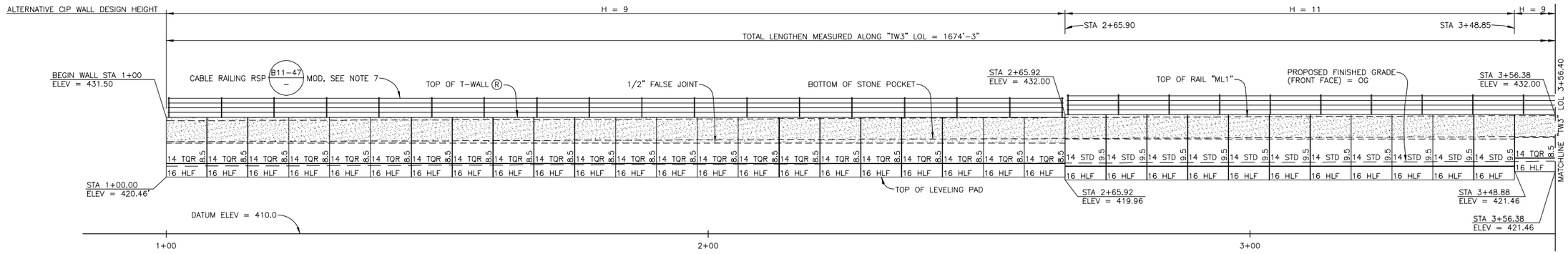
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 2
GENERAL PLAN No. 16

CONTRACT No. | DWG S-471 | SHEET OF

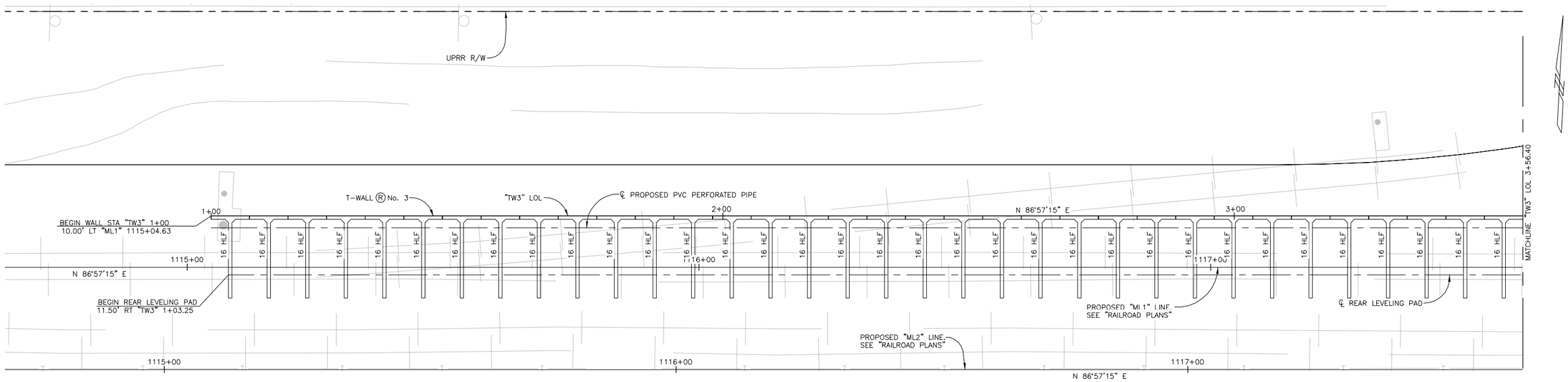


MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL CONSTRUCTION.
3. T-WALL No. 3 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL No. 3 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL R DETAILS" SHEET.



GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-472-S-TW3GP1
TIME: 9:56am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4685

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: TEH	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

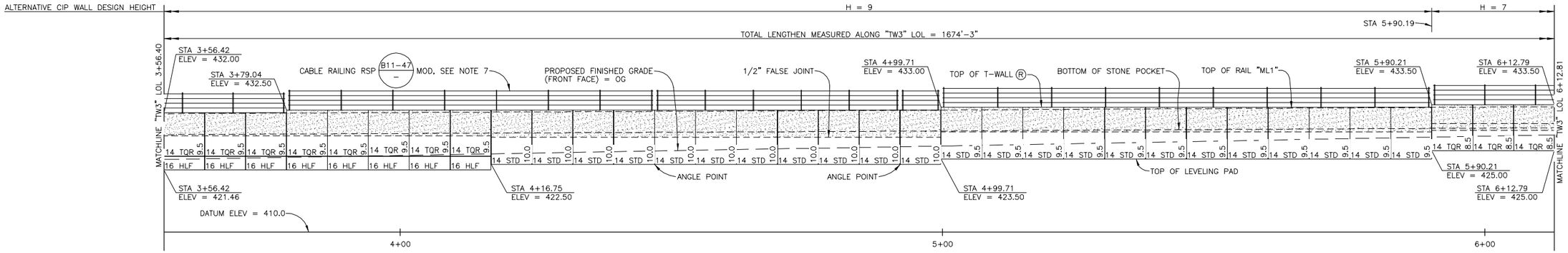
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 3
GENERAL PLAN No. 1

CONTRACT No. | DWG S-472 | SHEET OF



DEVELOPED MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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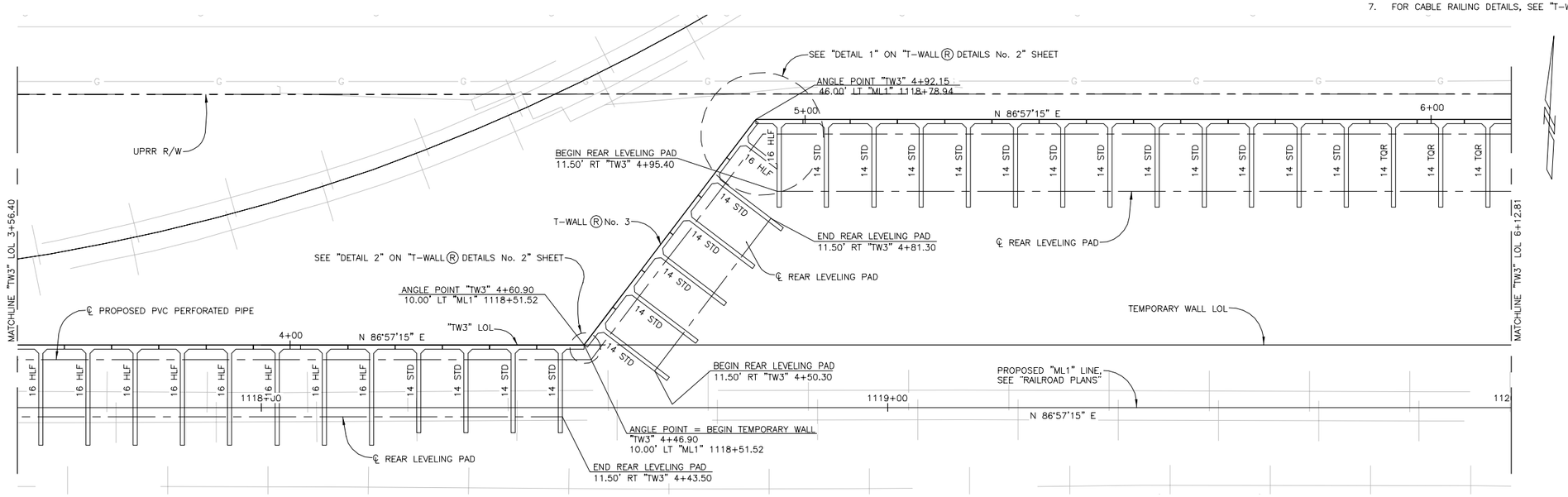
7. FOR CABLE RAILING DETAILS, SEE "T-WALL Ⓡ DETAILS" SHEET.



GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

1-800-227-2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

CADD PROJECT FILE NAME: P-207-473-S-TW3GP2
TIME: 9:56am DATE: 7/21/2015

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp.12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: TEH	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ACE — ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

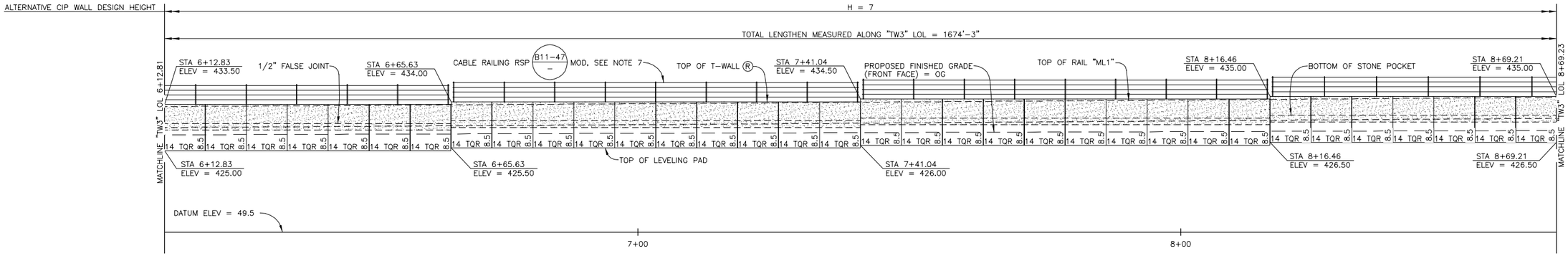
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL Ⓡ No. 3
GENERAL PLAN No. 2

CONTRACT No. | DWG S-473 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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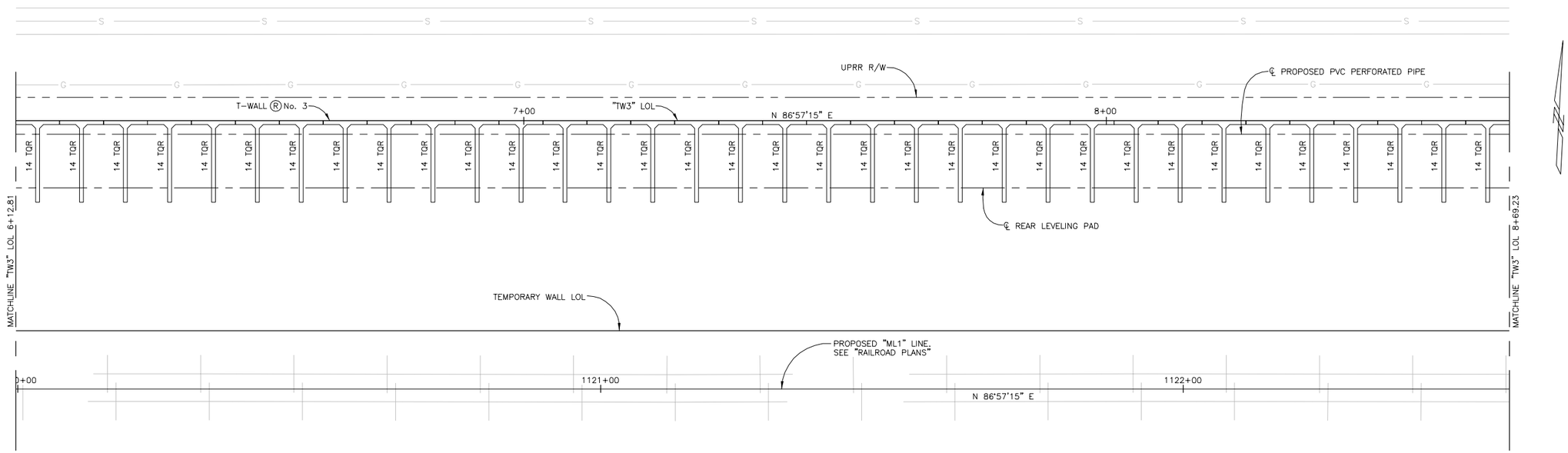


GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

1-800-227-2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

CADD PROJECT FILE NAME: P-207-474-S-TW3GP3
TIME: 9:57am DATE: 7/21/2015

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp.12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

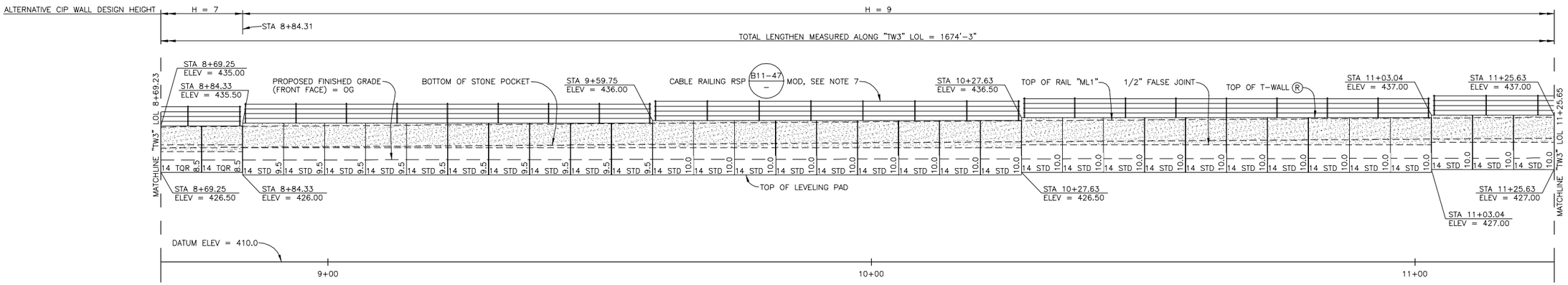
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL Ⓡ No. 3
GENERAL PLAN No. 3

CONTRACT No. | DWG S-474 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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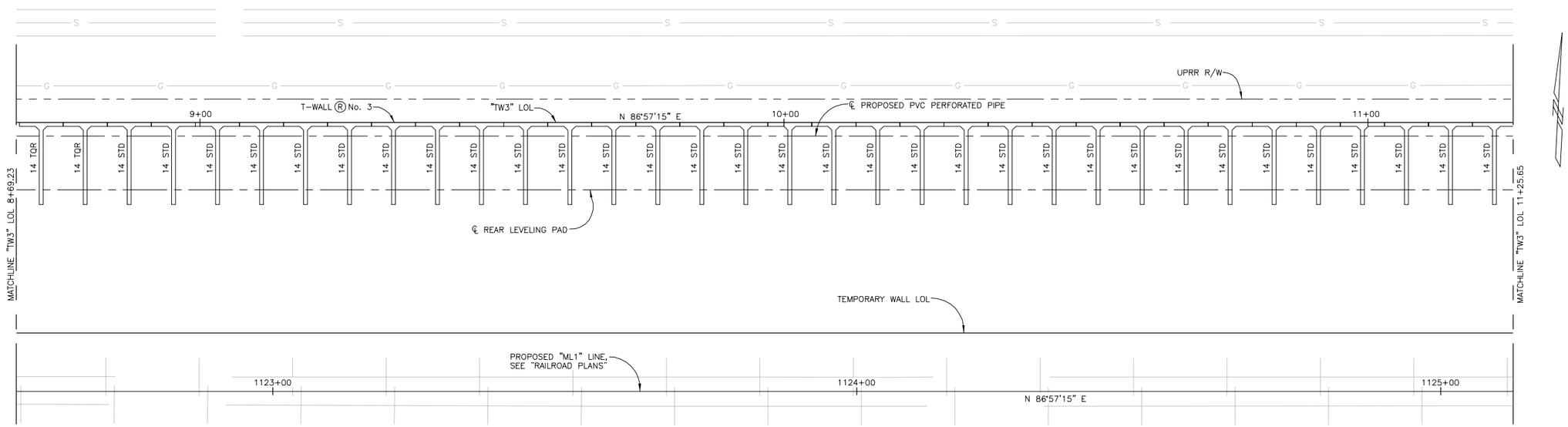


GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-475-S-TW3GP4
TIME: 9:58am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: TEH	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

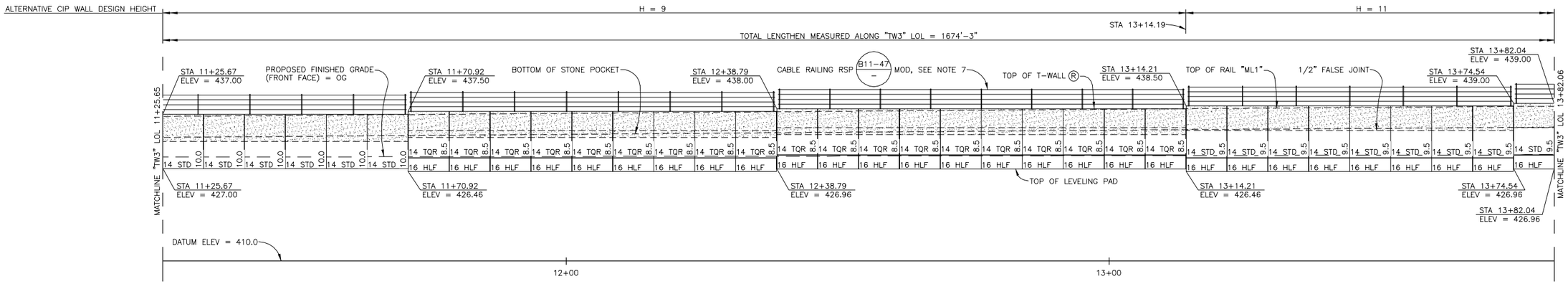
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 3
GENERAL PLAN No. 4

CONTRACT No. | DWG S-475 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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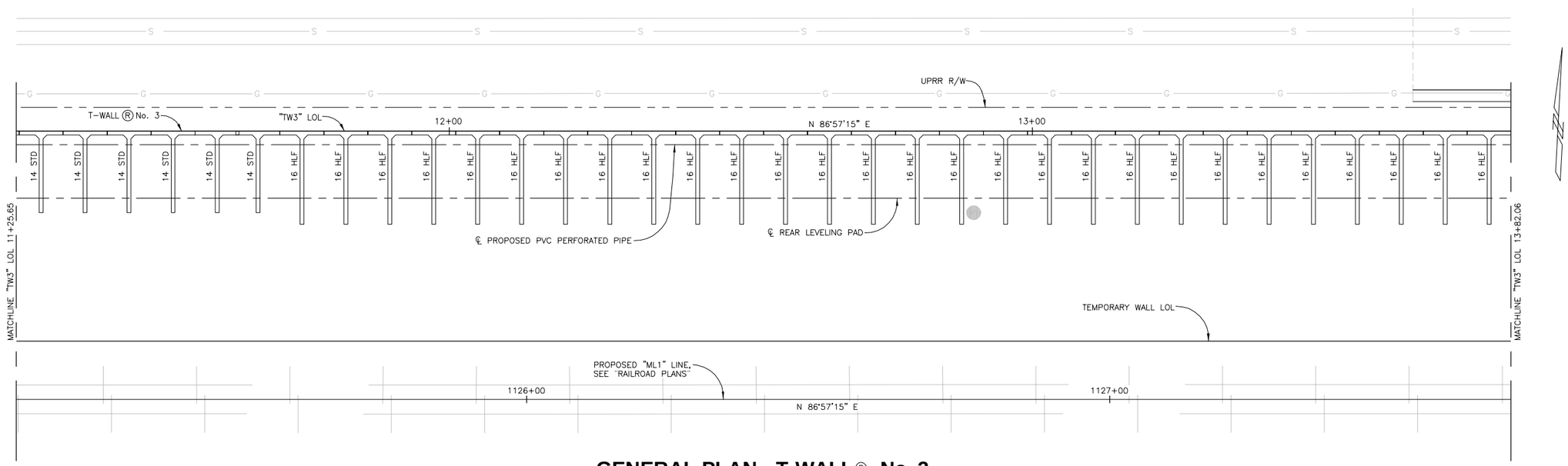


GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-476-S-TW3GP5
TIME: 9:58am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

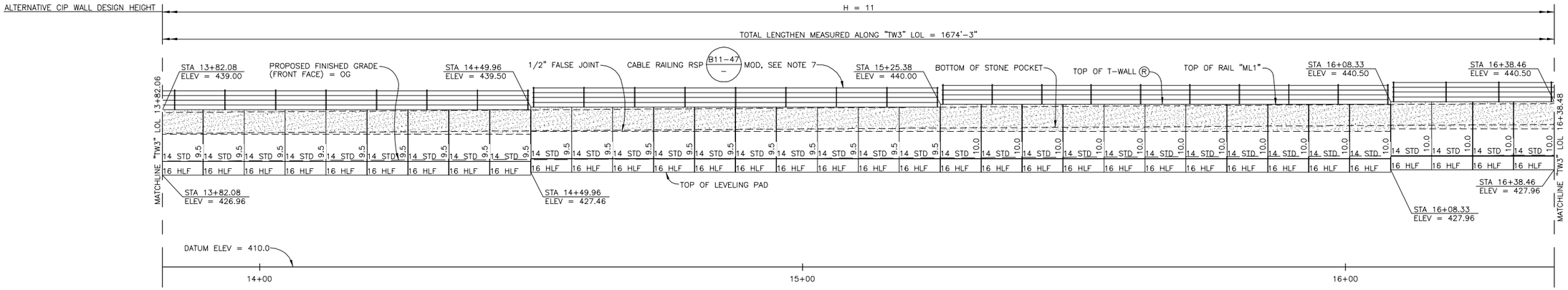
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL Ⓡ No. 3
GENERAL PLAN No. 5

CONTRACT No. | DWG S-476 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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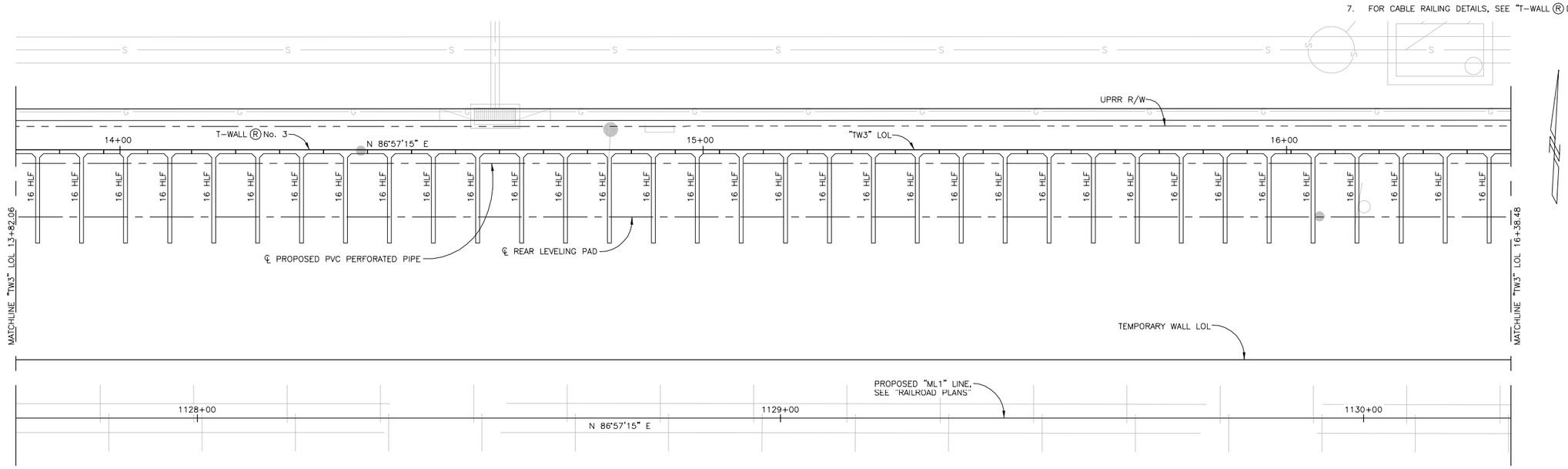


GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-477-S-TW3GP6
TIME: 9:59am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

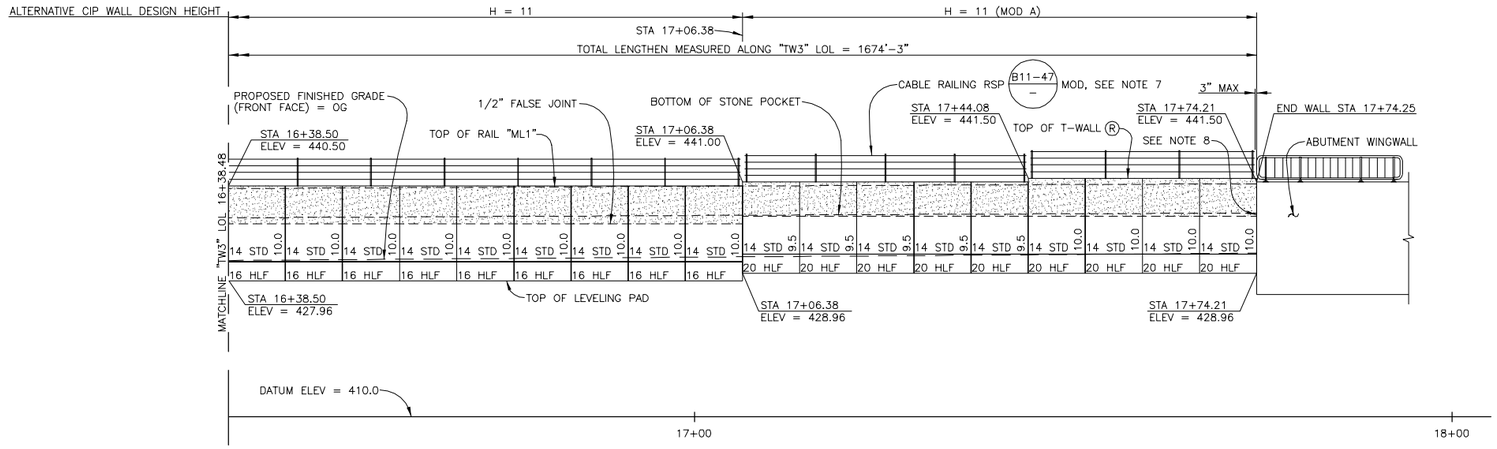
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

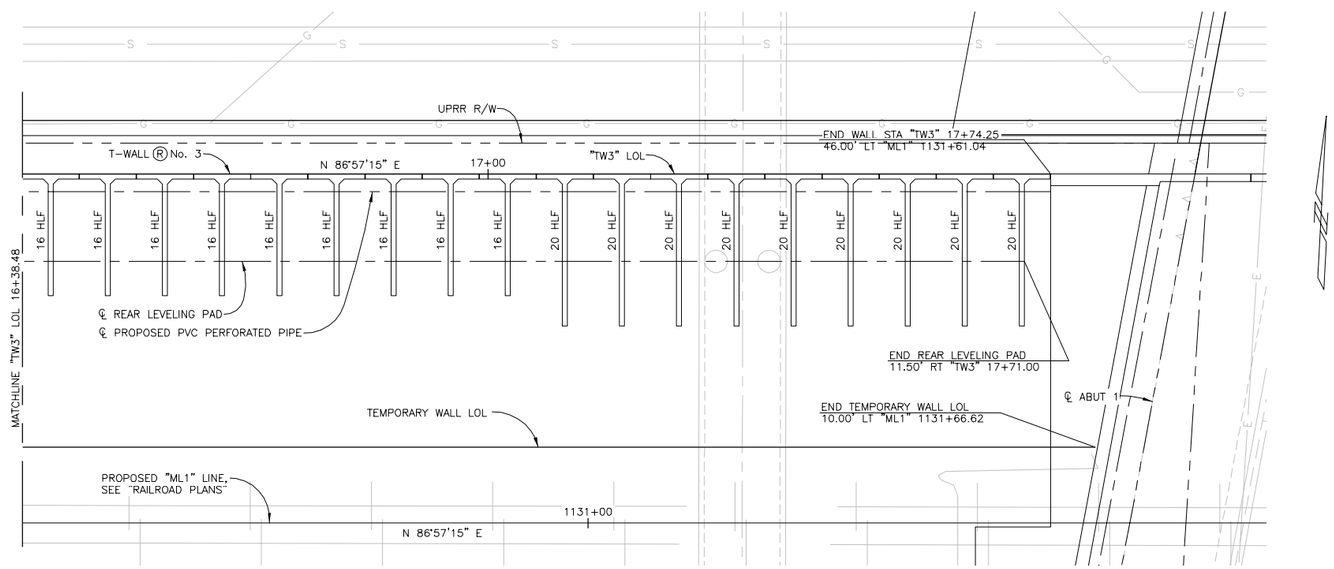
T-WALL ® No. 3
GENERAL PLAN No. 6

CONTRACT No. | DWG S-477 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'



GENERAL PLAN - T-WALL® No. 3

SCALE: 1" = 10'

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7. FOR CABLE RAILING DETAILS, SEE "T-WALL ® DETAILS No. 1" SHEET.
8. APPLY 1/2" VERTICAL JOINT BETWEEN T-WALL ® PANEL AND ABUTMENT WINGWALL. SEE "WINGWALL-T-WALL JOINT DETAIL" ON "T-WALL ® DETAILS No. 2" SHEET.

CADD PROJECT FILE NAME: P-207-478-S-TW3GP7
TIME: 9:59am DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: TEH DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR TRANSPORTATION AUTHORITY ACE

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
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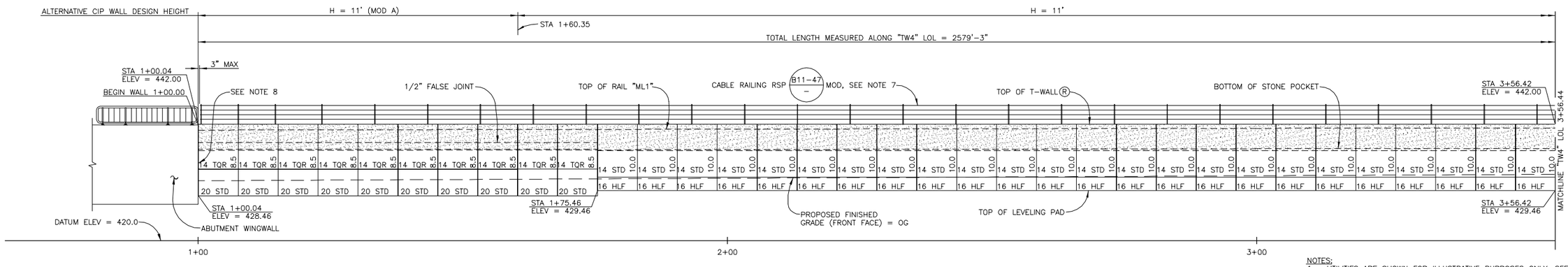
APPROVALS		
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL ® No. 3
GENERAL PLAN No. 7

CONTRACT No. | DWG S-478 | SHEET OF

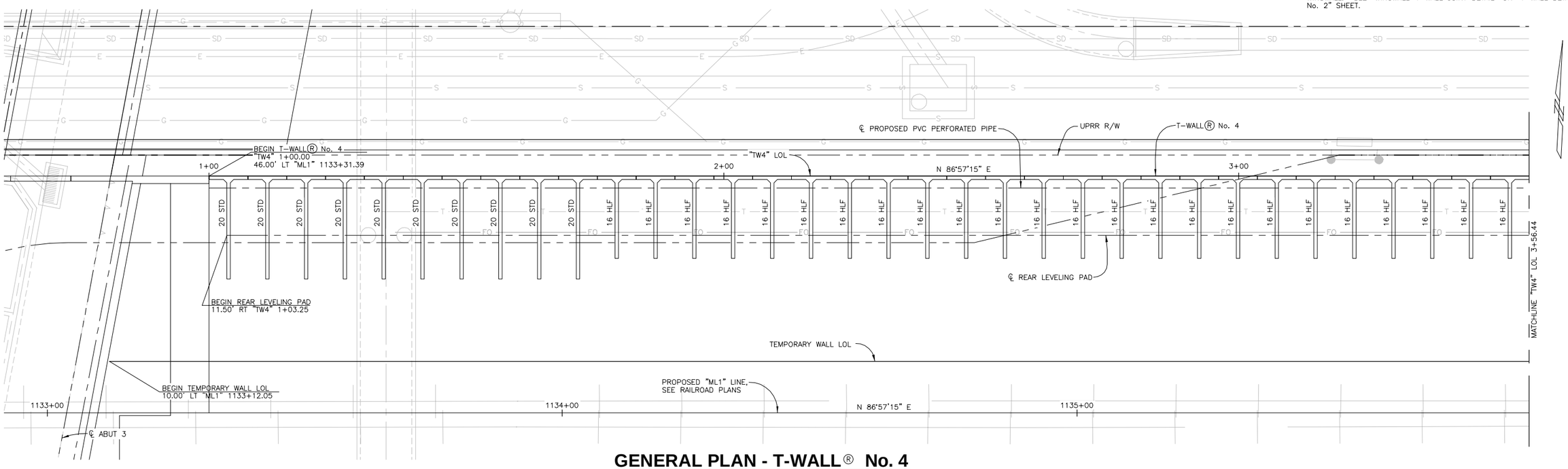


MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
3. T-WALL® No. 4 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL® No. 4 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS" SHEET.
8. APPLY 1/2" VERTICAL JOINT BETWEEN T-WALL® PANEL AND ABUTMENT WINGWALL. SEE "WINGWALL-T-WALL JOINT DETAIL" ON "T-WALL DETAILS No. 2" SHEET.



GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-479-S-TW4GP1
TIME: 12:58pm DATE: 7/21/2015

1-800-227-2600
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1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp.12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA
DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

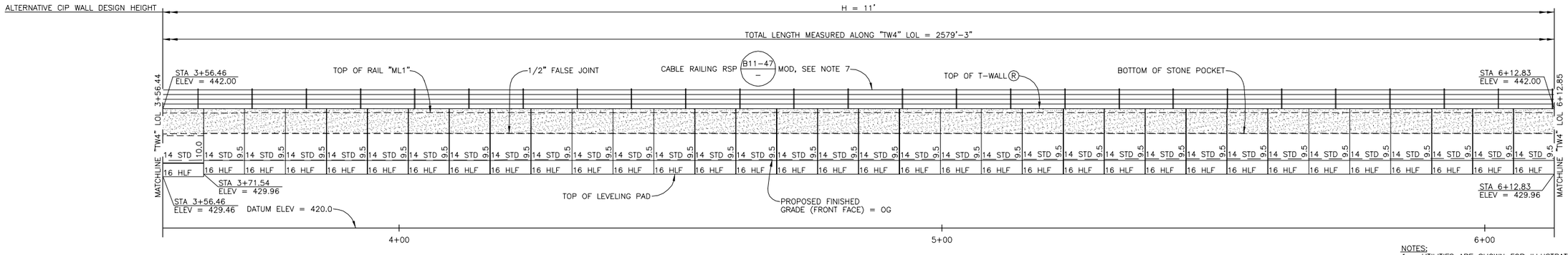
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 1

CONTRACT No. | DWG S-479 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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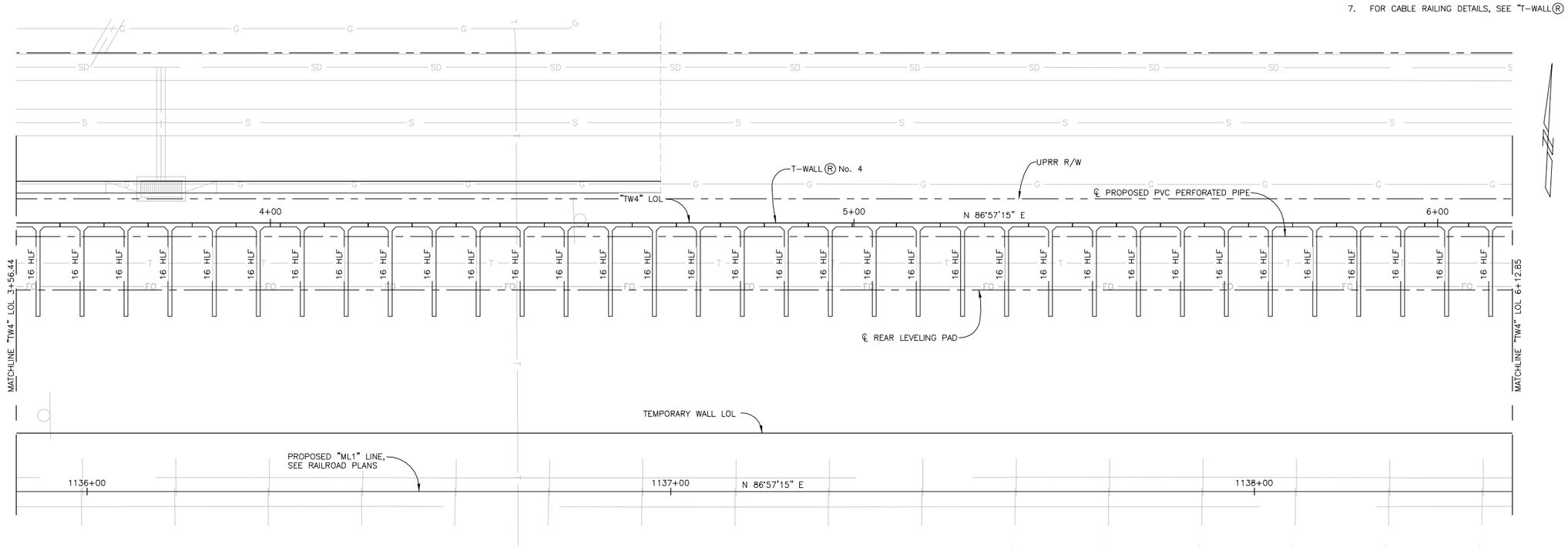


GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-480-S-TW4GP2
TIME: 12:59pm DATE: 7/21/2015

1-800-227-2600
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp.12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

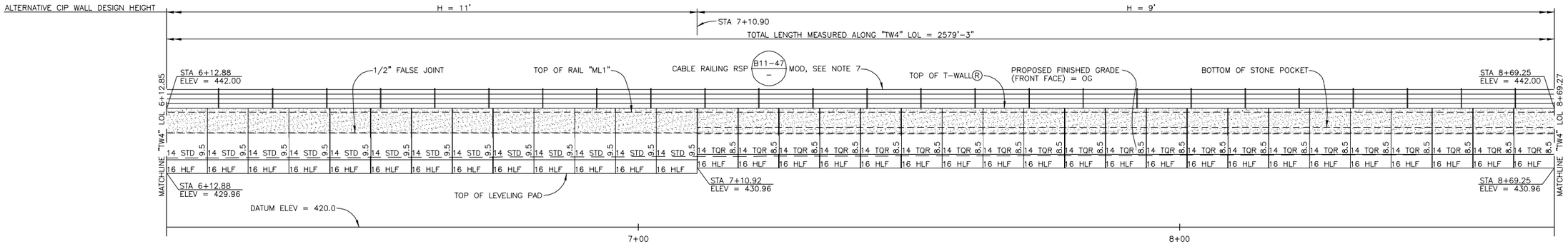
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 2

CONTRACT No. | DWG S-480 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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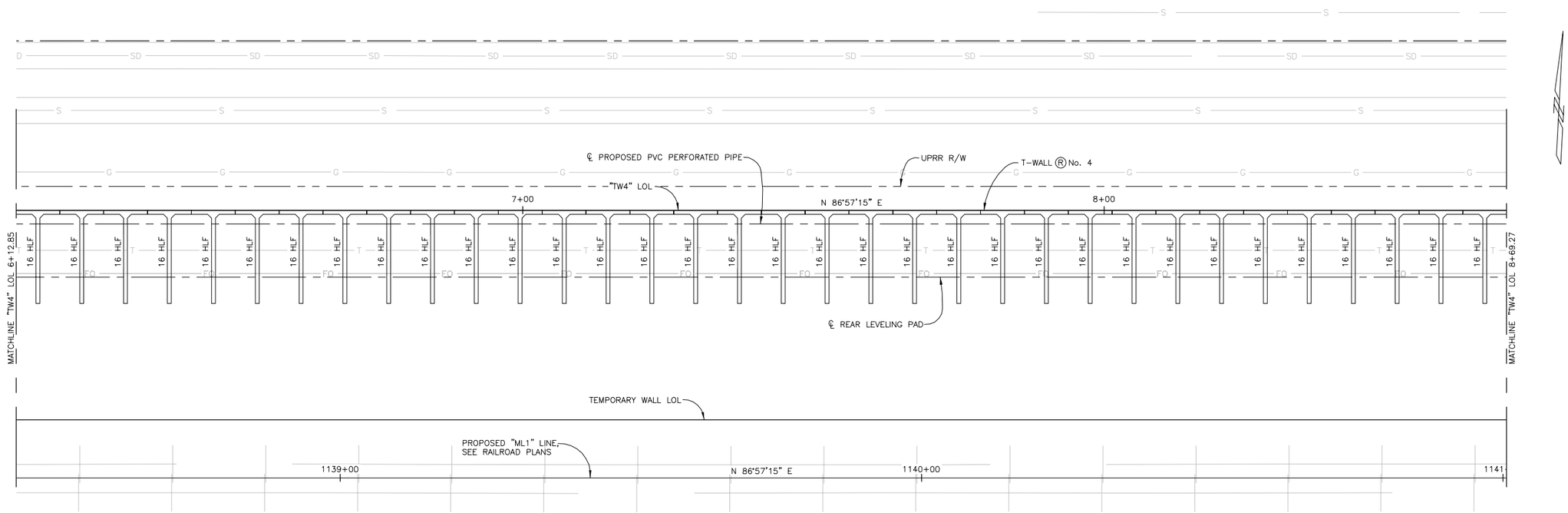


GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-481-S-TW4GP3
TIME: 12:59pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

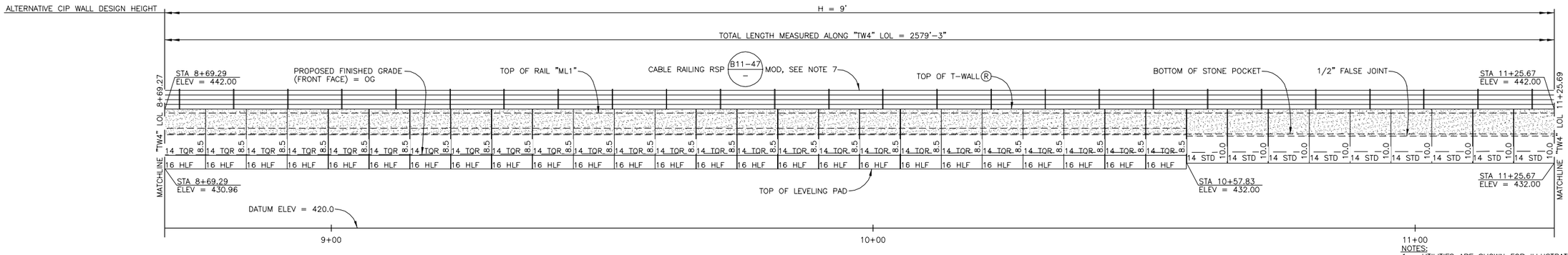
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 3

CONTRACT No. | DWG S-481 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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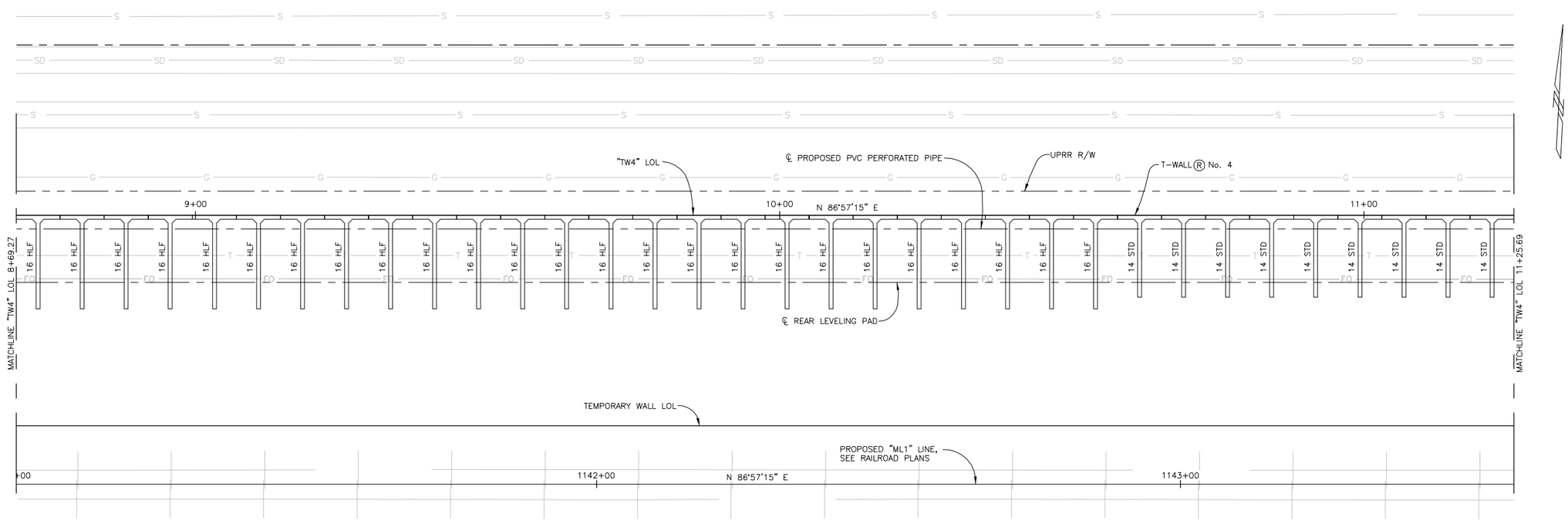

GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-482-S-TW4GP4
TIME: 1:00pm DATE: 7/21/2015

1-800-227-2600
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USA
UNDERGROUND SERVICE ALERT
1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
MIGUEL A CARBUCCIA
No. 70531
Exp. 12/31/16
CIVIL
STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665
BCA

DESIGNED BY: EJP	DATE: 5/14/14
DRAWN BY: DM	DATE: 5/14/14
CHECKED BY:	DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
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BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

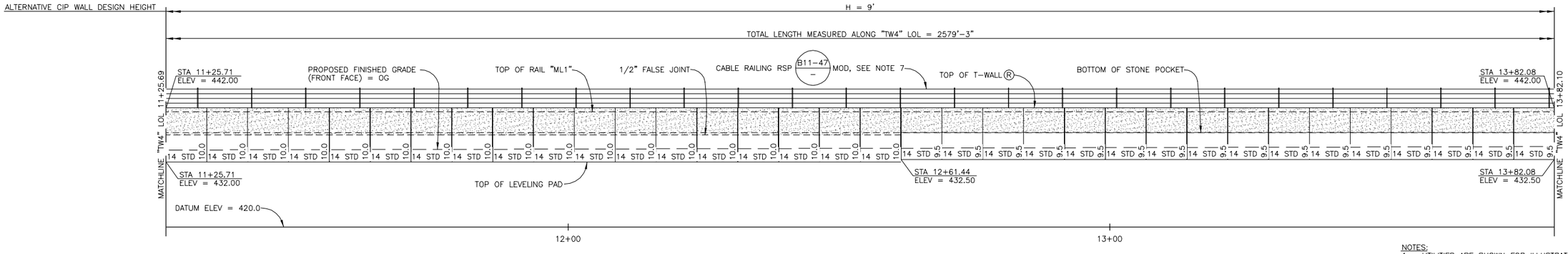
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 4

CONTRACT No. | DWG S-482 | SHEET OF



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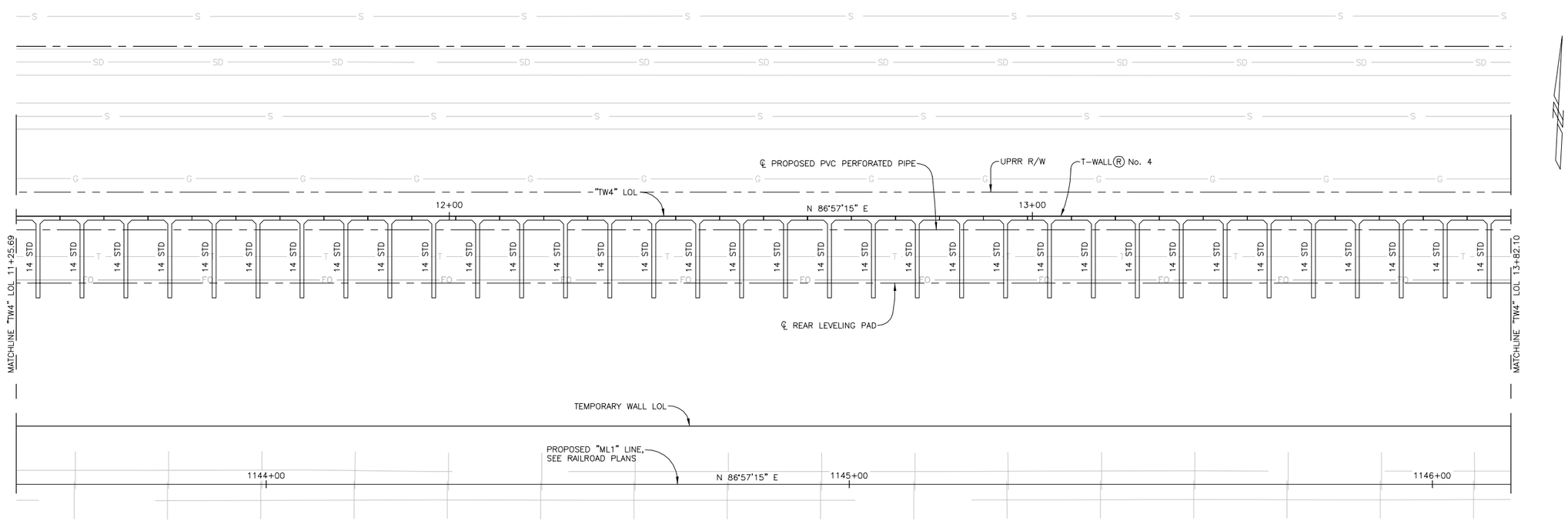

GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-483-S-TW4GP5
TIME: 1:00pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
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APPROVALS

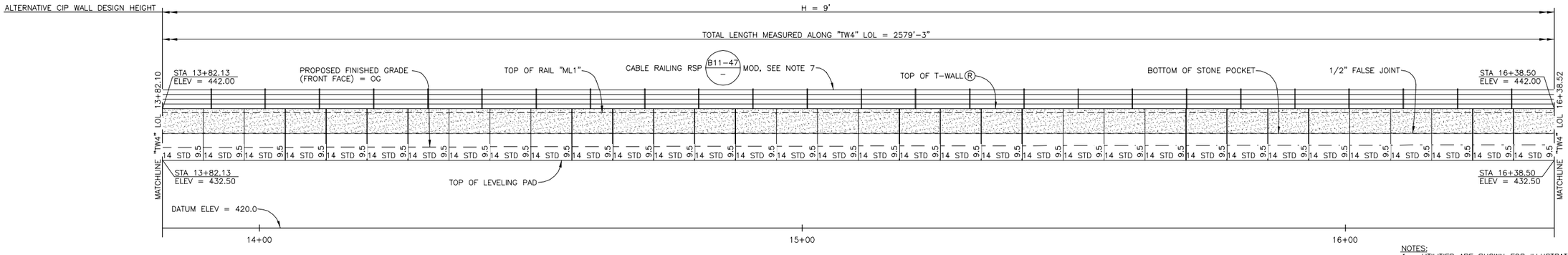
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 5

CONTRACT No. | DWG S-483 | SHEET OF



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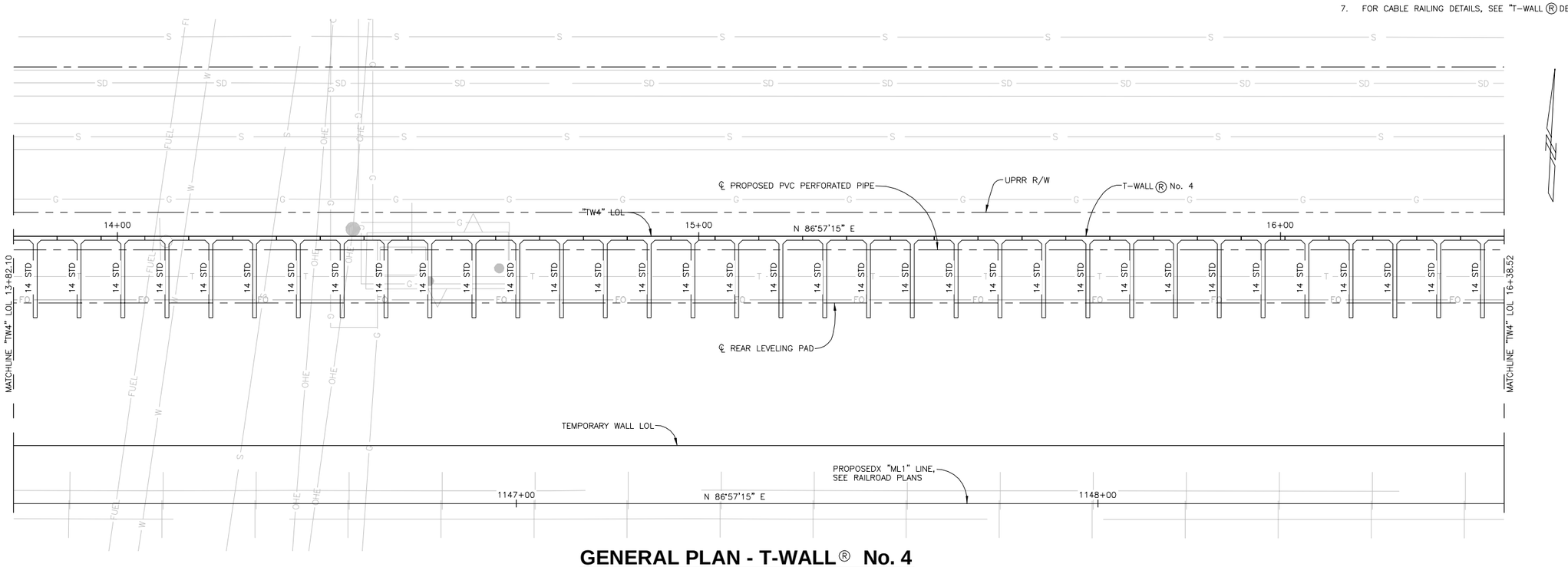

GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-484-S-TW4GP6
TIME: 1:01pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

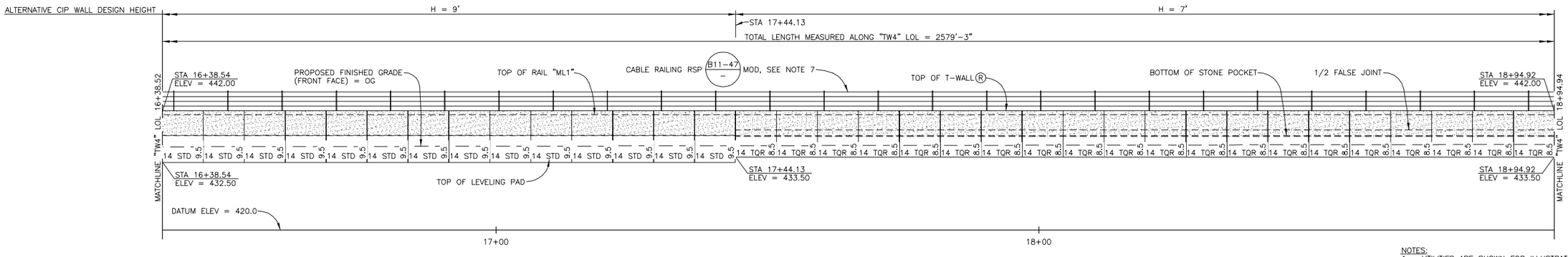
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 6

CONTRACT No. | DWG S-484 | SHEET OF



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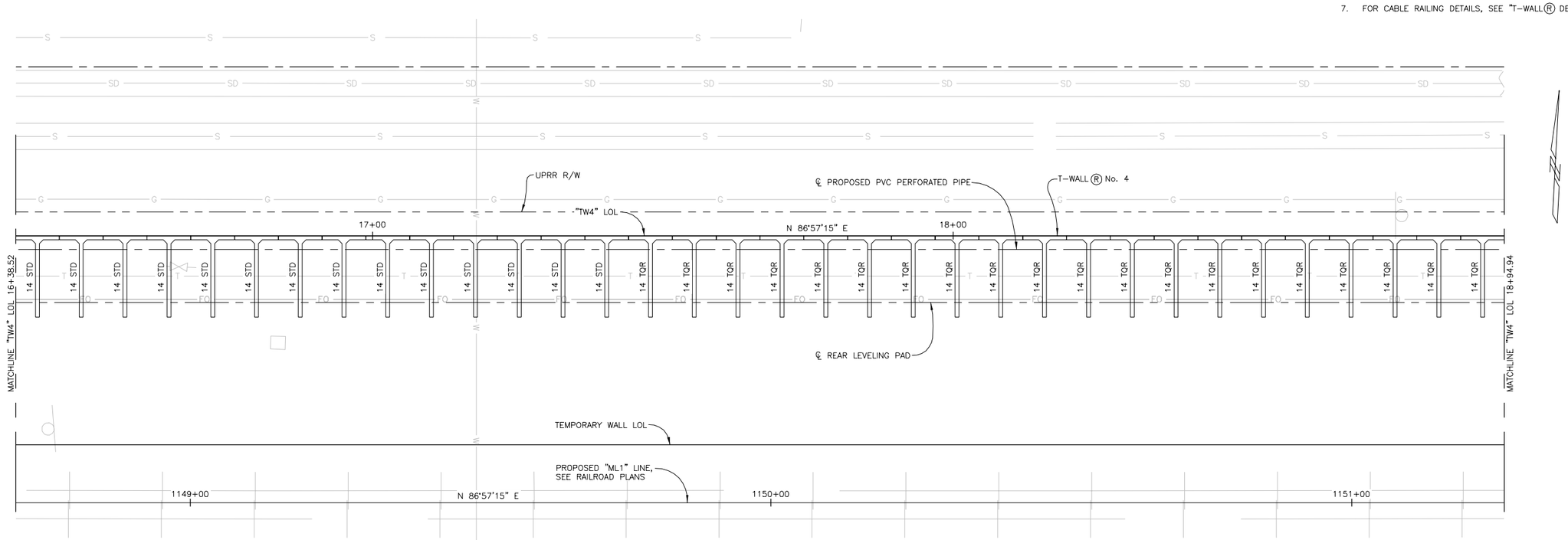

GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-485-S-TW4GP7
TIME: 1:02pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

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APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

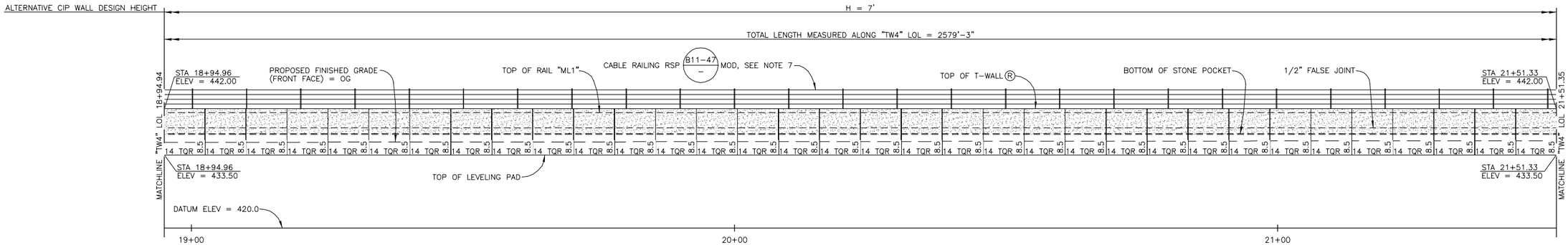
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 7

CONTRACT No. | DWG S-485 | SHEET OF

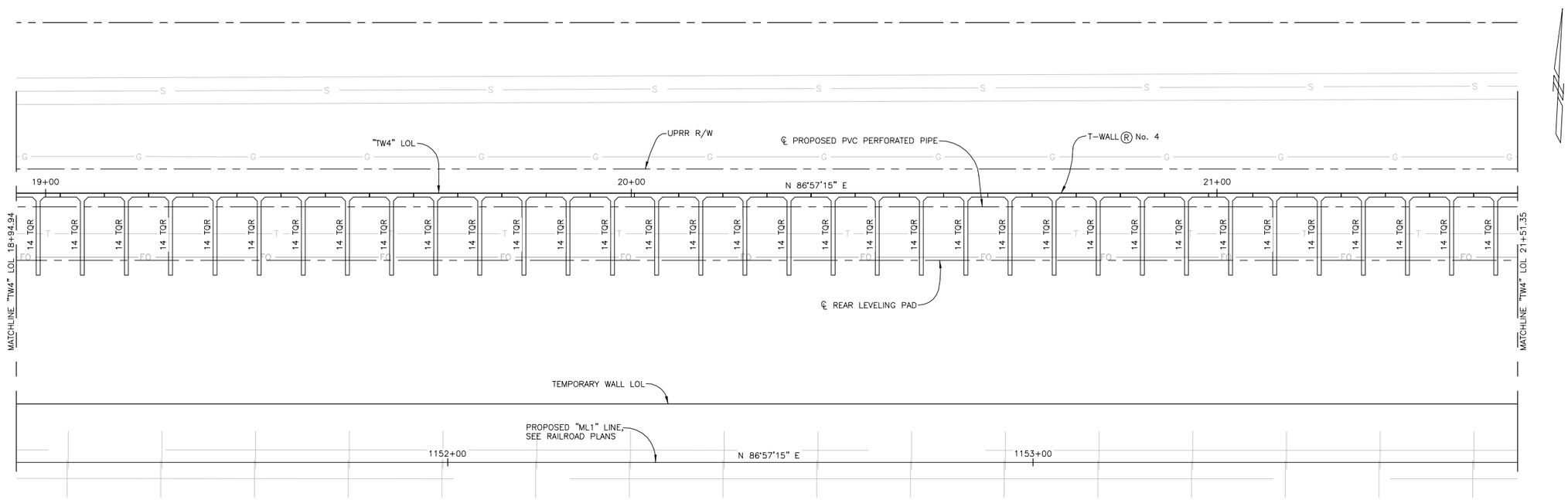


MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
2. CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS PRIOR TO T-WALL® CONSTRUCTION.
3. T-WALL® No. 4 LOL BASED ON OFFSET FROM "ML1" LINE. CONTRACTOR SHALL VERIFY THAT WALL ALIGNMENT CONFORMS TO UPRR MAINLINE TRACK PLANS.
4. T-WALL® No. 4 TOP OF WALL ELEVATIONS BASED ON "ML1" LINE PROFILES AND CROSS SECTIONS. CONTRACTOR SHALL VERIFY THAT TOP OF WALL ELEVATIONS CONFORM TO UPRR MAINLINE TRACK PLANS.
5. ALL TEMPORARY SHORING SYSTEMS THAT IMPACT RAILROAD OPERATIONS AND/OR SUPPORT THE RAILROAD EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT VERSION OF THE BNSF/UPRR GUIDELINES FOR TEMPORARY SHORING.
6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS" SHEET.



GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-486-S-TW4GP8
TIME: 1:02pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY ACE

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

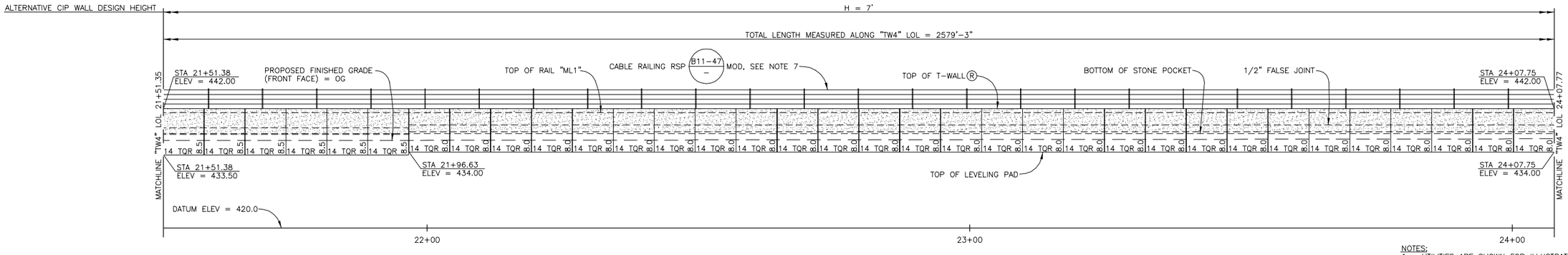
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 8

CONTRACT No. | DWG S-486 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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6. RAILROAD'S REVIEW AND APPROVAL OF SHORING, DEMOLITION AND FALSEWORK ARE REQUIRED.
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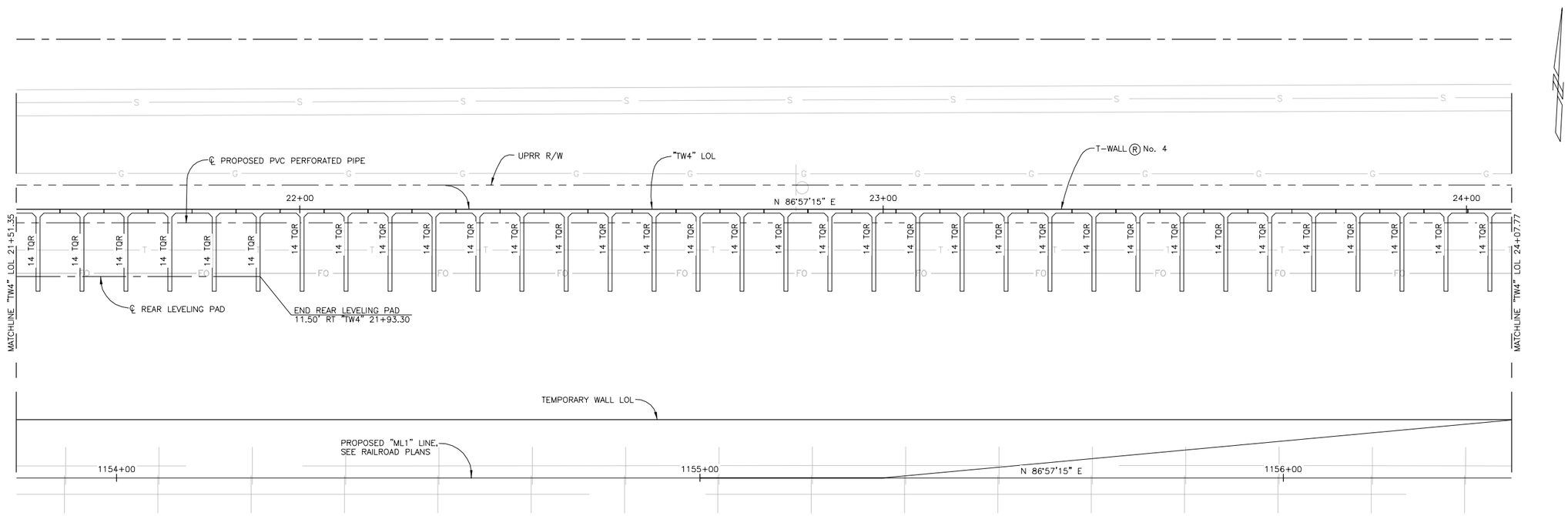


GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-487-S-TW4GP9
TIME: 1:03pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

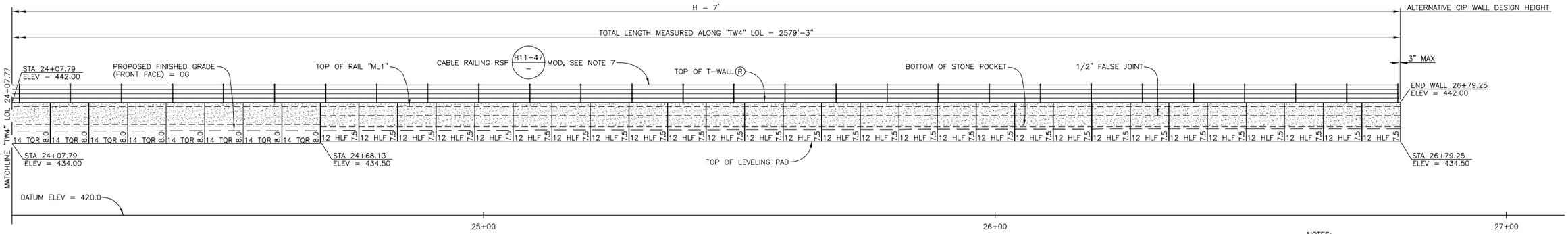
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 9

CONTRACT No. | DWG S-487 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

1. UTILITIES ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY, SEE "UTILITY PLANS."
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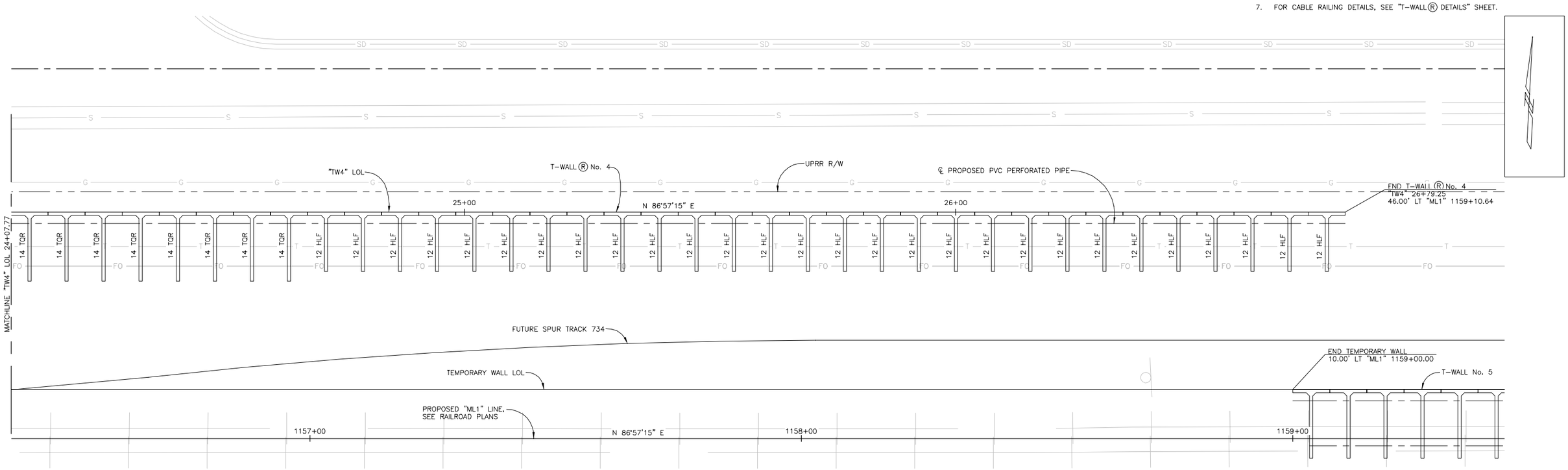


GENERAL PLAN - T-WALL® No. 4

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-488-S-TW4GP10
TIME: 1:03pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:

UNDER THE SUPERVISION OF:

NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

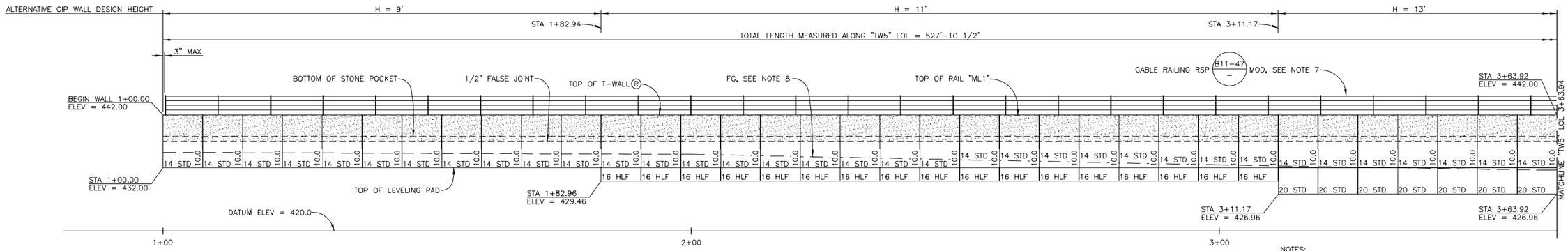
APPROVED

CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

T-WALL® No. 4
GENERAL PLAN No. 10

CONTRACT No. | DWG S-488 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

NOTES:

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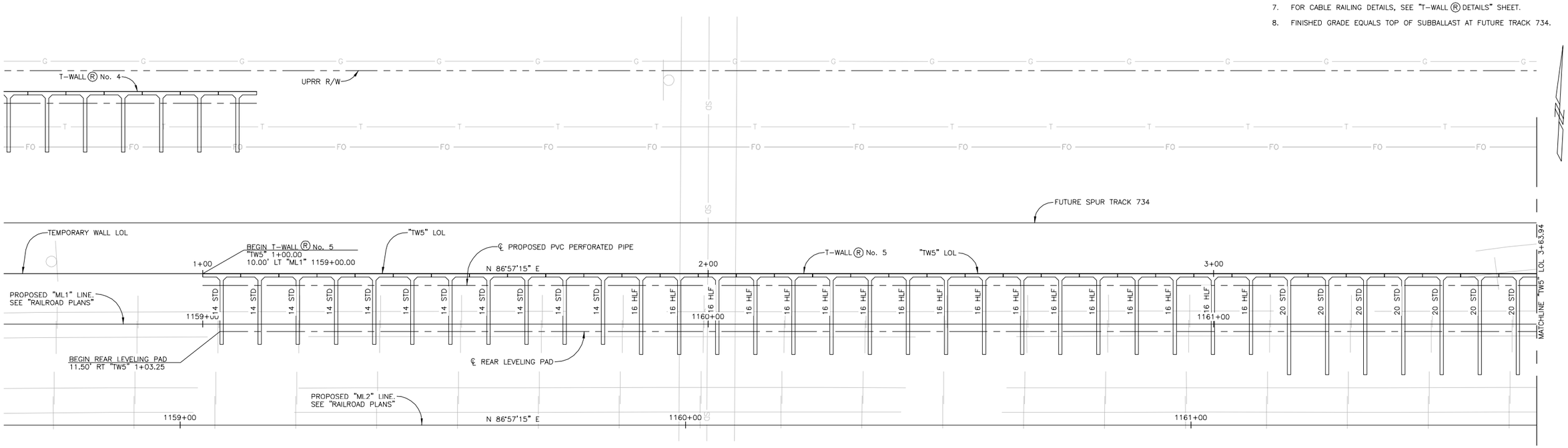
7. FOR CABLE RAILING DETAILS, SEE "T-WALL® DETAILS" SHEET.
8. FINISHED GRADE EQUALS TOP OF SUBBALLAST AT FUTURE TRACK 734.



GENERAL PLAN - T-WALL® No. 5

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-489-S-TW5GP1
TIME: 1:04pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455'
NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025
N04°23'04"E

APPROVALS

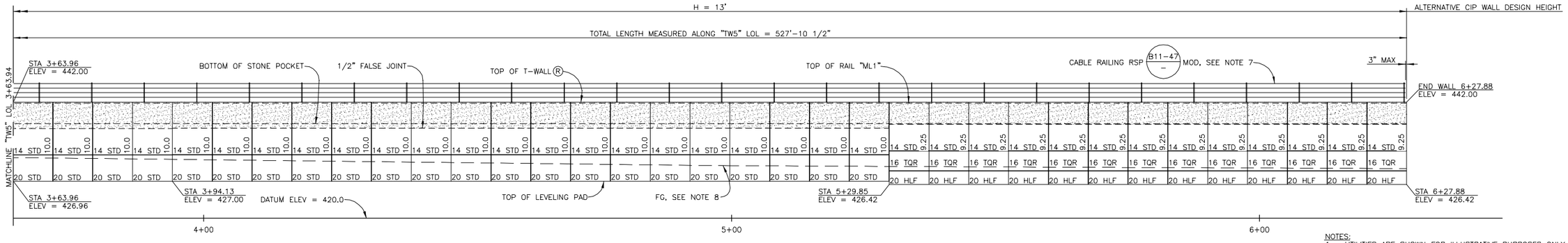
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 5
GENERAL PLAN No. 1

CONTRACT No. | DWG S-489 | SHEET OF



MIRRORED ELEVATION (FRONT FACE)

SCALE: 1" = 10'

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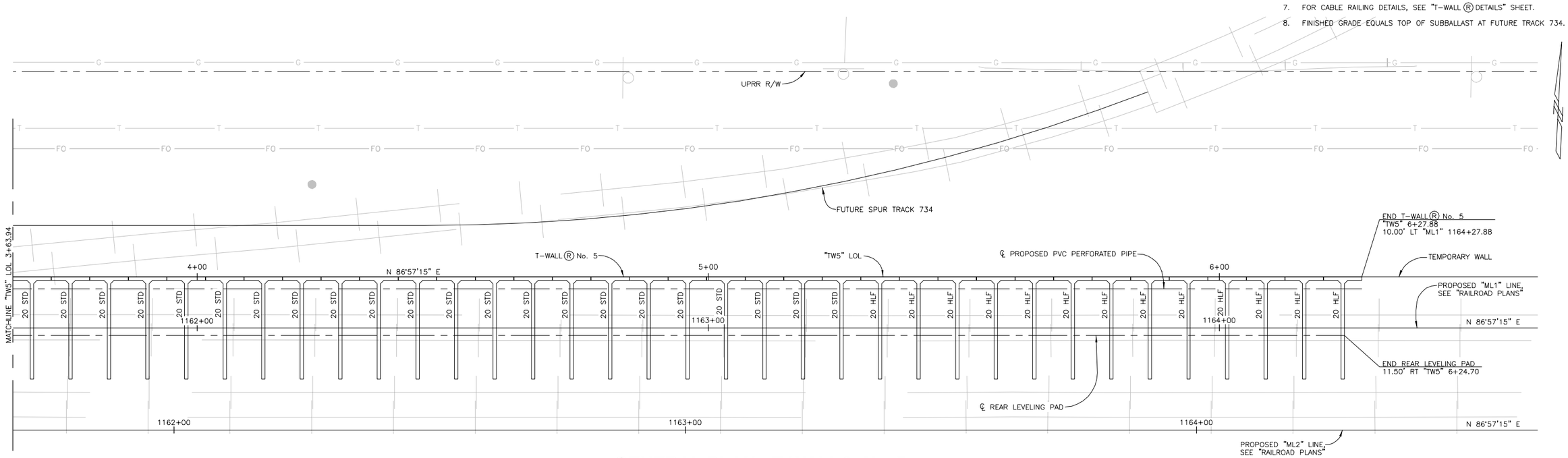


GENERAL PLAN - T-WALL® No. 5

SCALE: 1" = 10'

CADD PROJECT FILE NAME: P-207-490-S-TW5GP2
TIME: 1:04pm DATE: 7/21/2015

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER MIGUEL A CARBUCCIA No. 70531 Exp.12/31/16 CIVIL STATE OF CALIFORNIA

PLANS PREPARED BY:
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

DESIGNED BY: EJP DATE: 5/14/14
DRAWN BY: DM DATE: 5/14/14
CHECKED BY: DATE:
UNDER THE SUPERVISION OF:
NAME RCE # 70531 DATE: 8/12/15

REVISIONS

NO.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:
BM R-3 ELEVATION 430.455' NGVD29
C. OF I.B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

BASIS OF BEARING:
HELD GRID BEARING BETWEEN CITY GPS POINT I-026 AND I-025 N04°23'04"E

APPROVALS

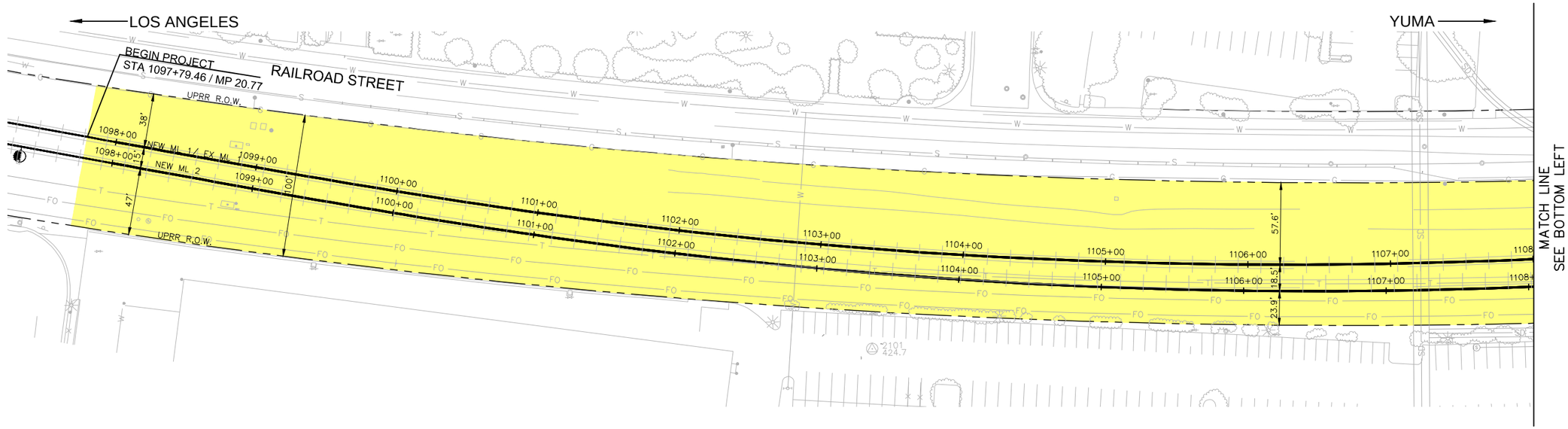
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

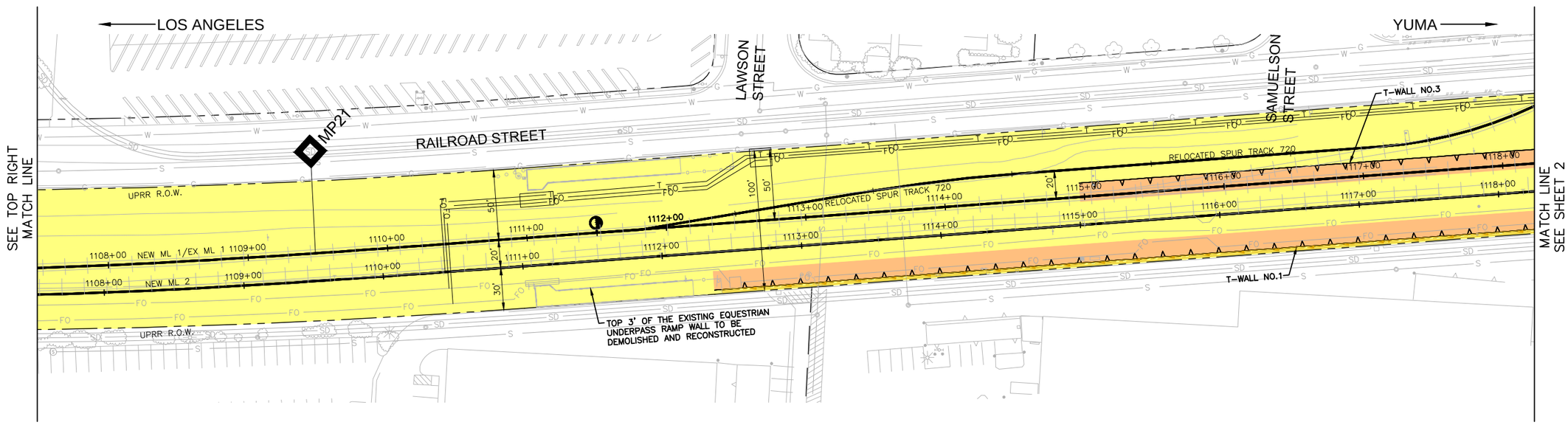
APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST
CONSTRUCTION AUTHORITY
FULLERTON RD GRADE SEPARATION

T-WALL® No. 5
GENERAL PLAN No. 2

CONTRACT No. | DWG S-490 | SHEET OF





LEGEND:

- EXISTING RIGHT OF WAY
- TRACK RETAINING WALL WORK = 137,047 SF
- TRACK AND GRADING WORK = 688,168 SF
- ROADWAY RETAINING WALL/BRIDGE ABUTMENT WORK = 4,446 SF
- PERMANENT ROADWAY EASEMENT = 1,289 SF

GRAPHIC SCALE IN FEET
0 20 40 80

95% SUBMITTAL SET - NOT FOR CONSTRUCTION 10/10/14

CADD PROJECT FILE NAME: EXHIBIT A-1.DWG
TIME: 9:13:18 AM DATE: 10/10/2014

1-800-227-2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
DARREN J. ADRIAN
No. 53031
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: JA DATE:
DRAWN BY: RFB DATE:
CHECKED BY: GSM DATE:
UNDER THE SUPERVISION OF:
NAME DARREN J. ADRIAN RCE # 53031 DATE: 05/21/14

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
600 So. Main St, Suite 900
Orange, California 92868
714-550-4665

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:

BM R-3 ELEVATION 430.455' NGVD29
C. OF I. B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

APPROVALS

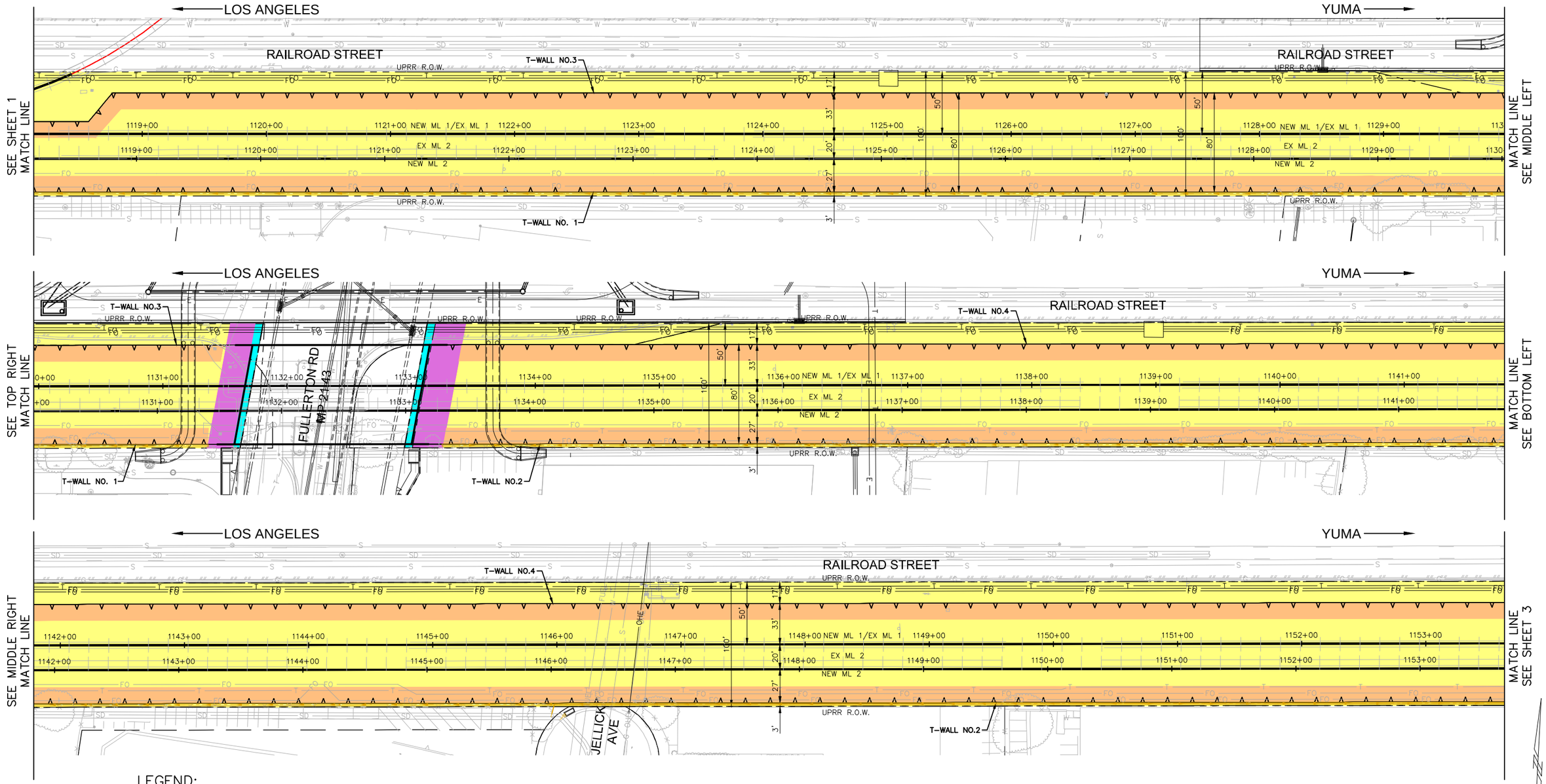
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

UPRR C&M AGREEMENT
EXHIBIT A1 – SHEET 1 OF 3

CONTRACT No. | DWG | SHEET OF –



LEGEND:

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- PERMANENT ROADWAY EASEMENT = 1,289 SF

GRAPHIC SCALE IN FEET
0 20 40 80

95% SUBMITTAL SET - NOT FOR CONSTRUCTION 10/10/14

CADD PROJECT FILE NAME: EXHIBIT A-1.DWG
TIME: 9:13:28 AM DATE: 10/10/2014

1-800-227-2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
DARREN J. ADRIAN
No. 53031
CIVIL
STATE OF CALIFORNIA

Kimley»Horn

DESIGNED BY: JA DATE:
DRAWN BY: RFB DATE:
CHECKED BY: GSM DATE:
UNDER THE SUPERVISION OF:
NAME DARREN J. ADRIAN RCE # 53031 DATE: 05/21/14

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
600 So. Main St, Suite 900
Orange, California 92868
714-550-4665

ACE
ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:

BM R-3 ELEVATION 430.455' NGVD29
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APPROVALS

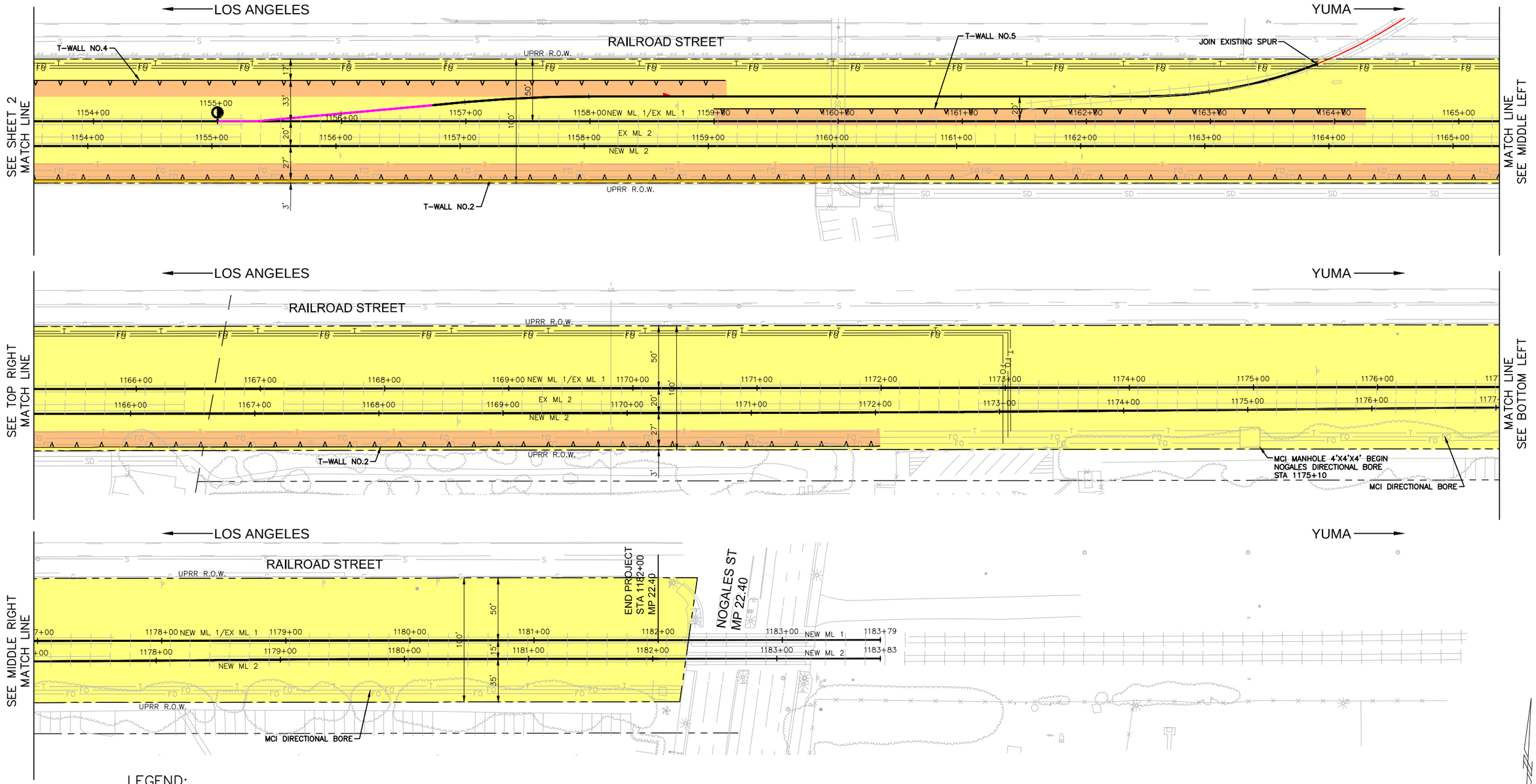
DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

UPRR C&M AGREEMENT
EXHIBIT A1 – SHEET 2 OF 3

CONTRACT No. | DWG | SHEET OF –



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- TRACK AND GRADING WORK = 688,168 SF
- ROADWAY RETAINING WALL/BRIDGE ABUTMENT WORK = 4,446 SF
- PERMANENT ROADWAY EASEMENT = 1,289 SF

GRAPHIC SCALE IN FEET
0 20 40 80

95% SUBMITTAL SET - NOT FOR CONSTRUCTION 10/10/14

CADD PROJECT FILE NAME: EXHIBIT A-1.DWG
TIME: 9:13:35 AM DATE: 10/10/2014

1-800-227-2600 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER DARREN J. ADRIAN No. 53031 CIVIL STATE OF CALIFORNIA

Kimley»Horn
DESIGNED BY: JA DATE:
DRAWN BY: RFB DATE:
CHECKED BY: GSM DATE:
UNDER THE SUPERVISION OF:
NAME DARREN J. ADRIAN RCE # 53031 DATE: 05/21/14

BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS
BCA
600 So. Main St, Suite 900 Orange, California 92868 714-550-4665

ACE ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

REVISIONS

No.	DATE	BY	DESCRIPTION	APP'D BY	DATE

BENCH MARK:

BM R-3 ELEVATION 430.455' NGVD29
C. OF L B.C. MON. IN S'LY CURB OF SAN JOSE AVE. ±1' E/O B.C.R., ±68' E/O CENTERLINE OF FULLERTON ROAD & ±2073' E/O LAWSON AVENUE.

APPROVALS

DIVISION	BY	DATE
DESIGN		
TRAFFIC		
RIGHT OF WAY		
UTILITIES		
PROJECT MANAGER		

APPROVED
CHIEF ENGINEER RCE # DATE

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY FULLERTON RD GRADE SEPARATION

UPRR C&M AGREEMENT
EXHIBIT A1 SHEET 3 OF 3

CONTRACT No. | DWG | SHEET OF –

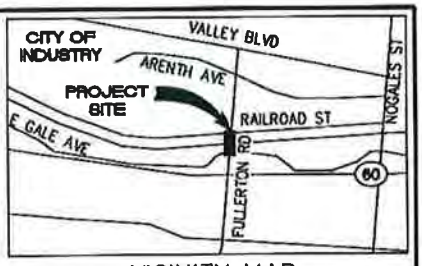
ACE

ACCEPTED _____
CHIEF ENGINEER

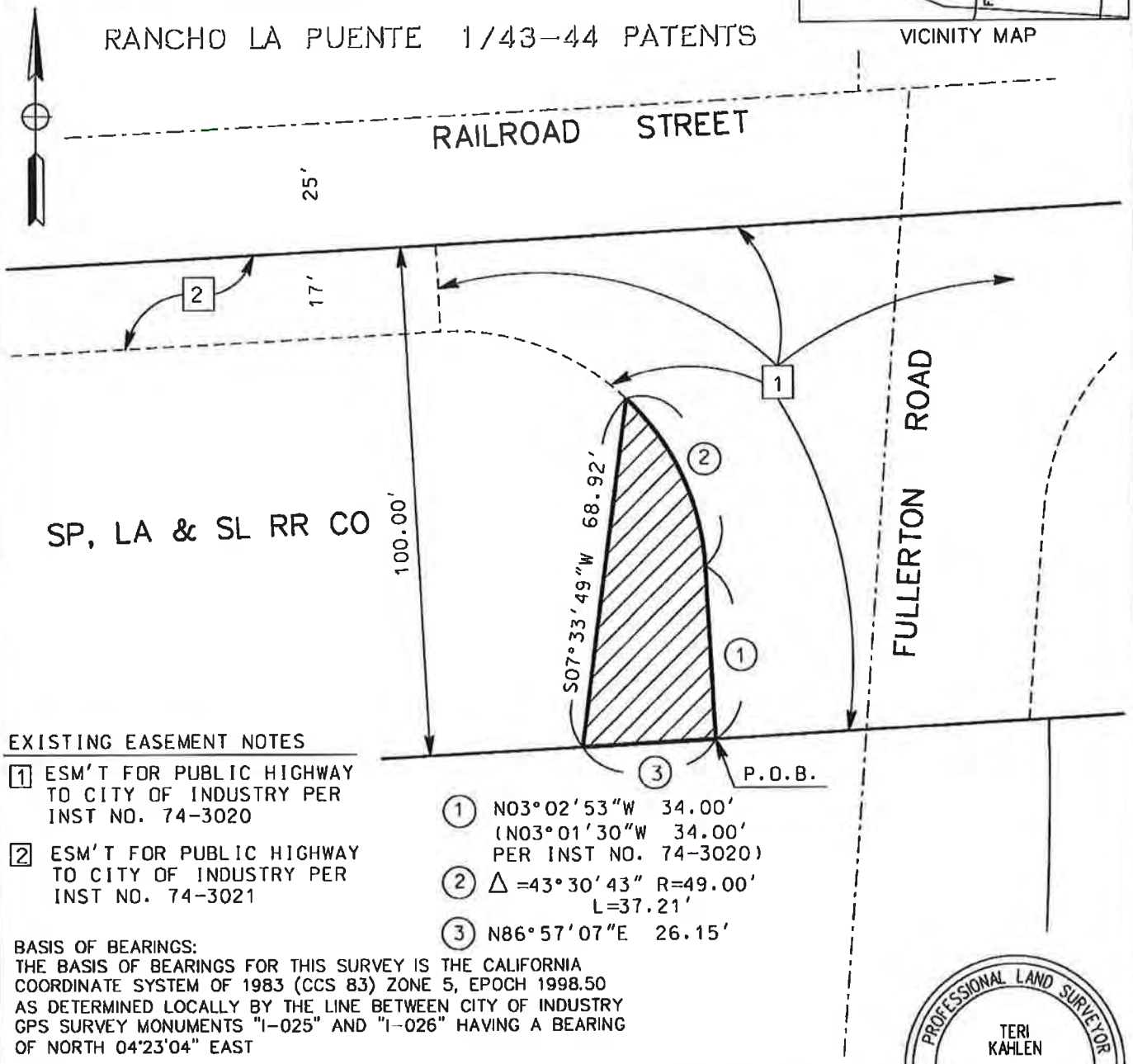
DATE: 9/11/15

EXHIBIT "B"

PARCEL 207-UPRR-2-RE
ROADWAY EASEMENT



VICINITY MAP



EXISTING EASEMENT NOTES

1. ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3020
2. ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3021

(1) N03°02'53"W 34.00'
(N03°01'30"W 34.00' PER INST NO. 74-3020)

(2) Δ =43°30'43" R=49.00'
L=37.21'

(3) N86°57'07"E 26.15'

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS 83) ZONE 5, EPOCH 1998.50 AS DETERMINED LOCALLY BY THE LINE BETWEEN CITY OF INDUSTRY GPS SURVEY MONUMENTS "I-025" AND "I-026" HAVING A BEARING OF NORTH 04°23'04" EAST

INDICATES ROADWAY EASEMENT TO BE ACQUIRED

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

ACE PARCEL NO: 207-UPRR-2-RE APN: APN 8264-018-805 OWNER: S.P., L.A. & S.L. RR CO.	AREA	TOTAL	REQUIRED	REMAINDER
	SQUARE FEET	199,702	1,200	198,502

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY

VA CONSULTING, INC.
Teri Kahlen
CHECKED BY PLS 8746

ACE RECOMMENDED BY:
9/10/15
PROJECT MANAGER DATE

FULLERTON ROAD GRADE SEPARATION
CITY OF INDUSTRY
COUNTY OF LOS ANGELES
STATE OF CALIFORNIA

DATE: 07/18/14
SCALE: 1"=30'
REV NO.: 1
SHEET: 1 OF 1

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 207-UPRR-2-RE
Roadway Easement

That portion of the Rancho La Puente, in the City of Industry, County of Los Angeles, State of California, as per Map recorded in book 1, pages 43 and 44 of Patents, lying within that certain 100.00 foot wide strip of land acquired by the San Pedro, Los Angeles & Salt Lake Railroad Company by Final Order of Condemnation in Case No. 37036, recorded December 18, 1902 as Instrument No. 68 of the Supreme Court of the State of California, described as follows:

Beginning at the southerly terminus of that certain course described as having a bearing of North 03°01'30" West, and a length of 34.00 feet in the southwesterly line of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3020 of Official Records in the office of the County Recorder of said County;

thence along said certain course, North 03°02'53" West, 34.00 feet to the beginning of a tangent curve, concave southwesterly and having a radius of 49.00 feet in said southwesterly line;

thence Northwesterly 37.21 feet along said curve and said southwesterly line through a central angle of 43°30'43";

thence leaving said southwesterly line, South 07°33'49" West, 68.92 feet to the southerly line of that certain 100.00 foot wide strip of land acquired by said San Pedro, Los Angeles & Salt Lake Railroad Company;

thence North 86°57'07" East, 26.15 feet along the southerly line of said 100.00 foot wide strip of land to the Point of Beginning.

The above-described parcel of land contains 1,200 square feet.

As more particularly shown on Exhibit "B" attached hereto and made a part hereof.

This real property description and accompanying plat have been prepared by me or under my direction in conformance with the Professional Land Surveyor's Act.

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

Teri Kahlen 7/18/14
Teri Kahlen, PLS 8746 Date

S:\Projects\1114_0304 Fullerton Road Grade Separation\SurMap\CAD\Maps & Exhibits\Parcels\207-UPRR-2\Legal Description\PARCEL 207UPRR-2-RE REV 1- Legal Description doc

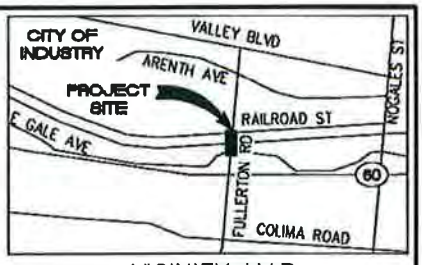
ACE

ACCEPTED _____ CHIEF ENGINEER

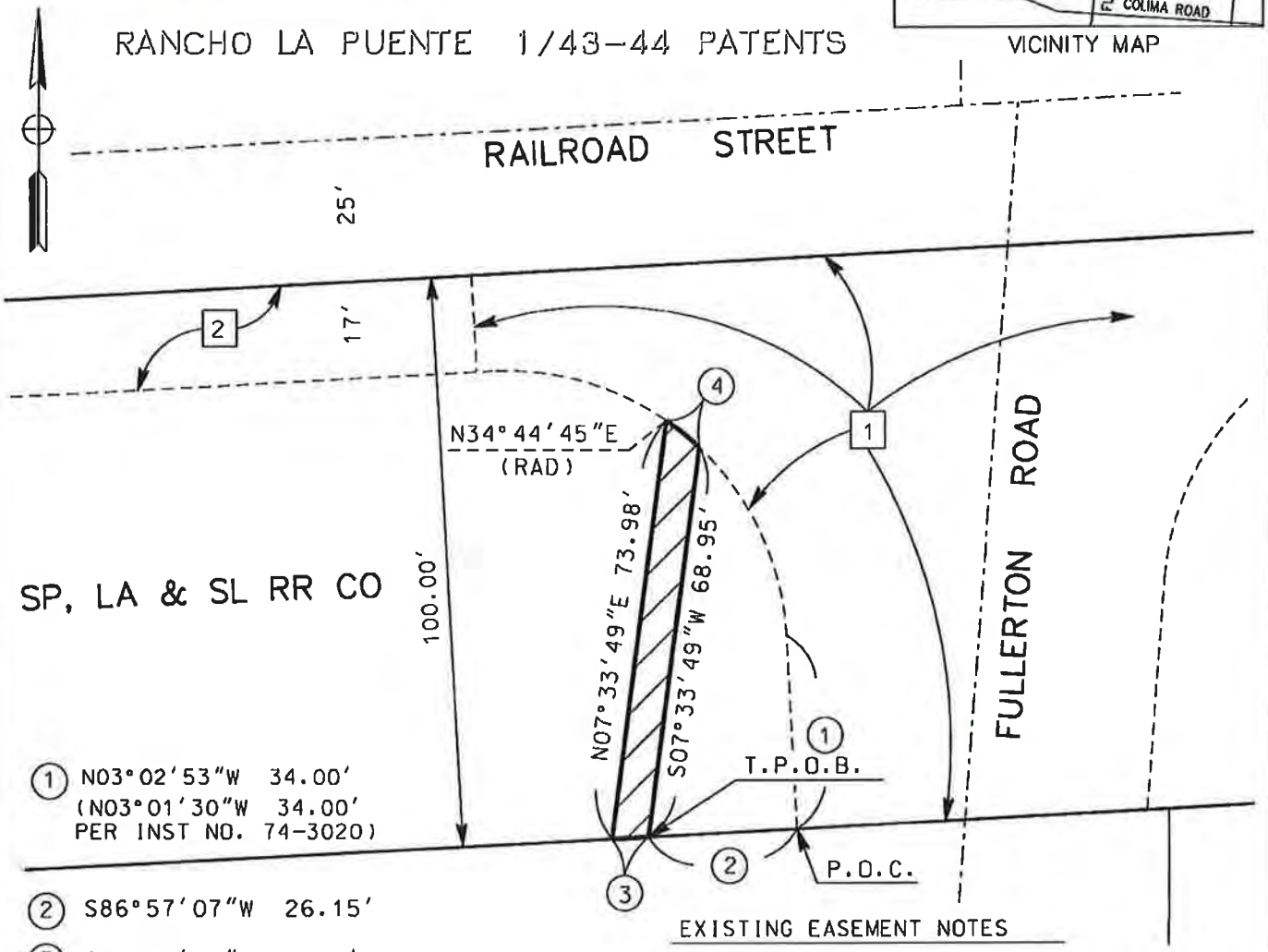
DATE: 9/11/15

EXHIBIT "B"

PARCEL 207-UPRR-2-PE
PERMANENT EASEMENT



VICINITY MAP



(1) N03°02'53"W 34.00'
(N03°01'30"W 34.00'
PER INST NO. 74-3020)

(2) S86°57'07"W 26.15'

(3) S86°57'07"W 6.41'

(4) Δ=08°38'36" R=49.00' L=7.39'

EXISTING EASEMENT NOTES

[1] ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3020

[2] ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3021

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS 83) ZONE 5, EPOCH 1998.50 AS DETERMINED LOCALLY BY THE LINE BETWEEN CITY OF INDUSTRY GPS SURVEY MONUMENTS "I-025" AND "I-026" HAVING A BEARING OF NORTH 04°23'04" EAST

INDICATES PERMANENT EASEMENT TO BE ACQUIRED

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

ACE PARCEL NO:207-UPRR-2-PE APN: 8264-018-805 OWNER:S.P.,L.A.&S.L. RR CO.	AREA	TOTAL	REQUIRED	REMAINDER
	SQUARE FEET	199,702	451	199,251

ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY

VA CONSULTING, INC.

Teri Kahlen

CHECKED BY PLS 8746

ACE RECOMMENDED BY:

9/10/15

PROJECT MANAGER DATE

FULLERTON ROAD GRADE SEPARATION

CITY OF INDUSTRY
COUNTY OF LOS ANGELES
STATE OF CALIFORNIA

DATE: 09/11/14

SCALE: 1"=30'

REV NO.: 1

SHEET: 1 OF 1

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 207-UPRR-2-PE
Permanent Easement

That portion of the Rancho La Puente, in the City of Industry, County of Los Angeles, State of California, as per Map recorded in book 1, pages 43 and 44 of Patents, lying within that certain 100.00 foot wide strip of land acquired by the San Pedro, Los Angeles & Salt Lake Railroad Company by Final Order of Condemnation in Case No. 37036, recorded December 18, 1902 as Instrument No. 68 of the Supreme Court of the State of California, described as follows:

Commencing at the southerly terminus of that certain course described as having a bearing of North 03°01'30" West, and a length of 34.00 feet in the southwesterly line of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3020 of Official Records in the office of the County Recorder of said County;

thence along the southerly line of that certain 100.00 foot wide strip of land acquired by San Pedro, Los Angeles & Salt Lake Railroad Company, South 86°57'07" West, 26.15 feet to the True Point of Beginning;

thence continuing along said southerly line, South 86°57'07" West, 6.41 feet;

thence leaving said southerly line, North 07°33'49" East, 73.98 feet to the beginning of a non-tangent curve, concave southwesterly and having a radius of 49.00 feet in the southwesterly line of the land described in said Easement Deed to the City of Industry, a radial line of said curve bears North 34°44'45" East;

thence Southeasterly 7.39 feet along said curve and said southwesterly line through a central angle of 08°38'36";

thence leaving said southwesterly line, South 07°33'49" West, 68.95 feet to the southerly line of the land acquired by said San Pedro, Los Angeles & Salt Lake Railroad Company and the True Point of Beginning.

The above-described parcel of land contains 451 square feet.

As more particularly shown on Exhibit "B" attached hereto and made a part hereof.

This real property description and accompanying plat have been prepared by me or under my direction in conformance with the Professional Land Surveyor's Act.

Teri Kahlen 9/11/14

Teri Kahlen, PLS 8746 Date

S:\Projects\1114_0304 Fullerton Road Grade Separation\SurMap\CAD\Maps & Exhibits\Parcels\207-UPRR-2\Legal Description\PARCEL 207UPRR-2-PE REV 1-Legal Description.doc

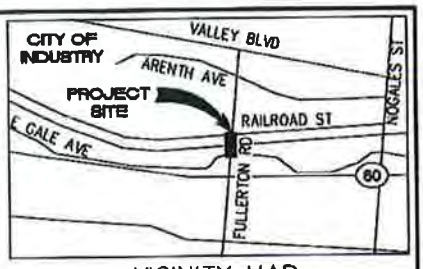
ACE

ACCEPTED _____
CHIEF ENGINEER

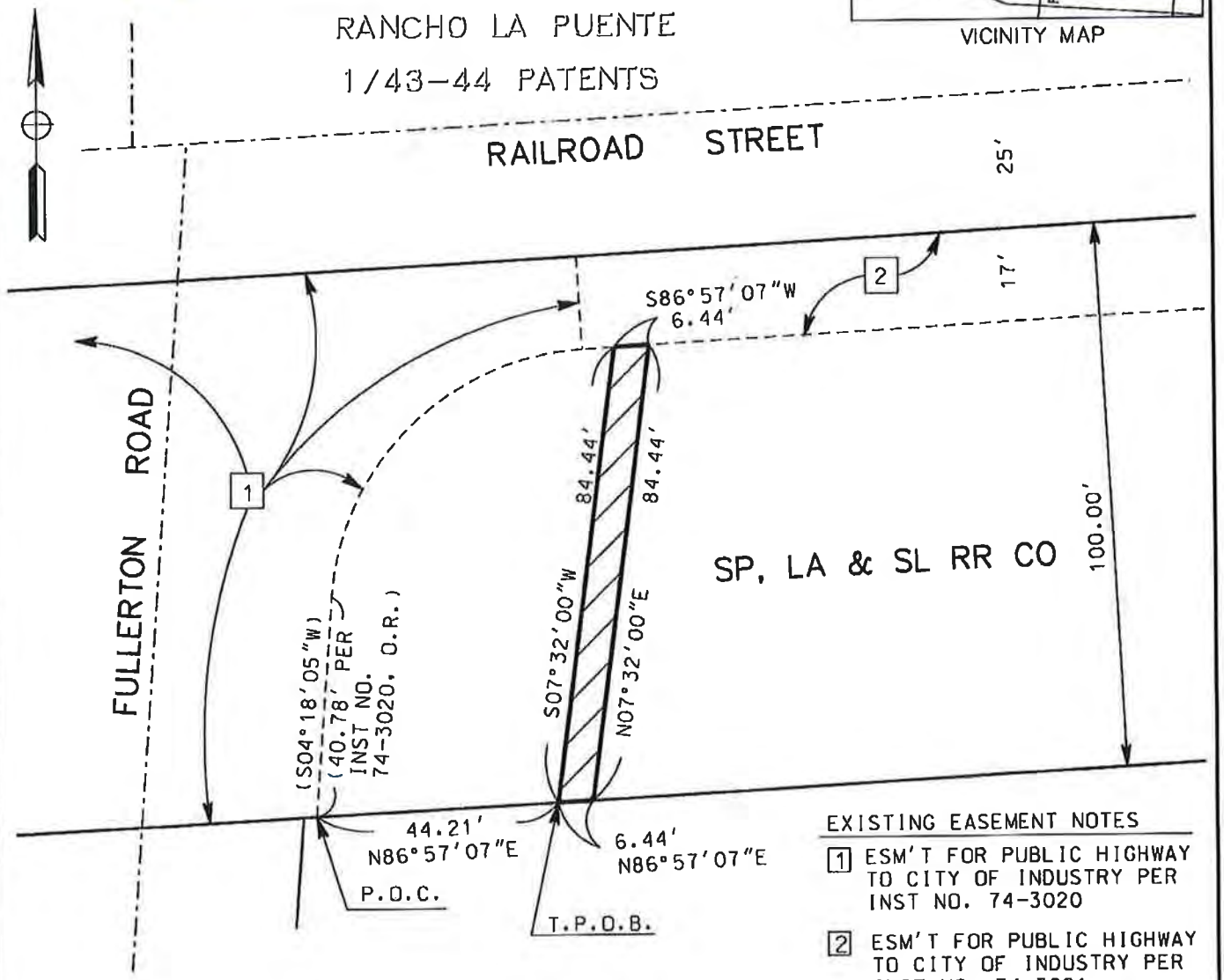
DATE: 9/11/15

EXHIBIT "B"

PARCEL 207-UPRR-3-PE
PERMANENT EASEMENT



VICINITY MAP



EXISTING EASEMENT NOTES

1 ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3020

2 ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3021

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS 83) ZONE 5, EPOCH 1998.50 AS DETERMINED LOCALLY BY THE LINE BETWEEN CITY OF INDUSTRY GPS SURVEY MONUMENTS "I-025" AND "I-026" HAVING A BEARING OF NORTH 04°23'04" EAST

INDICATES PERMANENT EASEMENT TO BE ACQUIRED

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

ACE PARCEL NO:207-UPRR-3-PE APN: APN 8264-018-806 OWNER:S.P.,L.A.&S.L. RR CO.	AREA	TOTAL	REQUIRED	REMAINDER
	SQUARE FEET	142,190	535	141,655

ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY

VA CONSULTING, INC.

CHECKED BY PLS 8746

ACE RECOMMENDED BY:

PROJECT MANAGER DATE 9/10/15

FULLERTON ROAD GRADE SEPARATION

CITY OF INDUSTRY
COUNTY OF LOS ANGELES
STATE OF CALIFORNIA

DATE: 09/11/14
SCALE: 1"=30'
REV NO.: 1
SHEET: 1 OF 1

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 207-UPRR-3-PE
Permanent Easement

That portion of the Rancho La Puente, in the City of Industry, County of Los Angeles, State of California, as per Map recorded in book 1, pages 43 and 44 of Patents, lying within that certain 100.00 foot wide strip of land acquired by the San Pedro, Los Angeles & Salt Lake Railroad Company by Final Order of Condemnation in Case No. 37036, recorded December 18, 1902 as Instrument No. 68 of the Supreme Court of the State of California, described as follows:

Commencing at the intersection of that certain course described as having a bearing of South 04°18'05" West, and a length of 40.78 feet in the southeasterly line of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3020 of Official Records in the office of the County Recorder of said County with the southerly line of that certain 100.00 foot wide strip of land acquired by said San Pedro, Los Angeles & Salt Lake Railroad;

thence North 86°57'07" East, 44.21 feet along said southerly line to the True Point of Beginning;

thence continuing along said southerly line, North 86°57'07" East, 6.44 feet;

thence leaving said southerly line, North 07°32'00" East, 84.44 feet to the southerly line of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3021 of said Official Records;

thence South 86°57'07" West, 6.44 feet along said southerly line;

thence leaving said southerly line, South 07°32'00" West, 84.44 feet to the True Point of Beginning.

The above-described parcel of land contains 535 square feet.

As more particularly shown on Exhibit "B" attached hereto and made a part hereof.

This real property description and accompanying plat have been prepared by me or under my direction in conformance with the Professional Land Surveyor's Act.

Teri Kahlen 9/11/14
Teri Kahlen, PLS 8746 Date

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

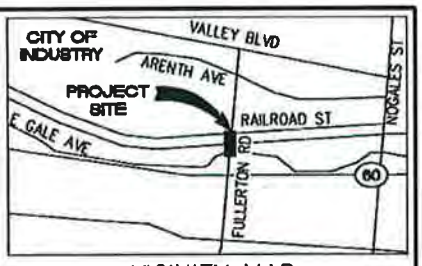
ACE

ACCEPTED _____ CHIEF ENGINEER

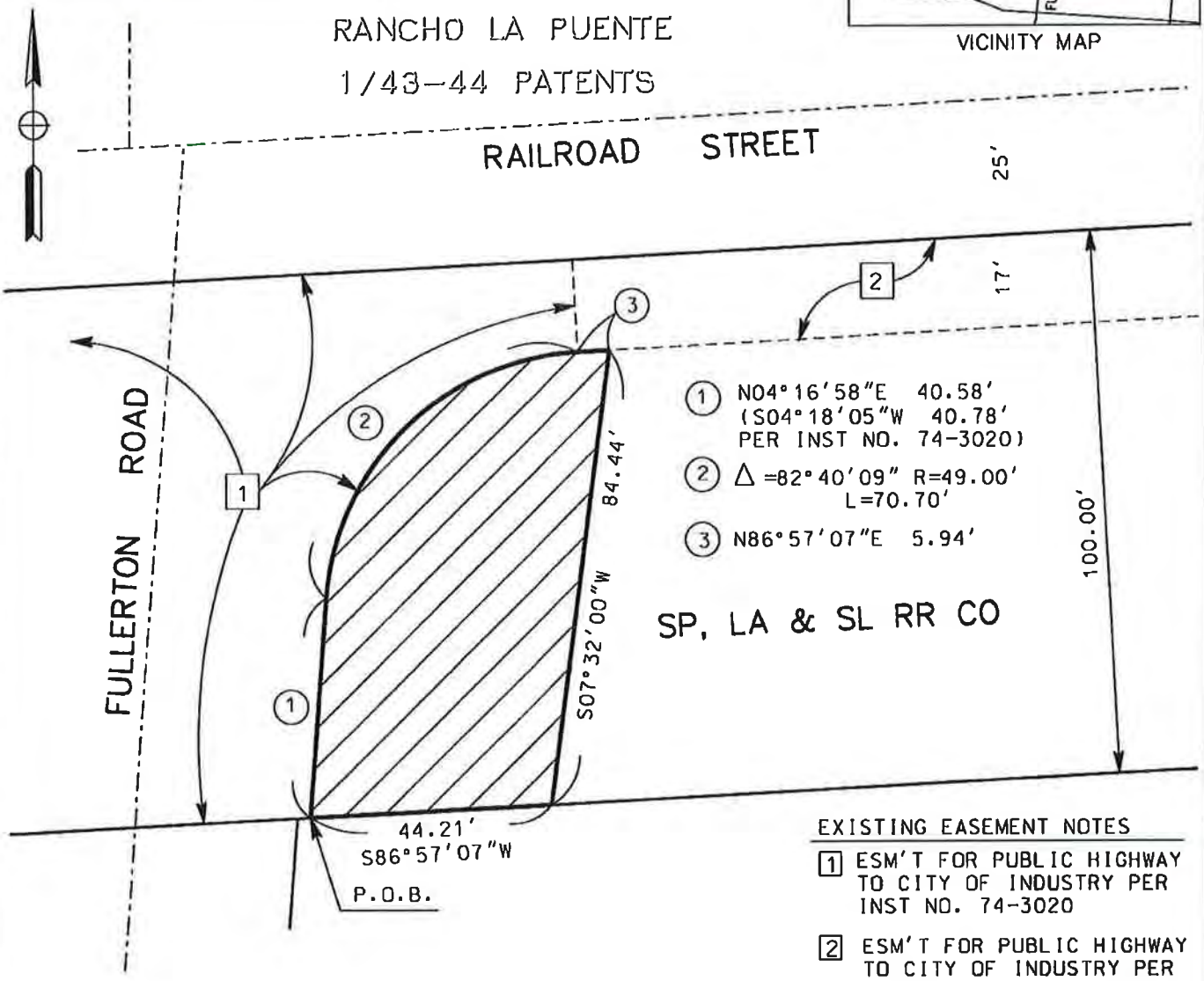
DATE: 9/11/15

EXHIBIT "B"

PARCEL 207-UPRR-3-RE
ROADWAY EASEMENT



VICINITY MAP



(1) N04°16'58"E 40.58'
(S04°18'05"W 40.78'
PER INST NO. 74-3020)

(2) Δ =82°40'09" R=49.00'
L=70.70'

(3) N86°57'07"E 5.94'

EXISTING EASEMENT NOTES

[1] ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3020

[2] ESM'T FOR PUBLIC HIGHWAY TO CITY OF INDUSTRY PER INST NO. 74-3021

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS 83) ZONE 5, EPOCH 1998.50 AS DETERMINED LOCALLY BY THE LINE BETWEEN CITY OF INDUSTRY GPS SURVEY MONUMENTS "I-025" AND "I-026" HAVING A BEARING OF NORTH 04°23'04" EAST

INDICATES ROADWAY EASEMENT TO BE ACQUIRED

PROFESSIONAL LAND SURVEYOR
TERI KAHLEN
No. 8746
STATE OF CALIFORNIA

ACE PARCEL NO: 207-UPRR-3-RE APN: APN 8264-018-806 OWNER: S.P., L.A. & S.L. RR CO.	AREA	TOTAL	REQUIRED	REMAINDER
	SQUARE FEET	142,190	3,490	138,700

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY

VA CONSULTING, INC.

Teri Kahlen

CHECKED BY PLS 8746

ACE RECOMMENDED BY:

9/10/15

PROJECT MANAGER DATE

FULLERTON ROAD GRADE SEPARATION

CITY OF INDUSTRY
COUNTY OF LOS ANGELES
STATE OF CALIFORNIA

DATE: 05/08/14

SCALE: 1"=30'

REV NO.: 0

SHEET: 1 OF 1

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 207-UPRR-3-RE
Roadway Easement

That portion of the Rancho La Puente, in the City of Industry, County of Los Angeles, State of California, as per Map recorded in book 1, pages 43 and 44 of Patents, lying within that certain 100.00 foot wide strip of land acquired by the San Pedro, Los Angeles & Salt Lake Railroad Company by Final Order of Condemnation in Case No. 37036, recorded December 18, 1902 as Instrument No. 68 of the Supreme Court of the State of California, described as follows:

Beginning at the southerly terminus of that certain course described as having a bearing of South 04°18'05" West, and a length of 40.78 feet in the southeasterly line of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3020 of Official Records in the office of the County Recorder of said County;

thence along said certain course, North 04°16'58" East, 40.58 feet to the beginning of a tangent curve, concave southeasterly and having a radius of 49.00 feet in said southeasterly line;

thence Northeasterly 70.70 feet along said curve and said southeasterly line through a central angle of 82°40'09" to the southwest corner of the land described in an Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3021 of said Official Records;

thence North 86°57'07" East, 5.94 feet along the southerly line of the land described in said Easement Deed to the City of Industry recorded August 28, 1974 as Instrument Number 74-3021 of said Official Records;

leaving said southerly line, South 07°32'00" West, 84.44 feet to the southerly line of that certain 100.00 foot wide strip of land acquired by said San Pedro, Los Angeles & Salt Lake Railroad Company;

thence South 86°57'07" West, 44.21 feet along said southerly line to the Point of Beginning.

The above-described parcel of land contains 3,490 square feet.

As more particularly shown on Exhibit "B" attached hereto and made a part hereof.

This real property description and accompanying plat have been prepared by me or under my direction in conformance with the Professional Land Surveyor's Act.

Teri Kahlen 5/8/14

Teri Kahlen, PLS 8746 Date

S:\Projects\114_0304 Fullerton Road Grade Separation\SurMap\CAD\Maps & Exhibits\Parcels\207-UPRR-3\Legal Description\PARCEL 207UPRR-3-RE REV 0- Legal Description.doc

Folder No.:

UPRR Audit No.:

CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

THIS AGREEMENT is made and entered into as of the _____ day of _____, 2014, by and between **UNION PACIFIC RAILROAD COMPANY**, a Delaware corporation ("Railroad"); and

_____ (*Name of Contractor*)

a _____ corporation ("Contractor").

RECITALS:

Contractor has been hired by the _____("State") to perform work relating to the _____at-grade public road crossing with all or a portion of such work to be performed on property of Railroad in the vicinity of the Railroad's Mile Post _____ (DOT _____) on its _____ Subdivision in or near _____, _____ County, California, as such location is in the general location shown on the Railroad Location Print marked **Exhibit A**, attached hereto and hereby made a part hereof, which work is the subject of a contract dated_____, 2014, between the Railroad and the State or City.

The Railroad is willing to permit the Contractor to perform the work described above at the location described above subject to the terms and conditions contained in this Agreement

AGREEMENT:

NOW, THEREFORE, it is mutually agreed by and between Railroad and Contractor, as follows:

ARTICLE 1 - DEFINITION OF CONTRACTOR.

For purposes of this Agreement, all references in this agreement to Contractor shall include Contractor's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority.

ARTICLE 2 - RIGHT GRANTED; PURPOSE.

Railroad hereby grants to Contractor the right, during the term hereinafter stated and upon and subject to each and all of the terms, provisions and conditions herein contained, to enter upon and have ingress to and egress from the property described in the Recitals for the purpose of performing the work described in the Recitals above. The right herein granted to Contractor is

limited to those portions of Railroad's property specifically described herein, or as designated by the Railroad Representative named in Article 4.

ARTICLE 3 - TERMS AND CONDITIONS CONTAINED IN EXHIBITS B, C & D.

The General Terms and Conditions contained in **Exhibit B**, the Insurance Requirements contained in **Exhibit C**, and the Minimum Safety Requirements contained in **Exhibit D**, each attached hereto, are hereby made a part of this Agreement.

ARTICLE 4 - ALL EXPENSES TO BE BORNE BY CONTRACTOR; RAILROAD REPRESENTATIVE.

A. Contractor shall bear any and all costs and expenses associated with any work performed by Contractor, or any costs or expenses incurred by Railroad relating to this Agreement.

B. Contractor shall coordinate all of its work with the following Railroad representative or his or her duly authorized representative (the "Railroad Representative"):

C. Contractor, at its own expense, shall adequately police and supervise all work to be performed by Contractor and shall ensure that such work is performed in a safe manner as set forth in Section 7 of **Exhibit B**. The responsibility of Contractor for safe conduct and adequate policing and supervision of Contractor's work shall not be lessened or otherwise affected by Railroad's approval of plans and specifications involving the work, or by Railroad's collaboration in performance of any work, or by the presence at the work site of a Railroad Representative, or by compliance by Contractor with any requests or recommendations made by Railroad Representative.

ARTICLE 5 - SCHEDULE OF WORK ON A MONTHLY BASIS.

The Contractor, at its expense, shall provide on a monthly basis a detailed schedule of work to the Railroad Representative named in Article 4B above. The reports shall start at the execution of this Agreement and continue until this Agreement is terminated as provided in this Agreement or until the Contractor has completed all work on Railroad's property.

ARTICLE 6 - TERM; TERMINATION.

A. The grant of right herein made to Contractor shall commence on the date of this Agreement, and continue until _____, unless sooner terminated as herein
(Expiration Date)

provided, or at such time as Contractor has completed its work on Railroad's property, whichever is earlier. Contractor agrees to notify the Railroad Representative in writing when it has completed its work on Railroad's property.

B. This Agreement may be terminated by either party on ten (10) days written notice to the other party.

ARTICLE 7 - CERTIFICATE OF INSURANCE.

A. Before commencing any work, Contractor will provide Railroad with the (i) insurance binders, policies, certificates and endorsements set forth in **Exhibit C** of this Agreement, and (ii) the insurance endorsements obtained by each subcontractor as required under Section 12 of **Exhibit B** of this Agreement.

B. All insurance correspondence, binders, policies, certificates and endorsements shall be sent to:

Union Pacific Railroad Company
Real Estate Department
1400 Douglas Street, MS 1690
Omaha, NE 68179-1690
UPRR Folder No.:_____

ARTICLE 8 - DISMISSAL OF CONTRACTOR'S EMPLOYEE.

At the request of Railroad, Contractor shall remove from Railroad's property any employee of Contractor who fails to conform to the instructions of the Railroad Representative in connection with the work on Railroad's property, and any right of Contractor shall be suspended until such removal has occurred. Contractor shall indemnify Railroad against any claims arising from the removal of any such employee from Railroad's property.

ARTICLE 9 - CROSSINGS.

No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

ARTICLE 10 - CROSSINGS; COMPLIANCE WITH MUTCD AND FRA GUIDELINES.

A. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Railroad's trackage shall be installed or used by Contractor without the prior written permission of Railroad.

B. Any permanent or temporary changes, including temporary traffic control, to crossings must conform to the Manual of Uniform Traffic Control Devices (MUTCD) and any applicable Federal Railroad Administration rules, regulations and guidelines, and must be reviewed by the Railroad prior to any changes being implemented. In the event the Railroad is found to be out of compliance with federal safety regulations due to the Contractor's modifications, negligence, or any other reason arising from the Contractor's presence on the Railroad's property, the Contractor agrees to assume liability for any civil penalties imposed upon the Railroad for such

noncompliance.

ARTICLE 11 - EXPLOSIVES.

Explosives or other highly flammable substances shall not be stored or used on Railroad's property without the prior written approval of Railroad.

IN WITNESS WHEREOF, the parties hereto have duly executed this agreement in duplicate as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY
(Federal Tax ID #94-6001323)

By:_____
DAVID C. LAPLANTE
Senior Manager-Real Estate

(*Name of Contractor)*

By_____

Printed Name:_____

Title:_____

EXHIBIT B

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

GENERAL TERMS & CONDITIONS

Section 1. NOTICE OF COMMENCEMENT OF WORK - FLAGGING.

A. Contractor agrees to notify the Railroad Representative at least thirty (30) working days in advance of Contractor commencing its work and at least ten (10) working days in advance of proposed performance of any work by Contractor in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Railroad's track(s) at any time, for any reason, unless and until a Railroad flagman is provided to watch for trains. Upon receipt of such ten (10)-day notice, the Railroad Representative will determine and inform Contractor whether a flagman need be present and whether Contractor needs to implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by Railroad, Railroad will bill Contractor for such expenses incurred by Railroad, unless Railroad and a federal, state or local governmental entity have agreed that Railroad is to bill such expenses to the federal, state or local governmental entity. If Railroad will be sending the bills to Contractor, Contractor shall pay such bills within thirty (30) days of Contractor's receipt of billing. If Railroad performs any flagging, or other special protective or safety measures are performed by Railroad, Contractor agrees that Contractor is not relieved of any of its responsibilities or liabilities set forth in this Agreement.

B. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eight-hour day for the class of flagmen used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between Railroad and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized governmental agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.

C. Reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work , even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad.

Section 2. LIMITATION AND SUBORDINATION OF RIGHTS GRANTED

A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Railroad to use and maintain its entire property including the right and power of Railroad to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines and other facilities upon, along or across any or all parts of its property, all or any of which may be freely done at any time or times by Railroad without liability to Contractor or to any other party for compensation or damages.

B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of Railroad's property, and others) and the right of Railroad to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 3. NO INTERFERENCE WITH OPERATIONS OF RAILROAD AND ITS TENANTS.

A. Contractor shall conduct its operations so as not to interfere with the continuous and uninterrupted use and operation of the railroad tracks and property of Railroad, including without limitation, the operations of Railroad's lessees, licensees or others, unless specifically authorized in advance by the Railroad Representative. Nothing shall be done or permitted to be done by Contractor at any time that would in any manner impair the safety of such operations. When not in use, Contractor's machinery and materials shall be kept at least fifty (50) feet from the centerline of Railroad's nearest track, and there shall be no vehicular crossings of Railroads tracks except at existing open public crossings.

B. Operations of Railroad and work performed by Railroad personnel and delays in the work to be performed by Contractor caused by such railroad operations and work are expected by Contractor, and Contractor agrees that Railroad shall have no liability to Contractor, or any other person or entity for any such delays. The Contractor shall coordinate its activities with those of Railroad and third parties so as to avoid interference with railroad operations. The safe operation of Railroad train movements and other activities by Railroad takes precedence over any work to be performed by Contractor.

Section 4. LIENS.

Contractor shall pay in full all persons who perform labor or provide materials for the work to be performed by Contractor. Contractor shall not create, permit or suffer any mechanic's or materialmen's liens of any kind or nature to be created or enforced against any property of Railroad for any such work performed. Contractor shall indemnify and hold harmless Railroad from and against any and all liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. If Contractor fails to promptly cause any lien to be released of record, Railroad may, at its election, discharge the lien or claim of lien at Contractor's expense.

Section 5. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

A. Fiber optic cable systems may be buried on Railroad's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. Contractor shall telephone Railroad during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on Railroad's property to be used by Contractor. If it is, Contractor will telephone the telecommunications company(ies) involved, make arrangements for a cable locator and, if applicable, for relocation or other protection of the fiber optic cable. Contractor shall not commence any work until all such protection or relocation (if applicable) has been accomplished.

B. In addition to other indemnity provisions in this Agreement, Contractor shall indemnify, defend and hold Railroad harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of any act or omission of Contractor, its agents and/or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on Railroad's property, and/or (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Railroad's property. Contractor shall not have or seek recourse against Railroad for any claim or cause of action for alleged loss of profits or revenue or loss of service or other consequential damage to a telecommunication company using Railroad's property or a customer or user of services of the fiber optic cable on Railroad's property.

Section 6. PERMITS - COMPLIANCE WITH LAWS.

In the prosecution of the work covered by this Agreement, Contractor shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

Section 7. SAFETY.

A. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Contractor. Contractor shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Contractor shall at a minimum comply with Railroad's safety standards listed in

Exhibit D, hereto attached, to ensure uniformity with the safety standards followed by Railroad's own forces. As a part of Contractor's safety responsibilities, Contractor shall notify Railroad if Contractor determines that any of Railroad's safety standards are contrary to good safety practices. Contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.

B. Without limitation of the provisions of paragraph A above, Contractor shall keep the job site free from safety and health hazards and ensure that its employees are competent and adequately trained in all safety and health aspects of the job.

C. Contractor shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Contractor shall promptly notify Railroad of any U.S. Occupational Safety and Health Administration reportable injuries. Contractor shall have a nondelegable duty to control its employees while they are on the job site or any other property of Railroad, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.

D. If and when requested by Railroad, Contractor shall deliver to Railroad a copy of Contractor's safety plan for conducting the work (the "Safety Plan"). Railroad shall have the right, but not the obligation, to require Contractor to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

Section 8. INDEMNITY.

A. To the extent not prohibited by applicable statute, Contractor shall indemnify, defend and hold harmless Railroad, its affiliates, and its and their officers, agents and employees (individually an “Indemnified Party” or collectively "Indemnified Parties") from and against any and all loss, damage, injury, liability, claim, demand, cost or expense (including, without limitation, attorney's, consultant's and expert's fees, and court costs), fine or penalty (collectively, "Loss") incurred by any person (including, without limitation, any Indemnified Party, Contractor, or any employee of Contractor or of any Indemnified Party) arising out of or in any manner connected with (i) any work performed by Contractor, or (ii) any act or omission of Contractor, its officers, agents or employees, or (iii) any breach of this Agreement by Contractor.

B. The right to indemnity under this Section 8 shall accrue upon occurrence of the event giving rise to the Loss, and shall apply regardless of any negligence or strict liability of any Indemnified Party, except where the Loss is caused by the sole active negligence of an Indemnified Party as established by the final judgment of a court of competent jurisdiction. The sole active negligence of any Indemnified Party shall not bar the recovery of any other Indemnified Party.

C. Contractor expressly and specifically assumes potential liability under this Section 8 for claims or actions brought by Contractor's own employees. Contractor waives any immunity it may have under worker's compensation or industrial insurance acts to indemnify the Indemnified Parties under this Section 8. Contractor acknowledges that this waiver was mutually negotiated by the parties hereto.

D. No court or jury findings in any employee's suit pursuant to any worker's compensation act or the Federal Employers' Liability Act against a party to this Agreement may be relied upon or used by Contractor in any attempt to assert liability against any Indemnified Party.

E. The provisions of this Section 8 shall survive the completion of any work performed by Contractor or the termination or expiration of this Agreement. In no event shall this Section 8 or any other provision of this Agreement be deemed to limit any liability Contractor may have to any Indemnified Party by statute or under common law.

Section 9. RESTORATION OF PROPERTY.

In the event Railroad authorizes Contractor to take down any fence of Railroad or in any manner move or disturb any of the other property of Railroad in connection with the work to be performed by Contractor, then in that event Contractor shall, as soon as possible and at Contractor's sole expense, restore such fence and other property to the same condition as the same were in before such fence was taken down or such other property was moved or disturbed. Contractor shall remove all of Contractor's tools, equipment, rubbish and other materials from Railroad's property promptly upon completion of the work, restoring Railroad's property to the same state and condition as when Contractor entered thereon.

Section 10. WAIVER OF DEFAULT.

Waiver by Railroad of any breach or default of any condition, covenant or agreement herein contained to be kept, observed and performed by Contractor shall in no way impair the right of Railroad to avail itself of any remedy for any subsequent breach or default.

Section 11. MODIFICATION - ENTIRE AGREEMENT.

No modification of this Agreement shall be effective unless made in writing and signed by Contractor and Railroad. This Agreement and the exhibits attached hereto and made a part hereof constitute the entire understanding between Contractor and Railroad and cancel and supersede any prior negotiations, understandings or agreements, whether written or oral, with respect to the work to be performed by Contractor.

Section 12. ASSIGNMENT - SUBCONTRACTING.

Contractor shall not assign or subcontract this Agreement, or any interest therein, without the written consent of the Railroad. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, the Contractor shall, except to the extent prohibited by law; (1) require each of its subcontractors to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each of its subcontractors to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each of its subcontractors to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

EXHIBIT C

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

INSURANCE REQUIREMENTS

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and the Contractor has removed all equipment and materials from Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

A. COMMERCIAL GENERAL LIABILITY INSURANCE. Commercial general liability (CGL) with a limit of not less than $5,000,000 each occurrence and an aggregate limit of not less than $10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

B. BUSINESS AUTOMOBILE COVERAGE INSURANCE. Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less $5,000,000 for each accident and coverage must include liability arising out of any auto (including owned, hired and non-owned autos).

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90) if required by law.

C. WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE. Coverage must include but not be limited to:

- Contractor's statutory liability under the workers' compensation laws of the state where the work is being performed.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 disease policy limit $500,000 each employee.

If Contractor is self-insured, evidence of state approval and excess workers compensation coverage must be provided.

Coverage must include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

- Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

D. RAILROAD PROTECTIVE LIABILITY INSURANCE. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than $2,000,000 per occurrence and an aggregate of $6,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.

E. UMBRELLA OR EXCESS INSURANCE. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.

F. POLLUTION LIABILITY INSURANCE. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least

$5,000,000 per occurrence and an aggregate limit of $10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of $1,000,000 per loss, and an annual aggregate of $2,000,000.

OTHER REQUIREMENTS

G. All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.

H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.

I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.

J. Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.

K. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state where the work is being performed.

L. The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT D

TO CONTRACTOR'S RIGHT OF ENTRY AGREEMENT

MINIMUM SAFETY REQUIREMENTS

The term "employees" as used herein refer to all employees of Contractor as well as all employees of any subcontractor or agent of Contractor.

I. CLOTHING

A. All employees of Contractor will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Contractor's employees must wear:

i. Waist-length shirts with sleeves.
ii. Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
iii. Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.

B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.

C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

II. PERSONAL PROTECTIVE EQUIPMENT

Contractor shall require its employees to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

i. Hard hat that meets the American National Standard (ANSI) Z89.1 – latest revision. Hard hats should be affixed with Contractor's company logo or name.
ii. Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 – latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
iii. Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:

- 100 feet of a locomotive or roadway/work equipment
- 15 feet of power operated tools
- 150 feet of jet blowers or pile drivers
- 150 feet of retarders in use (when within 10 feet, employees must wear dual ear protection – plugs and muffs)

iv. Other types of personal protective equipment, such as respirators, fall protection equipment, and face shields, must be worn as recommended or requested by the Railroad Representative.

III. ON TRACK SAFETY

Contractor is responsible for compliance with the Federal Railroad Administration's Roadway Worker Protection regulations – 49CFR214, Subpart C and Railroad's On-Track Safety rules. Under 49CFR214, Subpart C, railroad contractors are responsible for the training of their employees on such regulations. In addition to the instructions contained in Roadway Worker Protection regulations, all employees must:

i. Maintain a distance of twenty-five (25) feet to any track unless the Railroad Representative is present to authorize movements.

ii. Wear an orange, reflectorized workwear approved by the Railroad Representative.
iii. Participate in a job briefing that will specify the type of On-Track Safety for the type of work being performed. Contractor must take special note of limits of track authority, which tracks may or may not be fouled, and clearing the track. Contractor will also receive special instructions relating to the work zone around machines and minimum distances between machines while working or traveling.

IV. EQUIPMENT

A. It is the responsibility of Contractor to ensure that all equipment is in a safe condition to operate. If, in the opinion of the Railroad Representative, any of Contractor's equipment is unsafe for use, Contractor shall remove such equipment from Railroad's property. In addition, Contractor must ensure that the operators of all equipment are properly trained and competent in the safe operation of the equipment. In addition, operators must be:

i. Familiar and comply with Railroad's rules on lockout/tagout of equipment.
ii. Trained in and comply with the applicable operating rules if operating any hy-rail equipment on-track.
iii. Trained in and comply with the applicable air brake rules if operating any equipment that moves rail cars or any other railbound equipment.

B. All self-propelled equipment must be equipped with a first-aid kit, fire extinguisher, and audible back-up warning device.

C. Unless otherwise authorized by the Railroad Representative, all equipment must be parked a minimum of twenty-five (25) feet from any track. Before leaving any equipment unattended, the operator must stop the engine and properly secure the equipment against movement.

D. Cranes must be equipped with three orange cones that will be used to mark the working area of the crane and the minimum clearances to overhead powerlines.

V. GENERAL SAFETY REQUIREMENTS

A. Contractor shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.

B. Contractor shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.

C. All track work performed by Contractor meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.

D. All employees comply with the following safety procedures when working around any railroad track:

i. Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
ii. Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
iii. In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment of the opening is less than one car length (50 feet).
iv. Avoid walking or standing on a track unless so authorized by the employee in charge.
v. Before stepping over or crossing tracks, look in both directions first.
vi. Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.

E. All employees must comply with all federal and state regulations concerning workplace safety.

Material And Force Account Estimate

Estimate Number: 95963 Version: 1

Standard Rates: **Labor Additive = 234.24%** **WT Labor Additive = 199.51%**

Estimate Good for 6 Months Until 03/29/16

Location: LOS ANGELES SUB, NO 1, 20.77-22.4

Description of Work: City of Industry, CA - Fullerton Rd Grade Separation (ACE) - MP 21.43 (LA Sub)

Prepared For: 1003763 90%

COMMENTS	FACILITY	Description	QTY	UOM	UCST	LABOR	MATERIAL	TOTAL
ENGINEERING								
		Engineering	1	LS	250,000.00	250,000	0	250,000
		Contract Engineering	1	LS	50,000.00	0	50,000	50,000
		Flagging	820	MD	1,000.00	820,000	0	820,000
					Sub-Total =	1,070,000	50,000	1,120,000
TRACK CONSTRUCTION - COMPANY								
		Mobilization: Company	3	DA	11,450.00	34,350	0	34,350
Misc. Project Coord.		Gang Day Labor (25 Man)	10	DA	10,000.00	100,000	0	100,000
ML 1, 2 Trk 720 & 734	TRACK	136# CWRHH0 20-8'6" CONC SL3	14669	TF	266.11	2,064,339	1,839,187	3,903,527
MP 21.88	PPTO	PPTO 141# #11 HT W / XL SPRG FROG CONC T	1	EA	201,244.33	96,514	104,730	201,244
MP 21.04	PPTO	PPTO 141# #11 HT W / XL SPRG FROG CONC T	1	EA	201,244.33	96,514	104,730	201,244
ML1	COMPJT	Transition Rail - 136#	2	PR	8,114.53	6,403	9,826	16,229
ML1	XTIES	Transition Tie Set >50MPH	2	EA	6,336.89	4,168	8,505	12,674
Shift Track - 30% - Conc. Ties	TRACK	Shift Track: M.L. 30% TIES	4792	TF	45.04	121,856	93,986	215,842
Walkway ballast for TO's	BALCON	Walkway Ballast	12	CL	3,649.08	31,678	12,111	43,789
					Sub-Total =	2,555,823	2,173,076	4,728,899
TRACK REMOVAL - COMPANY								
Remove ML 1 - Wood Ties	TRACK	Remove Track	7244	TF	12.60	91,267	0	91,267
Remove ML 2 - Conc. Ties	TRACK	Remove Track	7242	TF	16.85	122,026	0	122,026
Exist. Spur Trks 720 & 734	TRACK	Remove Track	458	TF	12.60	5,770	0	5,770
Remove exist. #10 LH HTTO (M L1)	TO	Remove TO: #10	1	EA	5,689.51	5,690	0	5,690
					Sub-Total =	224,753	0	224,753
SIGNAL - COMPANY								
Ballpark per P. Prososki		Signal: Install	1	LS	200,000.00	0	200,000	200,000
					Sub-Total =	0	200,000	200,000
EQUIPMENT RENTAL								
		Equipment Rental	1	LS	200,000.00	0	200,000	200,000
					Sub-Total =	0	200,000	200,000
HOMELINE FREIGHT								
		Homeline Freight	34109	Per Ton	8.75	0	298,454	298,454
					Sub-Total =	0	298,454	298,454
PROJECT LEVEL COST								
	CONTINGENCIES	Contingency	15	%	67,721.06	577,586	438,230	1,015,816
					Sub-Total =	577,586	438,230	1,015,816
Total Wgt. in Tons = 34,109					Totals =	4,428,162	3,359,760	7,787,922

Grand Total = $7,787,922

This is a "Shotgun" estimate, intended to provide a ballpark cost to determine whether a proposed project warrants further study. This estimate is not to be used for budget authority. This estimate is based on a conceptual design, without detailed engineering or site investigation. Quantities and costs are estimated using readily available information and experience with similar projects. Site conditions and changes in project scope and design may result in significant cost variance.

Exhibit C-1

ACE PROJECT

GRADE SEPARATION

FULLERTON ROAD UNDERPASS PROJECT COST SUMMARY

UPRR PROJECT COST CONTRIBUTION ESTIMATE

($ 1,000's)

ITEM Code	ITEM & DESCRIPTION	STATUS	TOTAL PROJECT		
			Total	Reductions	UPRR Base
1	DESIGN COST[1]	Plan	$9,211	$5,987	$3,224
2	CONSTRUCTION COST	Plan	$78,845	$41,901	$36,945
3	CONST. MGT. COST[2]	Plan	$7,767	$5,049	$2,719
4	RIGHT OF WAY COST	Plan	$25,324	$24,127	$1,197
5	UTILITY RELOCATION	Plan	$150	$150	$0
6	PM COST[3]	Plan	$7,000	$6,000	$1,000
	TOTAL PROJECT COSTS		$128,297	$83,213	$45,085

UPRR Contribution @ 10% =	**$4,508**

Notes: 1 Items reduced pro-rata based on Construction Cost reductions
2 Reduced pro-rata based on Construction Cost reductions
3 Agency costs: management & administrative direct labor; contract legal, public affairs & labor compliance; agency overhead and OTCs

BIGGS CARDOSA
ASSOCIATES INC
STRUCTURAL ENGINEERS

500 S. Main Street, Ste 400
Orange, CA 92868-4507
Telephone 714-550-4665
Facsimile 714-550-7294

Exhibit C-1.1 UPRR Contribution Reductions

Fullerton Road Grade Separation Project

The following items have been reduced in the UPRR Theoretical Structure Estimate:

1. All City Betterment items are excluded.

2. The following items have been reduced because these items include a portion of work outside the existing roadway width of Fullerton Road, and areas on Gale Avenue, Railroad Street, Rowland Street, San Jose Avenue, and Lawson Street, which are not part of the theoretical grade separation. Refer to the exhibit showing excluded areas:
    a. Demolition & Removals Work: 80% reduction
    b. Roadway Excavation (Cut & Fill): 20% reduction
    c. Roadway Compaction & Surfacing: 80% reduction
    d. Sidewalk & Misc. Roadway Items: 80% reduction

3. Roadway Retaining Walls required to depress Fullerton Road have been reduced by 5% for minor areas outside the theoretical footprint and do not include the cost of architectural texture for the UPRR contribution.

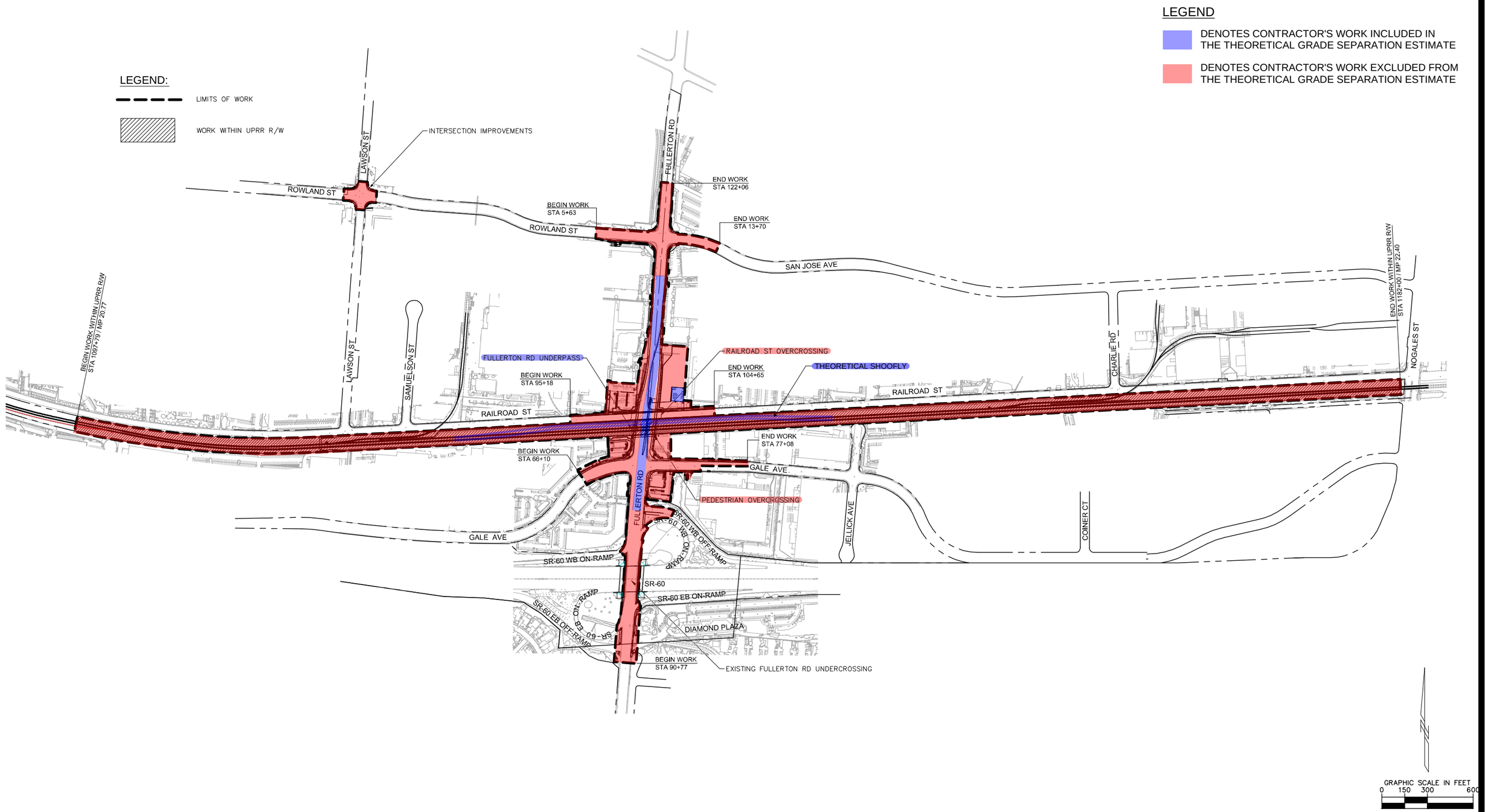
4. The Fullerton Road Underpass spans over a widened portion of Fullerton Road consisting of City Betterments. A 20% reduction is applied.

5. The Railroad Street Overcrossing, Pedestrian Overcrossing, Railroad Retaining Walls, slope paving under SR-60, and miscellaneous structures (e.g. Multi-Use Path Undercrossing) are excluded.

6. ACE Trackwork estimates are reduced by 80% to remove the raised railroad embankment from the UPRR contribution base. This reduction also applies to the length of new and shoofly tracks, which would be reduced in length if the tracks were not raised.

7. Right-of-way costs are not included in the UPRR contribution base. The exception is Parcel 207R (Fullerton Stone), where 20% of the right-of-way cost contributes to the UPRR contribution. This is required to build a pump station to drain the sump area created by depressing Fullerton Road under the tracks.

8. Due to the extent of construction related reductions a reduction of 65% has been applied to design and construction management.



FULLERTON ROAD GRADE SEPARATION

COM AGREEMENT | EXHIBIT C- 1.2

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
500 So. Main St. Suite 400
Orange, California 92868
714-550-4665

LEGEND:

- FULL: FULL ACQUISITION
- RE: ROADWAY EASEMENT
- FP: FUTURE PRIVATE
- FEE: ACQUISITION IN FEE
- FRE: FUTURE ROADWAY EASEMENT
- UE: UTILITY EASEMENT

LEGEND:

- FME: FOOTING AND MAINTENANCE EASEMENT
- TCE: TEMPORARY CONSTRUCTION EASEMENT
- PE: PERMANENT EASEMENT
- PROPOSED RIGHT OF WAY
- EXISTING RIGHT OF WAY
- PROPOSED EASEMENT
- CENTERLINE
- EXISTING LOT LINE

GRAPHIC SCALE

100' 0 100' 300'

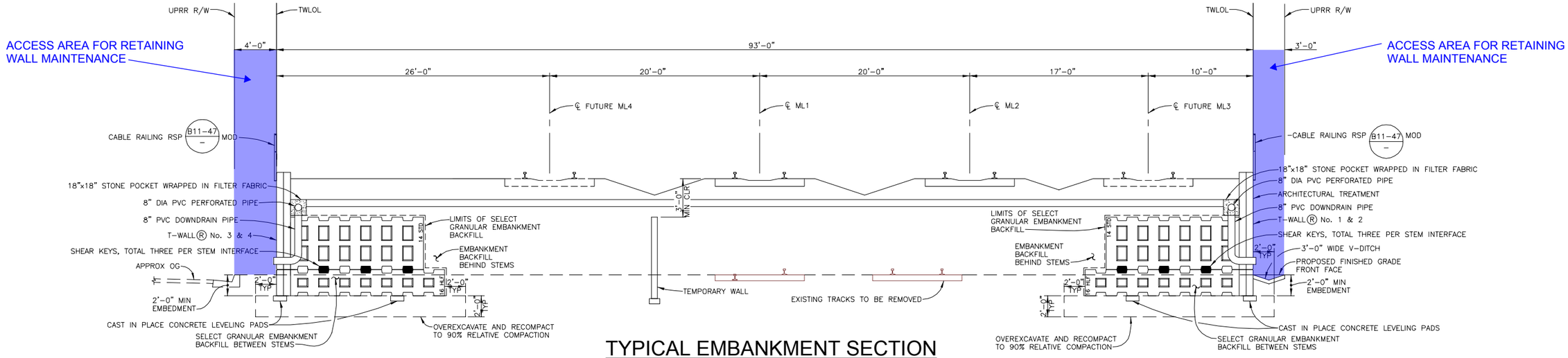
SCALE: 1"=100'

THE PUMP STATION IS INCLUDED IN THE THEORETICAL GRADE SEPARATION COST. ALL OTHER RIGHT-OF-WAY TAKES ARE NOT INCLUDED.

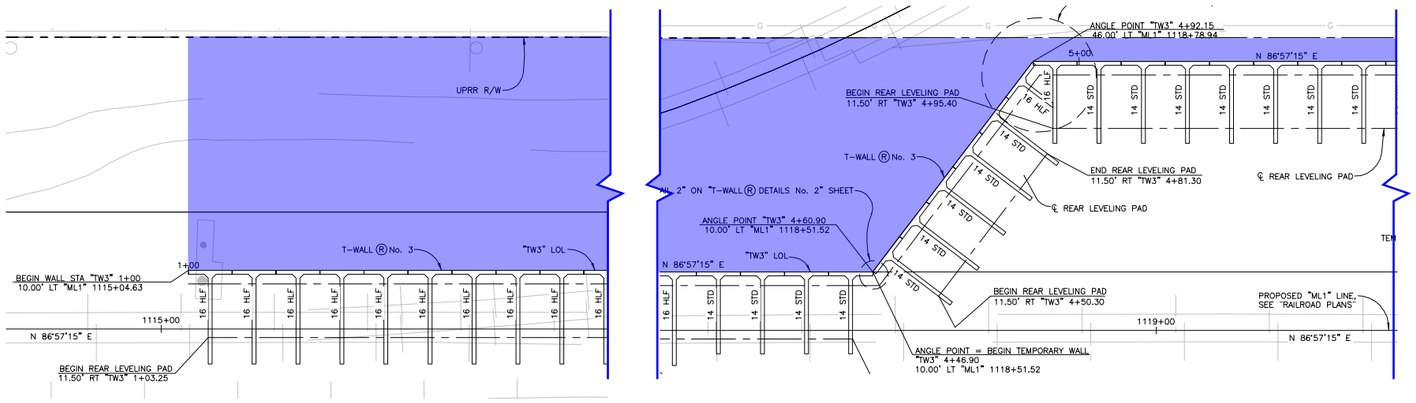
FULLERTON ROAD GRADE SEPARATION

COM AGREEMENT | EXHIBIT C-1.3

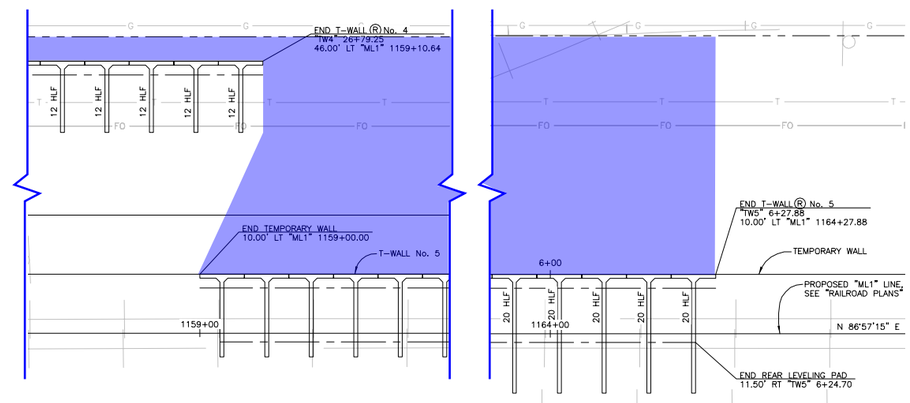
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St. Suite 400
Orange, California 92868
714-550-4665



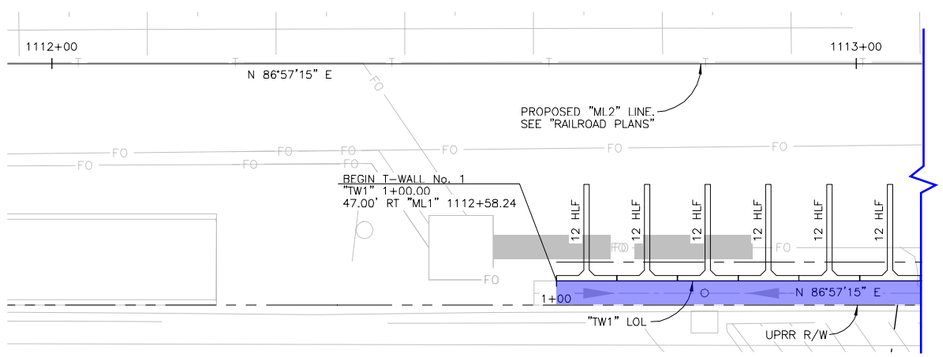
TYPICAL EMBANKMENT SECTION



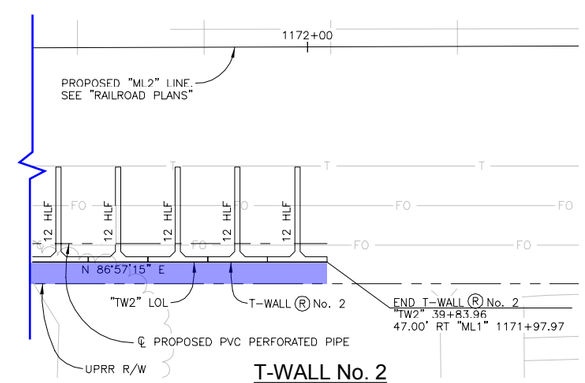
T-WALL No. 3



T-WALL No. 4 & 5



T-WALL No. 1



T-WALL No. 2

PLAN - ACCESS LIMITS

FULLERTON ROAD GRADE SEPARATION

COM AGREEMENT | EXHIBIT D

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA
500 So. Main St, Suite 400
Orange, California 92868
714-550-4665

Exhibit D
Criteria for Retaining Wall Replacement

The selected retaining wall structure is comprised of individual "T" wall modules which inherent to their design are structural building blocks that are set on grade. As such, wall failure or settlement may be localized and readily repaired or replaced. **CITY** shall be responsible for the repair, re-leveling or replacement of such T-wall blocks of the retaining walls when the following conditions arise.

- Catastrophic failure of the retaining wall due to accident, earthquake, act of God, or other man-made disaster, except an accident caused by on-track operations.
- Retaining walls leaning outward 5 degrees (1:12 slope) or more when measured relative to vertical, or
- T-wall surface exhibiting advanced deterioration with corrosion of reinforcement. This shall be defined as severe cracking with crack widths greater than 1/8 inch and spacing less than 8 inches or severe spalling with spalled area more than 25% of the T-wall panel area and more than 10% loss of section in the reinforcing bars, or
- An engineering and life cycle cost analysis, prepared by **CITY** and concurred by **UNION PACIFIC**, demonstrates that it is more economical to replace the T-walls than to repair or rehabilitate them.

Upon dissolution of **ACE**, the **CITY** will be responsible for repair, leveling or replacement of the retaining walls due to defective design, construction material or other related causes and is to be named as **ACE's** legal representative for any and all actions in cost recovery following dissolution of **ACE**. **CITY** is a public entity and shall be given sufficient time to prepare the necessary drawings, but not greater than 90 days and solicit public bids for any repair, re-leveling or replacement work in excess of $100,000. Such plans shall be submitted to **UNION PACIFIC** for review and approval prior to the commencement of work. **UNION PACIFIC** shall remove/replace or shift any tracks, switches, facilities located adjacent to and behind the retaining wall to allow such repair, leveling or replacement to occur. The width of the track area behind the retaining wall proposed to be cleared shall be a minimum width of three times the wall height and must be presented to and approved by Union Pacific and not interrupt rail service. **CITY** shall remove and replace the embankment backfill material to allow for such repair, re-leveling or replacement work at its sole expense.

CITY COUNCIL

ITEM NO. 7.4

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: Honorable Mayor and Members of the City Council

From: Paul J. Philips, City Manager

Staff: John Ballas, City Engineer

Date: September 29, 2015

SUBJECT: Amend MOU P00F3137 with LACMTA for the SR 57/60 Confluence Project Westbound Grand Avenue Slip On-Ramp

---

In connection with the Westbound Grand Avenue Slip-on-Ramp to State Route 60 Freeway Project, it is necessary for the City of Industry (City) to enter and amend the current Memorandum of Understanding (MOU) with Los Angeles County Metropolitan Transportation Authority (LACMTA). On November 23, 2011, the City entered into an MOU with LACMTA, defining the terms and conditions under which the project's activities are performed and financed. The City has secured $8.7 million in local Proposition C grant funds from LACMTA for a 50% share in project costs related to the right of way acquisition, construction and construction management. The remaining 50% share is expected to be funded in bond proceeds from the Successor Agency to the Industry Urban-Development Agency.

An amendment is necessary to extend the lapsing period of the MOU to June 30, 2016. The project is expected to go out to bid for construction soon. Caltrans has approved the Plans and Specifications for the project. Construction is expected to begin December 15, 2015, with an anticipated completion date of June 15, 2017.

It should be noted that LACMTA only allows extensions for the length of one year per period. As the extended lapsing period deadline of June 30, 2016 approaches, City staff will provide a project update to LACMTA and request another year long extension to cover the remaining duration of the construction phase.

Furthermore, Part II, Paragraph 11 of the existing MOU is being amended by deleting it in its entirety and replacing it with Metro's "Funding Agreement Communications Materials Guidelines" to ensure that all Communication Materials contain recognition of LACMTA's contribution to the Project.

It is hereby recommended that the City Council approve and execute Amendment No.1 to MOU P00F3137.

PJP:JDB:mk

AMENDMENT NO. 1
MEMORANDUM OF UNDERSTANDING
BETWEEN
CITY OF INDUSTRY
AND
THE LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

This Amendment No. 1 to Memorandum of Understanding (this "Amendment"), is dated as of August 1, 2015, by and between City of Industry ("Grantee"), and the Los Angeles County Metropolitan Transportation Authority ("LACMTA").

RECITALS:

A. Grantee and LACMTA entered into that certain Memorandum of Understanding No. MOU.P00F3137, dated November 23, 2011, (the "Existing MOU"), which Existing MOU provides for the SR-57/SR-60 Confluence Project: Westbound Slip On-Ramp, ("the Project"); and

B. Whereas, LACMTA Board on June 25, 2015, desires to extend the lapsing date of Funds programmed for Fiscal Year (FY) 2011-12 and FY 2012-13 to June 30, 2016; and

C. Grantee and LACMTA desire to amend the Existing MOU as provided herein.

AGREEMENT:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereby agree as follows:

1. Part II, Paragraph 8.1(iv) of the Existing MOU is hereby amended by deleting it in its entirety and replacing it with the following: "Funds programmed for FY 2011-12, FY 2012-13, and FY 2013-14 are subject to lapse on June 30, 2016. Grantee shall expend these Funds by the lapsing date."

2. Part II, Paragraph 11 of Existing MOU is hereby amended by deleting it in its entirety and replacing it with the following:

"11. **COMMUNICATIONS:**

11.1 Grantee shall ensure that all Communication Materials contain recognition of LACMTA's contribution to the Project as more particularly set forth in "Funding Agreement Communications Materials Guidelines" available on line or from the LACMTA Project Manager. Please check with the LACMTA Project Manager for the web address. The Funding Agreement Communications Materials Guidelines may be changed from time to time during the course of this Agreement. Grantee shall be responsible for complying with the latest Funding Agreement Communications Materials Guidelines during the term of this Agreement, unless otherwise specifically authorized in writing by the LACMTA Chief Communications Officer.

11.2 For purposes of this Agreement, "Communications Materials" include, but are not limited to, press events, public and external newsletters, printed materials, advertising, websites radio and public service announcements, electronic media, and construction site signage. A more detailed definition of "Communications Materials" is found in the Funding Agreement Communications Materials Guidelines.

11.3 The Metro logo is a trademarked item that shall be reproduced and displayed in accordance with specific graphic guidelines. These guidelines and logo files including scalable vector files will be available through the LACMTA Project Manager.

11.4 Grantee shall ensure that any subcontractor, including, but not limited to, public relations, public affairs, and/or marketing firms hired to produce Project Communications Materials for public and external purposes will comply with the requirements contained in this Section.

11.5 The LACMTA Project Manager shall be responsible for monitoring Grantee compliance with the terms and conditions of this Section. Grantee failure to comply with the terms of this Section shall be deemed a default hereunder and LACMTA shall have all rights and remedies set forth herein."

3. Except as expressly amended hereby, the Existing MOU remains in full force and effect as originally executed. All rights and obligations of the parties under the Existing MOU that are not expressly amended by this Amendment shall remain unchanged.

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to be duly executed and delivered as of the above date.

LOS ANGELES COUNTY
METROPOLITAN TRANSPORTATION AUTHORITY

By: _____ Date: _____
Phillip A. Washington
Chief Executive Officer

APPROVED AS TO FORM:

MARY C. WICKHAM
Interim County Counsel

By: _____ Date: 8/14/15
Deputy

CITY OF INDUSTRY

By: _____ Date: _____
Paul Philips
City Manager

APPROVED AS TO FORM:

By: _____ Date: _____
James M. Casso
City Attorney

CITY COUNCIL

ITEM NO. 7.5

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: Honorable Mayor and Members of the City Council

From: Paul J. Philips, City Manager

Staff: John Ballas, City Engineer

Date: October 1, 2015

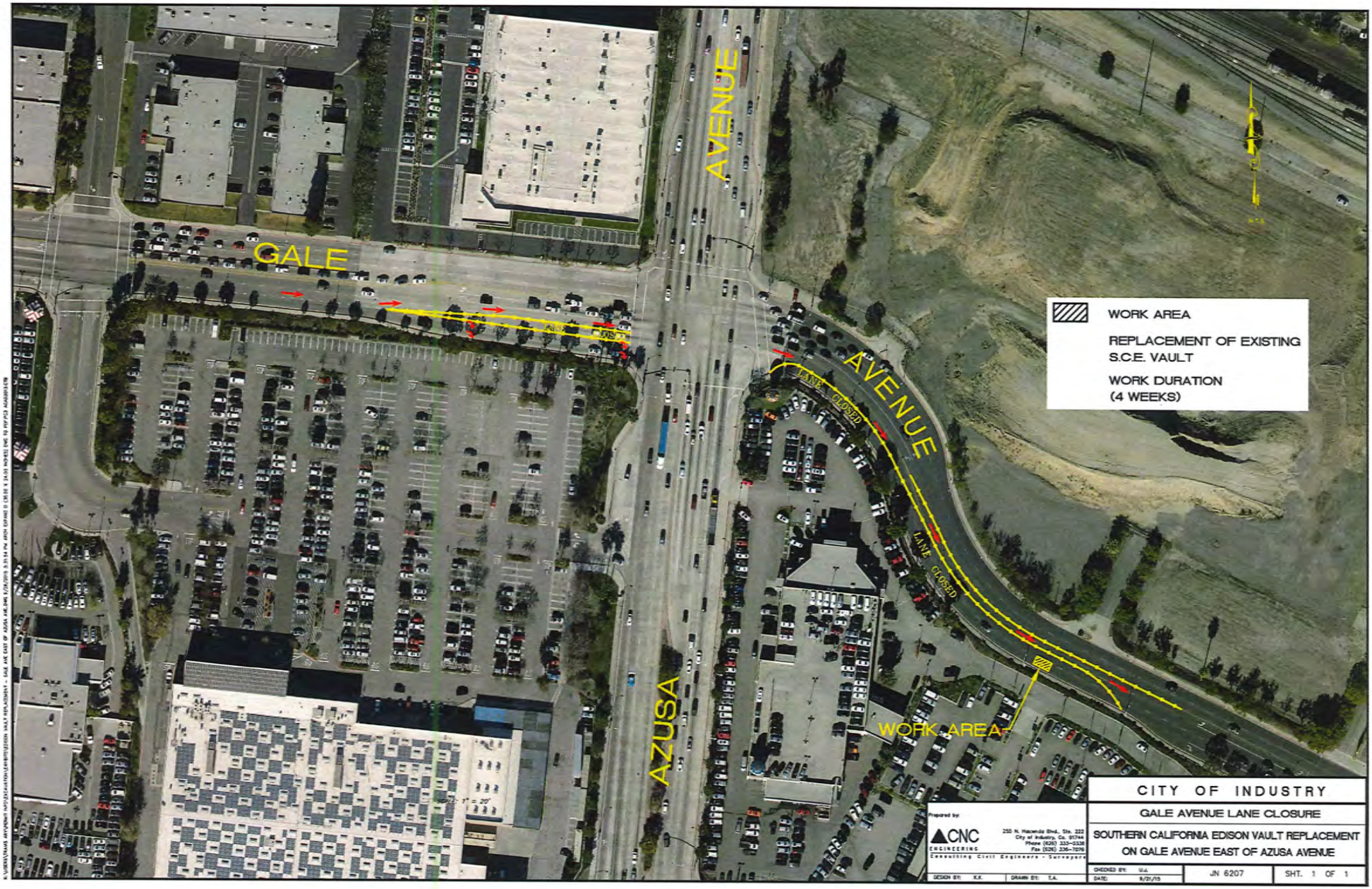
SUBJECT: Southern California Edison (SCE) Vault Replacement on Gale Avenue Immediately East of Azusa Avenue (JN-6207)

The City has received an application from Southern California Edison (SCE) for an encroachment permit to replace the existing vault on Gale Avenue just east of Azusa Avenue. This vault was installed by SCE in the mid 1960's using quick set concrete. The quick set concrete in the 1960's was not as strong, and as a result, SCE has had to repair this vault several times. The vault is now cracked beyond repair. In addition, whenever there is a new connection required, SCE used to core directly through the vault and the existing steel reinforcing bars have corroded over time. Now it is to the point that this vault needs to be replaced before it fails due to insufficient structural strength.

In order to replace this vault, SCE is requesting to have an extended closure along Gale Avenue as shown in the exhibit. SCE has requested to close the two eastbound curb lanes for a maximum of four (4) weeks. During construction, the existing two way left-turn lane will be converted to a single eastbound lane. All lanes will be opened to traffic after four (4) weeks. The tentative date to start the closure would be on Monday, October 19, 2015, concluding on November 16, 2015.

This report is being provided for informational purposes only.

PJP:JDB:mk



Prepared by:
CNC ENGINEERING
Consulting Civil Engineers - Surveyors
255 N. Hacienda Blvd., Ste. 222
City of Industry, Ca. 91744
Phone (626) 330-2338
Fax (626) 336-7076

CITY OF INDUSTRY			
GALE AVENUE LANE CLOSURE			
SOUTHERN CALIFORNIA EDISON VAULT REPLACEMENT ON GALE AVENUE EAST OF AZUSA AVENUE			
DESIGN BY: K.K.	DRAWN BY: S.A.	CHECKED BY: W.A. DATE: 8/21/15	JN 6207	SHT. 1 OF 1

CITY COUNCIL

ITEM NO. 7.6

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

To: Honorable Mayor and Members of the City Council

From: Paul J. Philips, City Manager

Staff: Clement N. Calvillo, CNC Engineering
Joshua Nelson, CNC Engineering

Date: September 30, 2015

SUBJECT: Various Conceptual Housing Developments at Various Locations around the City of Industry

---

Attached for your consideration are three different conceptual housing developments at various locations around the City of Industry. Through the years various ideas have surfaced for expanding residential sites within the City's boundaries. Below you will find various descriptions with background information on each site.

Industry Hills Expo Center Single Family Residences

In September, 2008 the City of Industry held a bid opening for the Handorf Road Realignment and Site Grading project and the low bid came in at around $2,400,000. However, subsequent to the award of the project, a deductive change order was processed and only around $950,000 of the work was actually performed. Primarily the grading and interim drainage structures was the only work performed. The housing pads weren't graded and the streets and utilities weren't extended or constructed. Attached you will find a plan that shows roughly what the original intent of the project was, but the actual work performed can be seen in the aerial imagery underlying the roadway linework. Without getting too far into the details of phase II we would estimate that there is about $2.0 to $2.5 million worth of infrastructure work left to complete the original vision of the project if the board chooses to keep a similar concept.

El Encanto/Homestead Expansion

There is a large vacant lot that is bound by El Encanto to the west, the Homestead parking lot to the south and Parriott Place West to the east. Some of the ideas for this parcel have been to add assistant living facilities but single residences (less than 1,000 square feet) and multi-unit residences. In addition a community center/multi-purpose

building could be constructed kind of at the center of all the facilities that everyone could share. The Homestead has a need for archival storage and a facility for researchers to go through the Homestead's archives and El Encanto could hold large events in the community center.

Walnut Drive South Single Family Residences

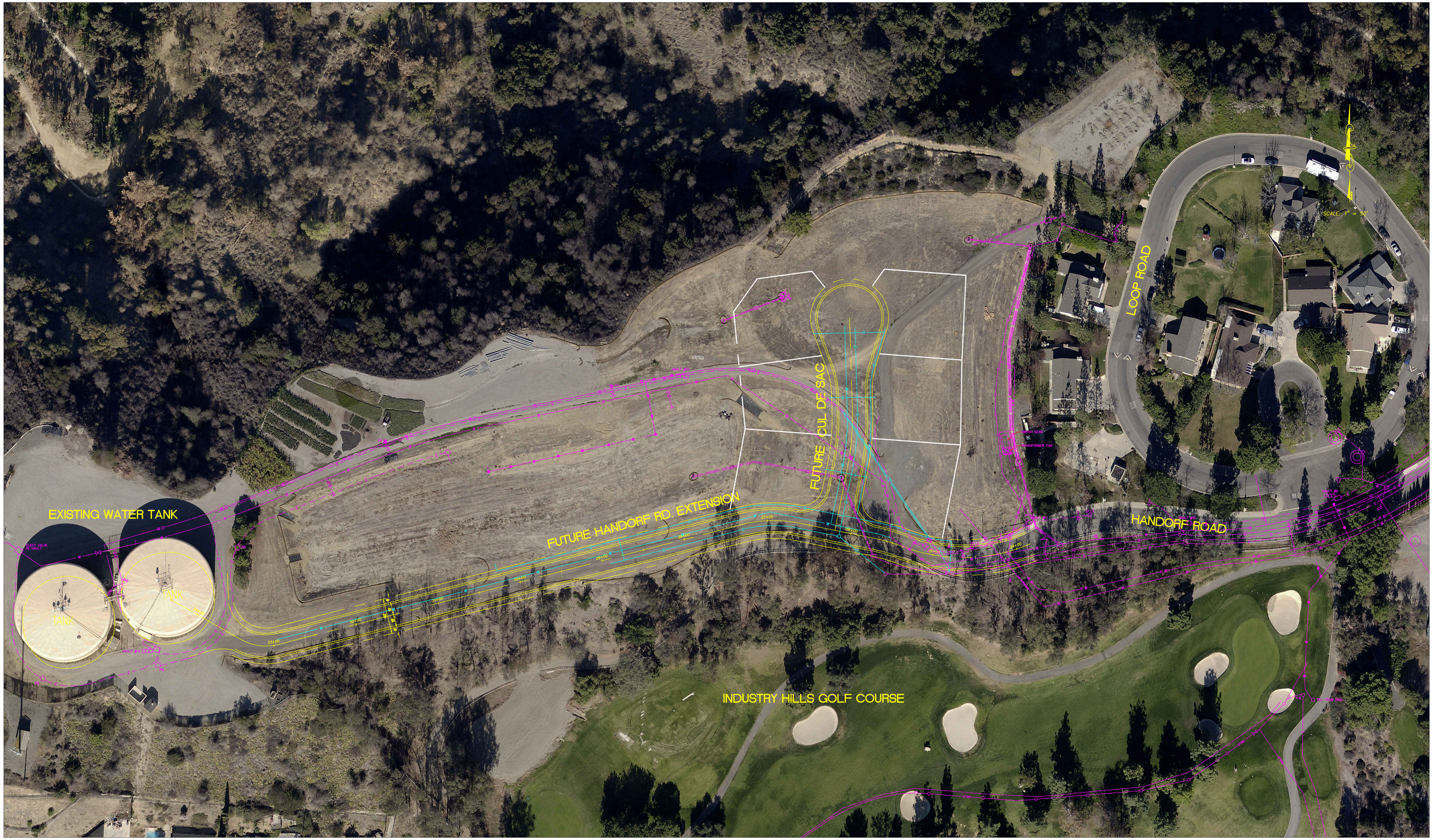
The City owns approximately 5.5 acres adjacent to Walnut Drive South and the SR60 Freeway. Previously the IPHMA had hired Calabrese Architects to look at expanding the residential housing that is there today. There are a lot of options for that site, but the biggest issue is the freeway noise. As you can see in the exhibits, the architect placed the living areas as far away from the freeway as possible and placed the garages between the living areas and the freeway to act as buffer for the noise. In addition the land between the access road and the freeway could be planted with vegetation that would also help with the noise issues.

The basic steps that each project would include are as follows:

1. Hire an architect to do preliminary layouts and conceptual designs (this has already been completed for Walnut Drive South) with options to proceed to detailed plans and specifications. (2-3 months)
2. Bring the concepts back to Council for approval. (2-3 months depending on the comments received from the board)
3. More detailed design and planning approvals. (highly variable depending on the amount of public input and environmental review required – allow 6-15 months)
4. CNC Engineering and Project architect prepare Detailed Plans and Specifications (6-12 months depending on the size of the project)
5. Bidding and Construction (6-18 months depending on the size of the project)

At this time, staff is looking for City Council input on these three projects and are requesting direction from the board on how they would like to proceed.

JN:cl



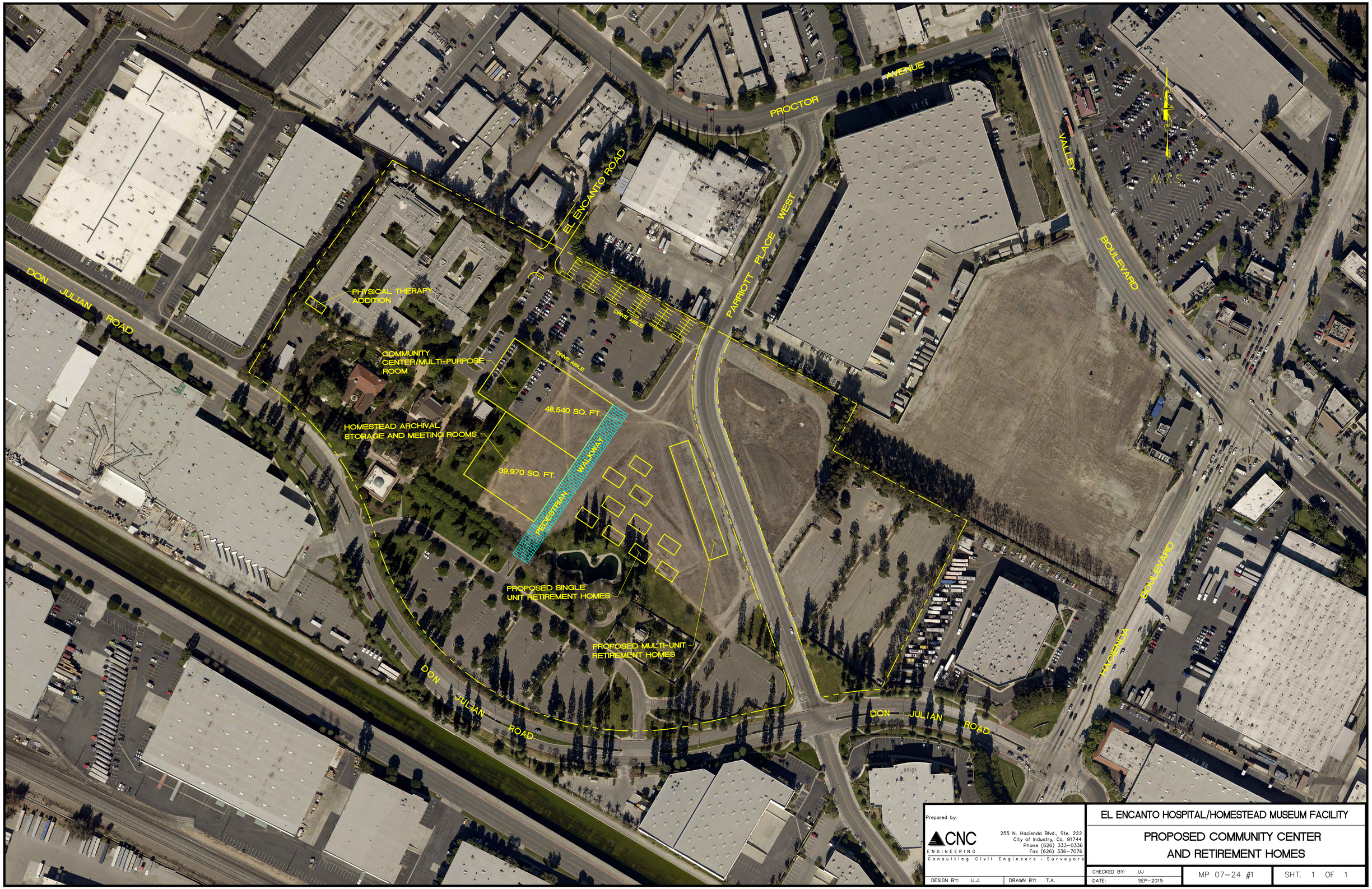
INDUSTRY HILLS PROPERTY
HANDORF ROAD EXTENSION/PROPOSED CUL DE SAC ROAD

CITY OF INDUSTRY
INCORPORATED JUNE 18, 1957

P.O. Box 3366, City of Industry, California 91744
Administrative Offices: 15651 E. Stafford Street
(626) 333-2211

CNC ENGINEERING
255 N. Hacienda Blvd., Ste. 222
City of Industry, Ca. 91744
Phone (626) 333-0336
Fax (626) 336-7076
Consulting Civil Engineers · Surveyors

K:\MISCPROJ\0709 INDUSTRY HILLS REALIGNMENT OF HANDORF ROAD & SITE GRADING\AS BUILT\BP MP 07-09 EXHIBIT.DWG 9/29/2015 3:40:03 AM ARCH FULL BLEED D (24.00 X 36.00 INCHES) DWG TO PDF - COLOR.PC3 AC/A0/20/13.CTB



Prepared by:

CNC ENGINEERING
Consulting Civil Engineers · Surveyors

255 N. Hacienda Blvd., Ste. 222
City of Industry, Ca. 91744
Phone (626) 333-0336
Fax (626) 336-7076

DESIGN BY: U.J. | DRAWN BY: T.A.

EL ENCANTO HOSPITAL/HOMESTEAD MUSEUM FACILITY

PROPOSED COMMUNITY CENTER AND RETIREMENT HOMES

CHECKED BY: UJ
DATE: SEP-2015

MP 07-24 #1

SHT. 1 OF 1

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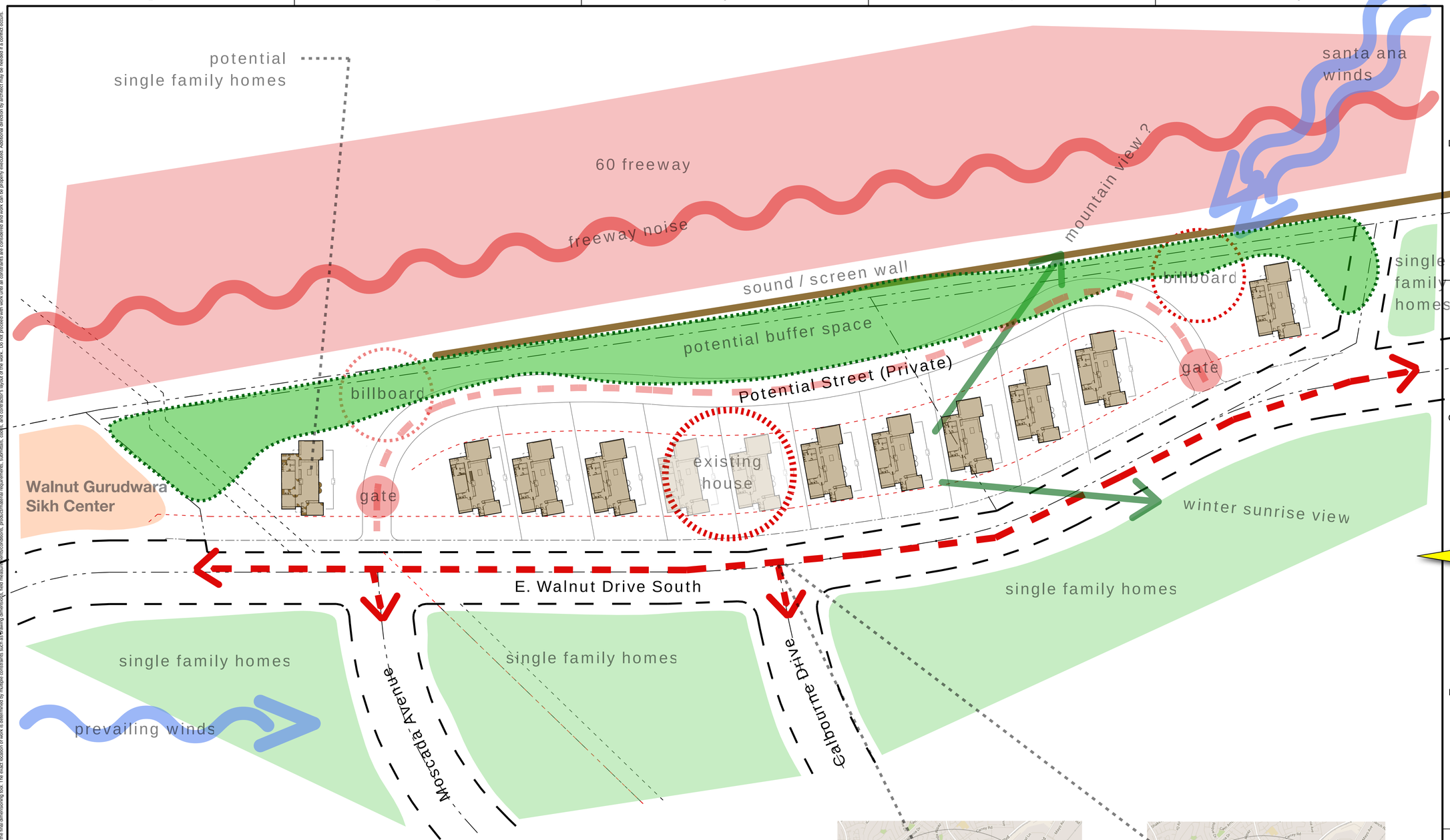
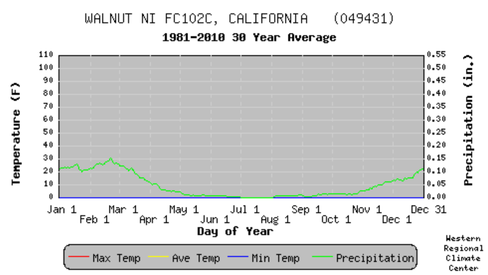
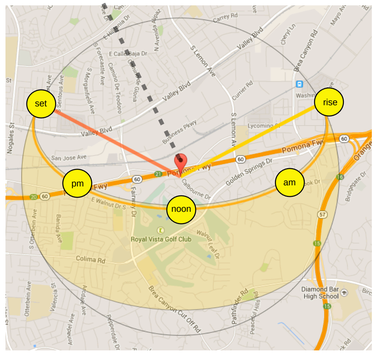


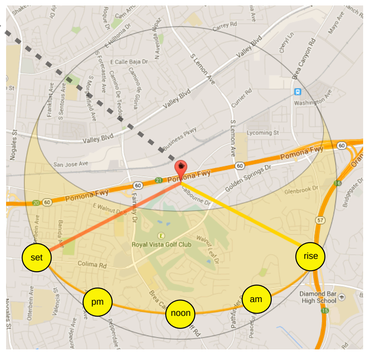
birds eye view



average rainfall



summer sun path



winter sun path

A1 Site Analysis
1/16" = 1'-0"

Architectural D size sheet 24" x 36"

CAUTION NOTE: Graphic scales are provided as an aid in understanding the drawings and they should not be relied upon as the final dimensioning tool. The exact location of work is determined by multiple constraints such as field dimensions, productivities requirements, submittals, code and contractor's layout of the work. Do not proceed with work until all constraints are considered and work can be properly executed. Additional direction by architect may be needed if a conflict occurs.

CalabreseArchitect
3660 West Temple Avenue Suite 110 Pomona California 91768
t 714.255.0066 e info@CalabreseArchitect.com
Joe Americo Calabrese AIA LEED AP C18987

Consultant

Project Name

Housing Study

E. Walnut Drive South
City of Industry, Ca 91744

Client

City of Industry
15625 E. Stafford Street
City of Industry, Ca 91744

Issue Dates

THIS SITE ANALYSIS IS AN EVALUATION OF EXISTING AND POTENTIAL SITE DEVELOPMENT IN RELATION TO THE DEVELOPMENT PROGRAM, ENVIRONMENTAL IMPACT, AND IMPACT ON ADJACENT PROPERTIES. IT IDENTIFIES CONSTRAINTS & OPPORTUNITIES.

10.30.14

Mark	Date	Description

Project	-
Drawn	JAC
Checked	-

Notice

All plans are preliminary and not for construction until approved by appropriate regulatory government agencies, stamped & signed architect/engineer, and authorized by owner.

Copyright © Joe Americo Calabrese Architect

Sheet Title

Site
Analysis

Sheet

sd 2

"Many are the plans in the mind of a man, but it is the purpose of the Lord that will be established." Proverbs 19:21

CITY COUNCIL

ITEM NO. 7.7

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

TO: The Honorable Mayor Radecki and Members of the City Council

FROM: Paul J. Philips, City Manager Paul J. Philips

DATE: October 1, 2015

SUBJECT: Increased Legislative Advocacy

At the regularly scheduled City Council Meeting of July 9, 2015, the City Council authorized the City Manager to review, modify, and recommend changes to our legislative advocacy program. Accordingly, I have taken action to reduce our lobbying costs by over $21,000 per month by refining and/or eliminating various consultant services. Please find attached a proposed contract with Lang, Hansen, O'Malley and Miller. Bev Hansen, Partner, will serve as the City's point of contact.

In an effort to strengthen our legislative advocacy program IT IS RECOMMENDED that the City Council authorize the City Manager to retain Lang, Hansen, O'Malley and Miller to assist us in our ongoing legislative activities.

P.O. Box 3366, City of Industry, California 91744-0366 • Administrative Offices: 15625 E. Stafford St. • (626) 333-2211 • Fax (626) 961-6795

Lang
Hansen
O'Malley
& Miller

Governmental Relations

Mr. Paul J. Philips, City Manager
City of Industry
PO Box 3366
City of Industry, CA 91744

September 28, 2015

Dear Mr. Philips:

This letter is to express the agreement between Lang, Hansen, O'Malley & Miller Governmental Relations (LHOM) and City of Industry (hereinafter referred to as "client") to provide governmental relations services to the client.

SERVICES

The services we provide include:

1. Comprehensive monitoring of all Legislative and Administration efforts addressing clients concerns. Providing timely reports on those actions to you, as necessary.
2. Coordination of these legislative efforts with other interest groups who may have an interest in or be supportive of any proposed statutory change. Helping to develop strong support from those groups and industries.
3. Arranging meetings with key Legislative leaders. Hands-on lobbying of the legislation, including meetings with Legislators, attending Legislative hearings, helping to prepare testimony, drafting of amendments, etc.
4. Assistance with the preparation of all forms or other reports necessary to comply with the Political Reform Act of 1974.

FEES/TERM

Our fees for these services will be a monthly retainer of $25,000 (twenty-five thousand dollars), due and payable on the first day of each month, beginning with November 1, 2015, through December 31, 2016.

In addition to our monthly retainer, we will bill any necessary travel expenses related to our provision of the above services, subject to prior approval of the client, at their actual rate.

Either party may terminate this agreement with 30 days written notice to other party.

The Senator Hotel, 1121 L Street, Suite 100, Sacramento, CA 95814 / Phone 916 441-6222 Fax 916 441-2024

We look forward to continue working with you and assisting the City of Industry in successfully pursuing its legislative goals. If this agreement is acceptable, please sign both copies provided, keeping one for your files and returning the other along with the first months payment to LHOM at 1121 L Street, Suite 100, Sacramento, CA 95814.

Sincerely,

Bev Hansen

Bev Hansen
Partner

Approved by: _____ Date: _____
Mr. Paul J. Philips, City Manager
City of Industry