CITY OF INDUSTRY

CITY COUNCIL
REGULAR MEETING AGENDA

OCTOBER 27, 2016
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 the Register of Demands for October 27, 2016

RECOMMENDED ACTION: Approve the Register of Demands and ratify the issuance of the checks.

5.2 Consideration of a License Agreement with Diamond Bar Imports, Inc., for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944, located at 17301 Gale Avenue, as a Temporary Overflow Parking Area for Vehicle Inventory.

RECOMMENDED ACTION: Approve the Agreement.

5.3 Consideration of a License Agreement with Leo Hoffman Chevrolet, Inc., for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944, located at 17301 Gale Avenue, as a Temporary Overflow Parking Area for Vehicle Inventory.

RECOMMENDED ACTION: Approve the Agreement.

5.4 Consideration of a License Agreement with PH Diversified, LLC, for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944, located at 17301 Gale Avenue, as a Temporary Overflow Parking Area for Vehicle Inventory.

RECOMMENDED ACTION: Approve the Agreement.

5.5 Consideration of a Grant Agreement between the City and the Veterans Benefit Team Roping Foundation for operation of the Foundation's Programs.

RECOMMENDED ACTION: Approve the Agreement.

5.6 Consideration of a Performance Bond with Sure Tec Insurance Company for mitigation measures related to the Lemon Avenue Interchange Project (MP 03-10).
RECOMMENDED ACTION: Authorize the Mayor to execute the Performance Bond with SureTec Insurance Company and approve the expenditure of $3,478.00.

5.7 Consideration of setting a Public Hearing for November 10, 2016 to

consider the extension of Urgency Ordinance No. 797 prohibiting the cultivation, processing, manufacturing, laboratory testing, labeling, storing, and wholesale and retail distribution of cannabis in the City.

RECOMMENDED ACTION: Set the Public Hearing for November 10, 2016 and have staff prepare the necessary reports.

6. **ACTION ITEMS**

6.1 Consideration of Resolution No. CC 2016-72 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, TO GRANT ANOTHER DESIGNATED PERIOD FOR A "GOLDEN HANDSHAKE" FOR TWO YEARS ADDITIONAL SERVICE CREDIT.

(SECOND READING)

RECOMMENDED ACTION: Adopt Resolution No. CC 2016-72 and authorize the City Manager to execute all documents.

6.2 Discussion and consideration of an appointment to the City of Industry Planning Commission.

RECOMMENDED ACTION: Discuss and make an appointment to the Planning Commission.

6.3 Consideration to contribute $5,000.00 to the "Land of the Free Veterans Day Golf Classic" to be held on November 11, 2016.

RECOMMENDED ACTION: Provide direction to staff.

6.4 Consideration of the solicitation of public bids for Contract No. CITY-1430, 2016-2017 Industry Business Center East Side Street Light and Cabling Plan, for an estimated cost of $1,090,000.00.

RECOMMENDED ACTION: Approve the plans and specifications, and authorize the advertising for receipt of sealed bids.

6.5 Consideration of the solicitation of public bids for Contract No. CITY-1431, 2016-2017 Grand Crossing Substation – Phase 1, 2, 3 Substructure and Cabling, for an estimated cost of $605,000.00.

RECOMMENDED ACTION: Approve the plans and specifications, and authorize the advertising for receipt of sealed bids.

6.6 Consideration of the Third Amendment to Professional Services Agreement between the City and Trimark Associates to provide Data Acquisition System, Met Station, and Revenue Meter Services for the

Metrolink Solar and Electrical Vehicle Charging Facility for a three year renewal and budget of $63,886.67.

RECOMMENDED ACTION: Approve the Third Amendment.

6.7 Consideration of Recommendations regarding the Request for Proposals for Operations and Maintenance ("O&M") Services of the City of Industry Metrolink Station 2 MWdc Solar Carport Facility located at 600 South Brea Canyon Road, and consideration of approval of a Maintenance Services Agreement with SST Construction, LLC, in an amount not-to-exceed $105,000.00, from October 27, 2016 through October 27, 2019.

RECOMMENDED ACTION: Approve the Agreement.

6.8 Consideration of Development Plan 16-1 and Lot Line Adjustment 80 submitted by S & C Property Development to develop two industrial warehouse buildings located at 14700 Nelson Avenue, and Mitigated Negative Declaration.

a. Consideration of Resolution No. CC 2016-73 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR DEVELOPMENT PLAN NO. 16-1 AND LOT LINE ADJUSTMENT 80 TO ALLOW THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS LOCATED AT 14700 NELSON AVENUE IN THE CITY OF INDUSTRY, WITHIN THE "I"-INDUSTRIAL ZONE, AND MAKING FINDINGS IN SUPPORT THEREOF.

RECOMMENDED ACTION: Adopt Resolution No. CC 2016-73.

b. Consideration of Resolution No. CC 2016-74 – A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, APPROVING DEVELOPMENT PLAN NO. 16-1 AND LOT LINE ADJUSTMENT 80 FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS LOCATED AT 14700 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA

RECOMMENDED ACTION: Adopt Resolution No. CC 2016-74.

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

RECOMMENDED ACTION: Discuss and provide direction to staff.

7. **CITY COUNCIL COMMITTEE REPORTS**

8. **AB 1234 REPORTS**

9. **CITY COUNCIL COMMUNICATIONS**

10. **CLOSED SESSION**

10.1 CONFERENCE WITH LEGAL COUNSEL – Anticipated Litigation
Significant exposure to litigation pursuant to Government Code Section 54956.9.9(d)(2) (One Case).

10.2 CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9(d)(1), Martinez, et al. v. U-Haul, et al., Case No. BC 582943.

10.3 Conference with real property negotiators pursuant to Government Code Section 54956.8

Property:	Assessor's Parcel No. 8760-002-908, northeast corner of Nogales Street and Walnut Drive North
City Negotiators:	Paul J. Philips, City Manager and James M. Casso, City Attorney
Negotiating Party:	Southern California Edison
Under Negotiation:	Price and Terms of Payment

10.4 Conference with real property negotiators pursuant to Government Code Section 54956.8

Property:	15130 Nelson Avenue
City Negotiators:	Paul J. Philips, City Manager and James M. Casso, City Attorney
Negotiating Party:	Matthew Sawyer
Under Negotiation:	Price and Terms of Payment

11. Adjournment. Next regular meeting: Thursday, November 10, 2016 at 9:00 a.m.

CITY COUNCIL

ITEM NO. 5.1

CITY OF INDUSTRY
AUTHORIZATION FOR PAYMENT OF BILLS
CITY COUNCIL MEETING OF OCTOBER 27, 2016

FUND RECAP:

FUND	DESCRIPTION	DISBURSEMENTS
100	GENERAL FUND	2,698,316.65
120	CAPITAL IMPROVEMENT FUND	462,385.03
161	IPUC - ELECTRIC	591,830.22
440	INDUSTRY PUBLIC FACILITY AUTHORITY	3,000.00
TOTAL ALL FUNDS		3,755,531.90

BANK RECAP:

BANK	NAME	DISBURSEMENTS
BOFA	BANK OF AMERICA - CKING ACCOUNTS	336,023.68
REF	REFUSE - CKING ACCOUNT	1,212,458.18
WFBK	WELLS FARGO - CKING ACCOUNT	2,207,050.04
TOTAL ALL BANKS		3,755,531.90

APPROVED PER CITY MANAGER

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CITY OF INDUSTRY
BANK OF AMERICA
October 27, 2016

Check	Date			Payee Name	Check Amount
CITYELEC.CHK - City Electric					
1392	10/11/2016			CITY OF INDUSTRY	$311,032.69
	Invoice	Date	Description	Amount	
	10/11/16	10/11/2016	TRANSFER FUNDS-ELECTRIC	$311,032.69	
1393	10/11/2016			CITY OF INDUSTRY	$3,019.45
	Invoice	Date	Description	Amount	
	10/11/16-A	10/11/2016	REIMBURSE-CALPERS CONTRIBUTION	$3,019.45	
CITYGEN.CHK - City General					
24328	09/26/2016			CITY OF INDUSTRY	$14,971.54
	Invoice	Date	Description	Amount	
	09/26/16	08/26/2016	CORRECT ACCRUED INTEREST-PROP A	$14,971.54	
24329	10/11/2016			CIVIC RECREATIONAL INDUSTRIAL	$7,000.00
	Invoice	Date	Description	Amount	
	10/11/16	10/11/2016	TRANSFER FUNDS-CRIA A/P	$7,000.00	

Checks	Status	Count	Transaction Amount
	Total	4	$336,023.68

CITY OF INDUSTRY
WELLS FARGO REFUSE
October 27, 2016

Check	Date			Payee Name	Check Amount
REFUSE - Refuse Account					
WT207	09/28/2016			CITY OF INDUSTRY DISPOSAL CO.	$540,613.75
	Invoice	Date	Description	Amount	
	2621562	09/28/2016	REFUSE SVC 09/01-09/23/16	$540,613.75	
WT208	10/12/2016			CITY OF INDUSTRY DISPOSAL CO.	$671,844.43
	Invoice	Date	Description	Amount	
	2667816	10/12/2016	REFUSE SVC 09/24-09/30/16	$671,844.43	

Checks	Status	Count	Transaction Amount
	Total	2	$1,212,458.18

CITY OF INDUSTRY
WELLS FARGO VOIDED CHECK
October 27, 2016

Check	Date			Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo						
64752	09/22/2016		10/17/2016	**ERNEST MILLER**		($900.00)
	Invoice	Date	Description		Amount	
	PPEM4	09/08/2016	VOIDED-EVENT WAS CANCELED		($900.00)	

Check	Status	Count	Transaction Amount
	Total	1	($900.00)

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
64923	10/07/2016			**DEPT OF TRANSPORTATION**	$97,909.54
	Invoice	Date	Description	Amount	
	17001946	09/20/2016	COOP 4959-WESTBOUND SLIP ON-RAMP SR60	$97,909.54	
64924	10/07/2016			**SOUTH COAST A.Q.M.D.**	$130.57
	Invoice	Date	Description	Amount	
	2980999	09/16/2016	FLAT FEE EMISSIONS-EL ENCANTO	$130.57	
64925	10/07/2016			**FIDELITY SECURITY LIFE**	$3,671.67
	Invoice	Date	Description	Amount	
	2912297	07/31/2016	VISION PREMIUM-JUL 2016	$1,223.89	
	2912298	08/31/2016	VISION PREMIUM-AUG 2016	$1,223.89	
	3314752	09/30/2016	VISION PREMIUM-SEP 2016	$1,223.89	
64926	10/07/2016			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	16/17SLURRY/SEAL	10/04/2016	FEE-NOTICE OF EXEMPTION FOR 16/17 SLURY SEAL	$75.00	
64927	10/12/2016			**FRONTIER**	$264.90
	Invoice	Date	Description	Amount	
	2017-00000354	09/25/2016	09/25-10/24/16 SVC - ELECTRIC MODEM	$51.29	
	2017-00000355	09/25/2016	09/25-10/24/16 SVC - ELECTRIC MODEM	$62.35	
	2017-00000356	09/28/2016	09/28-10/27/16 SVC - EM - 179 S. GRAND AVE	$37.62	
	2017-00000357	09/28/2016	09/28-10/27/16 SVC - ELECTRIC MODEM	$51.29	
	2017-00000358	09/28/2016	09/28-10/27/16 SVC - EM-21912 GARCIA LN-ALARM	$62.35	
64928	10/12/2016			**GAS COMPANY, THE**	$34.96
	Invoice	Date	Description	Amount	
	2017-00000359	10/03/2016	08/30-09/29/16 SVC - 710 NOGALES ST	$20.17	
	1135HATCH-OCT16	10/03/2016	08/30-09/29/16 SVC - 1135 HATCHER AVE	$14.79	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date		Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo				
64929	10/12/2016		**ROWLAND WATER DISTRICT**	$1,154.11
	Invoice	Date	Description	Amount
	2017-00000360	09/29/2016	08/15-09/19/16 SVC - 1100 AZUSA AVE	$152.66
	2017-00000361	09/29/2016	08/16-09/20/16 SVC - 17217 & 17229 CHESTNUT - IRR	$377.34
	2017-00000362	09/29/2016	08/16-09/20/16 SVC - 755 NOGALES (RC)	$131.12
	1123DHATCH-SEP16	09/29/2016	08/16-09/20/16 SVC - 1123D HATCHER ST	$127.86
	1135HATCH-SEP16	09/29/2016	08/16-09/20/16 SVC - 1135 HATCHER ST	$44.70
	1123CHATCH-SEP16	09/29/2016	08/16-09/20/16 SVC - 1123C HATCHER ST	$193.20
	2017-00000363	09/29/2016	08/17-09/20/16 SVC - AZUSA AVE (RC)	$127.23
64930	10/12/2016		**SAN GABRIEL VALLEY WATER CO.**	$11,625.25
	Invoice	Date	Description	Amount
	2017-00000364	09/28/2016	08/25-09/27/16 SVC - S/E COR OF PELLISSIER	$1,224.33
	2017-00000365	09/28/2016	08/25-09/27/16 SVC - PELLISSIER	$338.59
	2017-00000366	09/28/2016	08/25-09/27/16 SVC - IRRIG SALT LAKE/SEVENTH	$206.77
	2017-00000367	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY STA 103-	$351.23
	2017-00000368	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY SOUTH	$1,872.15
	2017-00000369	09/28/2016	08/25-09/27/16 SVC - PECK/UNION PACIFIC BRIDGE	$819.83
	2017-00000370	09/28/2016	08/25-09/27/16 SVC - PELLISSIER	$777.85
	2017-00000371	09/28/2016	08/25-09/27/16 SVC - PELLISSIER	$386.89
	2017-00000372	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY STA 111-	$711.49
	2017-00000373	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY STA 129-	$2,228.34
	2017-00000374	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY NORTH	$1,274.89
	2017-00000375	09/28/2016	08/25-09/27/16 SVC - CROSSROADS PKWY SOUTH	$1,432.89
64931	10/12/2016		**SO CALIFORNIA EDISON COMPANY**	$4,237.87
	Invoice	Date	Description	Amount
	2017-00000376	09/27/2016	08/24-09/23/16 SVC - BREA CYN-VARIOUS SITES	$492.32
	2017-00000377	09/28/2016	08/26-09/27/16 SVC - 137 N HUDSON AVE	$394.28
	2017-00000378	09/29/2016	12/17/14-09/01/16 SVC - VARIOUS SITES-	$2,685.49
	2017-00000379	09/29/2016	08/26-09/27/16 SVC - VARIOUS SITES	$665.78

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
64932	10/12/2016			**SO CALIFORNIA EDISON COMPANY**	$8,266.71
	Invoice	Date	Description	Amount	
	7500710451	09/16/2016	08/01-08/31/16 SVC - 208 S. WADDINGHAM WAY	$8,266.71	
64933	10/12/2016			**SUBURBAN WATER SYSTEMS**	$3,330.17
	Invoice	Date	Description	Amount	
	180040887624	09/23/2016	08/24-09/23/16 SVC - AZUSA & GEMINI	$3,330.17	
64934	10/12/2016			**VERIZON WIRELESS - LA**	$114.03
	Invoice	Date	Description	Amount	
	9772709014	09/26/2016	08/27-09/26/16 SVC - MOBILE BROADBAND	$114.03	
64935	10/17/2016			**MARTIN AND CHAPMAN CO.**	$400.00
	Invoice	Date	Description	Amount	
	CONF 11/04/16	10/17/2016	COFERENCE FEE FOR SCHLITING & MORROW	$400.00	
64936	10/18/2016			**HUMANA INSURANCE COMPANY**	$8,655.86
	Invoice	Date	Description	Amount	
	389690309	09/23/2016	DENTAL PREMIUM-SEP/OCT 2016	$8,655.86	
64937	10/18/2016			**NOBLE AMERICAS ENERGY**	$142,204.82
	Invoice	Date	Description	Amount	
	162850006306499	10/11/2016	WHOLESALE USE-SEP 2016	$142,204.82	
64938	10/18/2016			**SHELL ENERGY NORTH AMERICA-**	$80,400.00
	Invoice	Date	Description	Amount	
	1690868	10/04/2016	WHOLESALE USE-SEP 2016	$80,400.00	
64939	10/19/2016			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date		Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo					
	CUP5-8	10/14/2016	FEE- NOTICE OF DETERMINATION FOR CUP 15-8	$75.00	
64940	10/19/2016		**TRADEWAY GLASS CO.**		$2,500.00
	Invoice	Date	Description	Amount	
	10/17/16	10/17/2016	DEPOSIT-REPLACE LOOSE VINYL ON WINDOWS AT	$2,500.00	
64941	10/19/2016		**AT & T**		$9.07
	Invoice	Date	Description	Amount	
	2017-00000385	10/01/2016	10/01-10/31/16 SVC - CITY WHITE PAGES	$9.07	
64942	10/19/2016		**FRONTIER**		$2,249.51
	Invoice	Date	Description	Amount	
	2017-00000399	10/01/2016	10/01-10/31/16 SVC - GENERATOR SITE-TELEMETRY	$53.94	
	2017-00000400	10/01/2016	10/01-10/31/16 SVC - GENERATOR SITE-TELEMETRY	$51.23	
	2017-00000401	10/01/2016	10/01-10/31/16 SVC - VARIOUS GENERATOR SITES	$1,039.78	
	2017-00000402	10/01/2016	10/01-10/31/16 SVC - CITY HALL FAXES	$532.65	
	2017-00000403	10/01/2016	10/01-10/31/16 SVC - VARIOUS SITES	$328.70	
	HATCHER-OCT16	10/01/2016	10/01-10/31/16 SVC - HATCHER WAREHOUSE	$50.65	
	2017-00000404	10/04/2016	10/04-11/03/16 SVC - EM-21858 GARCIA LN-ALARM	$62.24	
	2017-00000405	10/04/2016	10/04-11/03/16 SVC - GS-21620 VALLEY BLVD	$53.94	
	2017-00000406	10/01/2016	10/01-10/31/16 SVC - TRES HERMANOS BARN	$49.70	
	2017-00000407	10/07/2016	10/07-11/06/16 SVC - GS-408 BREA CYN RD	$26.68	
64943	10/19/2016		**GAS COMPANY, THE**		$481.89
	Invoice	Date	Description	Amount	
	2017-00000386	10/05/2016	09/01-10/03/16 SVC - 2700 CHINO HILLS PKWY	$46.39	
	2017-00000387	10/05/2016	09/01-10/03/16 SVC - 1 INDUSTRY HILLS PKWY	$17.93	
	2017-00000388	10/07/2016	09/05-10/03/16 SVC - 15651 STAFFORD ST	$20.27	
	2017-00000389	10/07/2016	09/06-10/05/16 SVC - 15633 RAUSCH RD	$154.11	
	2017-00000390	10/07/2016	09/06-10/05/16 SVC - 15625 STAFFORD ST APT B	$14.30	
	2017-00000391	10/07/2016	09/06-10/05/16 SVC - 15625 STAFFORD ST APT A	$171.32	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date		Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo					
	2017-00000392	10/10/2016	09/01-10/01/16 SVC - 1 INDUSTRY HILLS PKWY UNIT	$57.57	
64944	10/19/2016		**ROWLAND WATER DISTRICT**		$2,196.45
	Invoice	Date	Description	Amount	
	2017-00000393	09/29/2016	08/15-09/19/16 SVC - AZUSA AVE - CENTER	$118.95	
	2017-00000394	09/29/2016	08/15-09/19/16 SVC - AZUSA AVE 205597	$145.68	
	2017-00000396	09/29/2016	08/16-09/20/16 SVC - HURLEY ST & VALLEY	$459.75	
	2017-00000397	09/29/2016	08/16-09/20/16 SVC - 18044 ROWLAND-LAWSON	$249.63	
	2017-00000398	09/29/2016	08/16-09/20/16 SVC - 17401 VALLEY BLVD	$682.50	
	2017-00000416	09/29/2016	08/16-09/20/16 SVC - 930 AZUSA AVE	$539.94	
64945	10/19/2016		**SO CALIFORNIA EDISON COMPANY**		$11,934.42
	Invoice	Date	Description	Amount	
	2017-00000408	10/04/2016	09/01-10/03/16 SVC - 208 S WADDINGHAM WAY CP	$125.11	
	2017-00000409	10/04/2016	09/01-10/01/16 SVC - 600 BREA CYN RD	$475.78	
	2017-00000410	10/04/2016	09/01-10/01/16 SVC - 1 VALLEY/AZUSA	$15.26	
	2017-00000411	10/05/2016	09/01-10/03/16 SVC - 15625 STAFFORD ST	$6,265.44	
	15660STAFF-OCT16	10/05/2016	08/26-09/27/16 SVC - 15660 STAFFORD ST	$3,171.63	
	1123AHATCH-OCT16	10/06/2016	09/06-10/05/16 SVC - 1123 HATCHER AVE STE A	$370.33	
	1135HATCH-OCT16	10/06/2016	09/06-10/05/16 SVC - 1135 HATCHER AVE	$392.88	
	2017-00000412	10/06/2016	09/01-10/01/16 SVC - NOGALES ST/SAN JOSE AVE	$445.02	
	2017-00000413	10/07/2016	09/06-10/05/16 SVC - VARIOUS SITES	$97.05	
	2017-00000414	10/08/2016	09/01-10/01/16 SVC - GALE AVE/L ST	$33.95	
	2017-00000415	10/12/2016	08/12-10/06/16 SVC - VALLEY BLVD U-VARIOUS SITES	$541.97	
64946	10/19/2016		**SUBURBAN WATER SYSTEMS**		$510.63
	Invoice	Date	Description	Amount	
	180060742229	10/04/2016	09/03-10/04/16 SVC - NE CNR VALLEY/STIMS	$510.63	
64947	10/19/2016		**VERIZON WIRELESS - LA**		$991.05
	Invoice	Date	Description	Amount	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	9772709013	09/26/2016	08/27-09/26/16 SVC - VARIOUS WIRELESS	$991.05	
64948	10/19/2016			**WALNUT VALLEY WATER DISTRICT**	$2,080.63
	Invoice	Date	Description	Amount	
	2435727	10/11/2016	09/01-09/30/16 SVC - BAKER PKWY & GRAND N/W	$2,080.63	
64949	10/27/2016			**ALVAKA NETWORKS**	$13,915.17
	Invoice	Date	Description	Amount	
	157535	10/01/2016	NETWORK MAINT-NOV 2016	$6,540.17	
	157503	10/01/2016	NETWORK MAINT-HOMESTEAD	$755.00	
	157507	10/01/2016	NETWORK MAINT-NOV 2016	$6,620.00	
64950	10/27/2016			**APPLIED METERING**	$970.23
	Invoice	Date	Description	Amount	
	2017-00000384	09/28/2016	METER MAINT-AUG 2016	$970.23	
64951	10/27/2016			**ARAMARK REFRESHMENT SERVICE,**	$161.12
	Invoice	Date	Description	Amount	
	8797397	09/27/2016	OFFICE SUPPLIES	$161.12	
64952	10/27/2016			**AT & T**	$225.00
	Invoice	Date	Description	Amount	
	896 1695754	10/01/2016	10/1-10/31/16 SVC-600 S BREA CYN-METRO	$225.00	
64953	10/27/2016			**AVANT-GARDE, INC**	$2,962.50
	Invoice	Date	Description	Amount	
	4127	09/20/2016	PROJECT MGMGT-CITY BRIDGES	$1,980.00	
	4128	09/20/2016	PROJECT MGMGT-AZUSA AVE BRIDGE	$982.50	
64954	10/27/2016			**BANK OF AMERICA - VISA**	$2,196.59
	Invoice	Date	Description	Amount	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	2017-00000417	10/06/2016	09/07-10/06/16 CREDIT CARD EXPENSES-PHILIPS	$2,196.59	
64955	10/27/2016			**BLAKE AIR CONDITIONING**	$296.91
	Invoice	Date	Description	Amount	
	42262	10/06/2016	A/C MAINT-CITY HALL	$296.91	
64956	10/27/2016			**BOUZA LAW FIRM**	$36,632.75
	Invoice	Date	Description	Amount	
	504	09/30/2016	LEGAL SVC-JUL THRU SEP 2016	$36,632.75	
64957	10/27/2016			**BRYAN PRESS**	$139.53
	Invoice	Date	Description	Amount	
	0075869	10/04/2016	BUSINESS CARDS-A. GONZALEZ	$55.05	
	0075914	10/07/2016	COI - #9 ENVELOPES	$84.48	
64958	10/27/2016			**CALIF MUNICIPAL UTILITIES**	$3,200.00
	Invoice	Date	Description	Amount	
	16-2308	10/01/2016	MEMBERSHIP DUES FY 16/17	$3,200.00	
64959	10/27/2016			**CALIFORNIA CONTRACT CITIES**	$31.65
	Invoice	Date	Description	Amount	
	1917	08/25/2016	CITY MANAGER MEETING ON 8/25/16	$31.65	
64960	10/27/2016			**CASC ENGINEERING AND**	$9,207.50
	Invoice	Date	Description	Amount	
	0036225	08/31/2016	NPDES ENG SVC-COI	$9,207.50	
64961	10/27/2016			**CASSO & SPARKS, LLP**	$86,488.48
	Invoice	Date	Description	Amount	
	20181	10/18/2016	COI-LEGAL SVC FOR MAY 2016	$86,488.48	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
64962	10/27/2016			**CITY OF INDUSTRY**	$1,476.56
	Invoice	Date	Description	Amount	
	2017-00000019	09/30/2016	IH FUEL PUMP-SECURITY VEHICLES	$1,022.87	
	2017-00000021	09/30/2016	IH FUEL PUMP-CITY HALL VEHICLES	$453.69	
64963	10/27/2016			**CITY OF INDUSTRY-MEDICAL**	$800.00
	Invoice	Date	Description	Amount	
	REG 10/27/16	10/19/2016	TRANSFER FUNDS-MEDICAL	$800.00	
64964	10/27/2016			**CITY OF INDUSTRY-PAYROLL ACCT**	$150,000.00
	Invoice	Date	Description	Amount	
	P/R 10/15/16	10/13/2016	REIMBURSE FOR PAYROLL 10/15/16	$150,000.00	
64965	10/27/2016			**CITY OF INDUSTRY-REFUSE**	$11,157.57
	Invoice	Date	Description	Amount	
	2666797	09/30/2016	DISP SVC-HADDCK'S IMPOUND YARD	$754.96	
	2665440	10/01/2016	DISP SVC-TRES HERMANOS	$138.38	
	2666011	10/01/2016	DISP SVC-CITY BUS STOPS	$4,376.33	
	2666755	09/30/2016	DISP SVC-1123 HATCHER	$4,229.95	
	2665439	10/01/2016	BOX RENTAL-TONNER CYN (CAMP COURAGE)	$300.00	
	2665438	10/01/2016	DISP SVC-CITY HALL	$299.47	
	2665437	10/01/2016	DISP SVC-TONNER CYN (MAINT YD)	$690.00	
	2665688A	09/30/2016	DISP SVC-205 HUDSON	$184.24	
	2665688B	10/01/2016	DISP SVC-841 7TH AVE	$184.24	
64966	10/27/2016			**CNC ENGINEERING**	$224,368.33
	Invoice	Date	Description	Amount	
	45417	10/13/2016	WALNUT DR SOUTH WIDENING	$415.73	
	45418	10/13/2016	VALLEY BLVD PCC PAVEMENT RECONSTRUCTION	$11,913.49	
	45419	10/13/2016	CLARK AVE WIDENING	$1,207.29	
	45420	10/13/2016	2016 CLEANOUT OF STORMWATER DEVICES	$402.82	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date	Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo			
45421	10/13/2016	2016-2017 SLURRY SEAL	$3,076.15
45422	10/13/2016	GENERAL ENGINEERING SVC-CIP	$46,500.04
45423	10/13/2016	GENERAL ENGINEERING SVC-MAINT OF CITY	$45,752.91
45424	10/13/2016	TONNER CYN PROPERTY	$665.16
45425	10/13/2016	COLIMA ROAD WIDENING	$1,701.12
45426	10/13/2016	PUENTE VALLEY OPERABLE UNIT	$2,993.22
45427	10/13/2016	SEWER SYSTEM MAINT-EXPO	$3,658.38
45428	10/13/2016	EXPO CENTER UPGRADES	$470.64
45429	10/13/2016	PUENTE BASIN WATER MASTER ISSUES	$1,015.74
45430	10/13/2016	TRES HERMANOS PROPERTY	$2,396.83
45432	10/13/2016	SAFETY UPGRADE AT VARIOUS RR CROSSINGS	$498.87
45433	10/13/2016	TRAFFIC SIGNAL AT DON JULIAN/SIXTH AVE	$3,547.71
45434	10/13/2016	SANITATION DISTRICT INTERMODAL FACILITY	$914.60
45435	10/13/2016	SAN JOSE AVE RECONSTRUCTION	$9,263.46
45436	10/13/2016	PACIFIC PALMS LAUNDRY BLDG ISSUES	$9,840.99
45437	10/13/2016	PAINT EVALUATION OF FENCE ON TEMPLE	$13,140.77
45438	10/13/2016	HIGHWAY BRIDGE PROGRAM-AZUSA AVE	$1,348.87
45439	10/13/2016	FISCAL YEAR BUDGET	$16,963.65
45440	10/13/2016	FOLLOW'S CAMP PROPERTY	$268.54
45441	10/13/2016	VARIOUS ASSIGNMENTS-SA TO THE IUDA	$3,801.72
45442	10/13/2016	NEW CUL-DE-SAC EAST OF FAURE AVE	$11,879.29
45443	10/13/2016	NELSON AVE/PUENTE AVE INTERSECTION	$546.57
45444	10/13/2016	GATEWAY CITIES COUNCIL OF GOVERMENTS	$517.41
45445	10/13/2016	BICYCLE MASTER PLAN	$134.27
45446	10/13/2016	ARENTH AVE RECONSTRUCTION	$2,557.29
45447	10/13/2016	CARTEGRAPH IMPLEMENTATION/MGMT	$2,055.24
45448	10/13/2016	CITYWIDE CATCH BASIN RETROFITS	$3,987.34
45449	10/13/2016	COI PAVEMENT MGMT SYSTEM	$172.47
45450	10/13/2016	GRAND AVE BRIDGE WIDENING	$83.15
45451	10/13/2016	FULLERTON RD GRADE SEPARATION	$5,621.31
45452	10/13/2016	ALAMEDA CORRIDOR PROJECTS	$498.87

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	45453	10/13/2016	FAIRWAY DR GRADE SEPARATION	$3,466.26	
	45454	10/13/2016	NOGALES GRADE SEPARATION	$837.63	
	45455	10/13/2016	MISC GRADE SEPARATION STUDIES	$86.24	
	45431	10/13/2016	PUC RAILROAD SAFETY UPGRADE	$166.29	
	102016	10/01/2016	MEALS/WHEELS RENT-OCT 2016	$5,000.00	
	112016	11/01/2016	MEALS/WHEELS RENT-NOV 2016	$5,000.00	
64967	10/27/2016			**COMFORT SYSTEMS USA**	$3,862.23
	Invoice	Date	Description	Amount	
	252894	09/29/2016	A/C MAINT-EL ENCANTO	$1,973.83	
	252691	09/23/2016	SERVICE REPAIR-EL ENCANTO	$1,057.00	
	252895	09/29/2016	SERVICE REPAIR-EL ENCANTO	$831.40	
64968	10/27/2016			**CORELOGIC INFORMATION**	$192.50
	Invoice	Date	Description	Amount	
	81729705	09/30/2016	GEOGRAPHIC PKG-SEP 2016	$192.50	
64969	10/27/2016			**DIRECTV - FOR BUSINESS**	$1,311.86
	Invoice	Date	Description	Amount	
	29604888752	10/01/2016	ANNUAL BUSINESS VIEWING SVC	$1,311.86	
64970	10/27/2016			**ENVIRONS, INC.**	$2,715.00
	Invoice	Date	Description	Amount	
	2942	09/20/2016	LANDSCAPE PLANS-FAURE AVE	$2,715.00	
64971	10/27/2016			**FRAZER, LLP**	$63,670.00
	Invoice	Date	Description	Amount	
	145287	09/30/2016	COI-ACCTG SVC 9/16-9/30/16	$29,655.00	
	145392	09/30/2016	COI-PROF SVC FOR SEP 2016	$34,015.00	
64972	10/27/2016			**FRONTIER**	$146.03

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	Invoice	Date	Description	Amount	
	2017-00000395	10/10/2016	10/10-11/19/16 SVC-GENERATOR SITE-TELEMETRY	$146.03	
64973	10/27/2016			**GMS ELEVATOR SERVICES, INC**	$138.00
	Invoice	Date	Description	Amount	
	00084693	10/03/2016	MO SVC-ELEVATOR	$138.00	
64974	10/27/2016			**GONSALVES & SON, JOE A.**	$5,000.00
	Invoice	Date	Description	Amount	
	155123	09/19/2016	LEGISLATIVE SVC-OCT 2016	$5,000.00	
64975	10/27/2016			**HADDICK'S AUTO BODY**	$4,262.70
	Invoice	Date	Description	Amount	
	047711	10/05/2016	AUTO MAINT-LIC 1370863	$385.86	
	047712	10/05/2016	AUTO MAINT-LIC 1320295	$427.63	
	047716	10/05/2016	AUTO MAINT-LIC 1370863	$26.77	
	047719	10/05/2016	AUTO MAINT-LIC 1279616	$3,090.66	
	047717	10/05/2016	AUTO MAINT-LIC 1279616	$63.78	
	H-75542	10/03/2016	TOWING SVC-DONATION BINS	$268.00	
64976	10/27/2016			**HDL COREN & CONE**	$745.00
	Invoice	Date	Description	Amount	
	0023229-IN	10/05/2016	STATISTICAL REPORTS PKG 2015-2016	$745.00	
64977	10/27/2016			**HISTORICAL RESOURCES, INC.**	$4,227.82
	Invoice	Date	Description	Amount	
	09/29/16	09/29/2016	AGREEMENT REIMBURSEMENT FOR F&M CREDIT	$4,227.82	
64978	10/27/2016			**INDUSTRY SECURITY SERVICES**	$38,515.95
	Invoice	Date	Description	Amount	
	14-18956	10/07/2016	EXTRA SECURITY-HOMESTEAD FESTIVAL	$504.72	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	14-18883	09/30/2016	SECURITY SVC-TRES HERMANOS	$2,187.12	
	14-18951	10/07/2016	SECURITY SVC-TRES HERMANOS	$2,187.12	
	14-18872	09/30/2016	SECURITY SVC 9/23-9/29/16	$16,265.46	
	14-18955	10/07/2016	VEHICLE FUEL-TRES HERMANOS	$590.65	
	14-18940	10/07/2016	SECURITY SVC 9/30-10/06/16	$16,780.88	
64979	10/27/2016			**JANUS PEST MANAGEMENT**	$580.00
	Invoice	Date	Description	Amount	
	181372	10/01/2016	PEST SVC-HOMESTEAD	$580.00	
64980	10/27/2016			**KLEINFELDER, INC.**	$7,384.40
	Invoice	Date	Description	Amount	
	001121747	09/16/2016	SOIL TESTING-VALLEY BLVD RECONSTRUCTION	$7,384.40	
64981	10/27/2016			**KLINE'S PLUMBING, INC.**	$1,150.00
	Invoice	Date	Description	Amount	
	10138	09/29/2016	LEAK REPAIRS-CITY HALL	$1,150.00	
64982	10/27/2016			**L A COUNTY DEPT OF PUBLIC**	$72.87
	Invoice	Date	Description	Amount	
	IN170000208	09/20/2016	ACCIDENT-VALLEY BLVD @ PUENTE/WORKMAN	$72.87	
64983	10/27/2016			**L A COUNTY REGISTRAR-**	$75.00
	Invoice	Date	Description	Amount	
	DP16-1/LLA80	10/27/2016	FEE-NOTICE OF DETERMINATION FOR DP16-1/LLA80	$75.00	
64984	10/27/2016			**L A COUNTY REGISTRAR-**	$2,210.25
	Invoice	Date	Description	Amount	
	DP16-1/LLA80-A	10/27/2016	FEE-NOTICE OF DETERMINATION FOR DP16-1/LLA80	$2,210.25	
64985	10/27/2016			**L A COUNTY REGISTRAR-**	$75.00

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name		Check Amount
CITY.WF.CHK - City General Wells Fargo						
	Invoice	Date	Description		Amount	
	GRAND-CROSSING	10/17/2016	FEE--NOTICE OF EXEMPTION		$75.00	
64986	10/27/2016			**L A COUNTY REGISTRAR-**		$75.00
	Invoice	Date	Description		Amount	
	IBC-EAST SIDE	10/17/2016	FEE- NOTICE OF EXEMPTION		$75.00	
64987	10/27/2016			**L A COUNTY REGISTRAR-**		$75.00
	Invoice	Date	Description		Amount	
	PLAN 16-1	10/17/2016	FEE- NOTICE OF DETERMINATION		$75.00	
64988	10/27/2016			**L A COUNTY REGISTRAR-**		$2,210.25
	Invoice	Date	Description		Amount	
	PLAN 16-1-A	10/17/2016	FEE- NOTICE OF DETERMINATION		$2,210.25	
64989	10/27/2016			**L A COUNTY REGISTRAR-**		$75.00
	Invoice	Date	Description		Amount	
	PLAN 15-12	10/17/2016	FEE- NOTICE OF DETERMINATION		$75.00	
64990	10/27/2016			**L A COUNTY REGISTRAR-**		$3,070.00
	Invoice	Date	Description		Amount	
	PLAN 15-12-A	10/17/2016	FEE- NOTICE OF DETERMINATION		$3,070.00	
64991	10/27/2016			**L A COUNTY SHERIFF'S**		$762,765.64
	Invoice	Date	Description		Amount	
	170858NH	10/06/2016	SHERIFF CONTRACT-SEP 2016		$738,828.62	
	170711NH	09/28/2016	SPECIAL EVENT-DIRECTED PATROL		$23,937.02	
64992	10/27/2016			**LA PUENTE VALLEY COUNTY**		$285.43
	Invoice	Date	Description		Amount	
	BS;09/16	09/21/2016	WATER MONITORING-BOY SCOUTS RESERVOIR		$285.43	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
64993	10/27/2016			LA WEEKLY LP	$4,600.00
	Invoice	Date	Description	Amount	
	146347-9.22-9.29	09/09/2016	ADVERTISING FOR HOMESTEAD FESTIVAL	$4,000.00	
	146347-100616	09/30/2016	ADVERTISING FOR HOMESTEAD FESTIVAL	$600.00	
64994	10/27/2016			LOS ANGELES TIMES	$259.57
	Invoice	Date	Description	Amount	
	10007093243-2017	09/24/2016	SUBSCRIPTION THRU 10/21/17-CITY HALL	$259.57	
64995	10/27/2016			LOS ANGELES TIMES MEDIA GROUP	$6,808.85
	Invoice	Date	Description	Amount	
	002931740	09/30/2016	ADVERTISING FOR HOMESTEAD FESTIVAL	$6,808.85	
64996	10/27/2016			METHOD TECHNOLOGIES	$57.50
	Invoice	Date	Description	Amount	
	34293	10/10/2016	UPDATE CITY WEBSITE	$57.50	
64997	10/27/2016			PAETEC COMMUNICATIONS	$786.26
	Invoice	Date	Description	Amount	
	68556535	10/10/2016	CITY HALL PHONE SVC-OCT 2016	$786.26	
64998	10/27/2016			PHILIPS, PAUL J.	$388.70
	Invoice	Date	Description	Amount	
	10/11/16	10/11/2016	REIMBURSE FOR LUNCH MEETINGS AND PARKING	$388.70	
64999	10/27/2016			PITNEY BOWES, INC.	$110.96
	Invoice	Date	Description	Amount	
	3100568596	09/30/2016	POSTAGE MACHINE-OCT 2016	$110.96	
65000	10/27/2016			POST ALARM SYSTEMS	$286.90

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	Invoice	Date	Description	Amount	
	913226	10/05/2016	MONITORING SVC-HOMESTEAD	$286.90	
65001	10/27/2016			**POSTMASTER**	$280.00
	Invoice	Date	Description	Amount	
	BOX #3305	10/01/2016	ANNUAL FEE-PO BOX #3305	$280.00	
65002	10/27/2016			**PT EVENTS, INC.**	$3,140.90
	Invoice	Date	Description	Amount	
	5566	09/29/2016	RENTALS FOR HOMESTEAD FESTIVAL	$3,140.90	
65003	10/27/2016			**RANDALL WOLTZ PIANO SERVICE**	$120.00
	Invoice	Date	Description	Amount	
	10/10/16	10/10/2016	PIANO TUNING FOR 10/8/16 EVENT-HOMESTEAD	$120.00	
65004	10/27/2016			**REGIONAL GOVERNMENT**	$41,508.75
	Invoice	Date	Description	Amount	
	6104	06/30/2016	HR SERVICES-JUN 2016	$9,753.75	
	6178	07/31/2016	HR SERVICES-JUL 2016	$15,446.25	
	6263	08/31/2016	HR SERVICES-AUG 2016	$16,308.75	
65005	10/27/2016			**RESERVE ACCOUNT**	$1,000.00
	Invoice	Date	Description	Amount	
	10/14/2016	10/14/2016	POSTAGE FOR ACCOUNT #15775679	$1,000.00	
65006	10/27/2016			**RICOH USA, INC.**	$38.19
	Invoice	Date	Description	Amount	
	5044866290	10/03/2016	METER READING-CODE ENFORCEMENT COPIER	$38.19	
65007	10/27/2016			**ROBINSON'S FLOWERS**	$179.85
	Invoice	Date	Description	Amount	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	2661	10/01/2016	FLOWERS AND DELIVERY	$179.85	
65008	10/27/2016			**SAN GABRIEL VALLEY NEWSPAPER**	$1,254.00
	Invoice	Date	Description	Amount	
	0000286501	09/30/2016	MONTHLY ADVERTISING-HOMESTEAD	$1,254.00	
65009	10/27/2016			**SO CAL INDUSTRIES**	$84.90
	Invoice	Date	Description	Amount	
	242450	09/21/2016	RR RENTAL-TONNER CYN/57 FWY	$84.90	
65010	10/27/2016			**SO CALIFORNIA EDISON COMPANY**	$194.85
	Invoice	Date	Description	Amount	
	7500714615	10/10/2016	6/1-6/30/16 SVC-RELIABILITY SVC	$194.85	
65011	10/27/2016			**SOUTHERN CALIFORNIA WATER**	$2,000.00
	Invoice	Date	Description	Amount	
	26995	10/06/2016	SPONSORSHIP	$2,000.00	
65012	10/27/2016			**STAPLES BUSINESS ADVANTAGE**	$1,849.43
	Invoice	Date	Description	Amount	
	8041134164	09/24/2016	OFFICE SUPPLIES	$249.75	
	8041257620	10/01/2016	OFFICE SUPPLIES	$1,599.68	
65013	10/27/2016			**STAPLES CREDIT PLAN**	$253.20
	Invoice	Date	Description	Amount	
	61591	09/02/2016	OFFICE SUPPLIES	$253.20	
65014	10/27/2016			**SULLY MILLER CONTRACTING**	$211,966.06
	Invoice	Date	Description	Amount	
	#2CITY-1421	10/01/2016	VALLEY BLVD RECONSTRUCTION	$223,122.20	

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
65015	10/27/2016			**U.S. NATIONAL BANK**	$26,572.33
	Invoice	Date	Description	Amount	
	#2CITY-1421-RET	10/01/2016	RETENTION-VALLEY BLVD RECONSTRUCTION	$26,572.33	
65016	10/27/2016			**TATTLETALE**	$480.00
	Invoice	Date	Description	Amount	
	R45279	10/02/2016	MONITORING SVC-METRO SOLAR 11/1/16-10/31/17	$480.00	
65017	10/27/2016			**TELEPACIFIC COMMUNICATIONS**	$912.08
	Invoice	Date	Description	Amount	
	82880085-0	09/30/2016	INTERNET SVC-HOMESTEAD	$912.08	
65018	10/27/2016			**THE DOLPHIN GROUP, INC.**	$30,000.00
	Invoice	Date	Description	Amount	
	30532	09/30/2016	MEDIA CONSULTING-SEP 2016	$15,000.00	
	30491	08/31/2016	MEDIA CONSULTING-AUG 2016	$15,000.00	
65019	10/27/2016			**THE PUN GROUP**	$23,000.00
	Invoice	Date	Description	Amount	
	1600284	09/30/2016	PFA-AUDIT FY 15/16	$3,000.00	
	1600282	09/30/2016	COI-AUDIT FY 15/16	$20,000.00	
65020	10/27/2016			**USA FACT, INC.**	$77.18
	Invoice	Date	Description	Amount	
	6080525	07/25/2016	BACKGROUND CHECK SVC	$77.18	
65021	10/27/2016			**VANGUARD CLEANING SYSTEMS,**	$925.00
	Invoice	Date	Description	Amount	
	29017	10/01/2016	JANITORIAL SVC-HOMESTEAD	$925.00	
65022	10/27/2016			**VEJAR COMMUNITY CLUB**	$200.00

CITY OF INDUSTRY
WELLS FARGO BANK
October 27, 2016

Check	Date			Payee Name	Check Amount
CITY.WF.CHK - City General Wells Fargo					
	Invoice	Date	Description	Amount	
	JTTTVE1	10/12/2016	BUS FUNDING STIPEND-HOMESTEAD	$100.00	
	JTTTVE2	10/12/2016	BUS FUNDING STIPEND-HOMESTEAD	$100.00	
65023	10/27/2016			**VERIZON BUSINESS**	$160.65
	Invoice	Date	Description	Amount	
	66932329	10/10/2016	9/1-9/30/16 SVC-VARIOUS SITES	$124.02	
	66932328	10/10/2016	9/1-9/30/16 SVC-VARIOUS SITES	$31.44	
	66932328-A	10/10/2016	9/1-9/30/16 SVC-HATCHER	$5.19	
65024	10/27/2016			**WALNUT VALLEY WATER DISTRICT**	$1,600.00
	Invoice	Date	Description	Amount	
	09/30/16	09/30/2016	DESIGN/PLAN CHECK FEE-FAURE AVE	$1,600.00	
65025	10/27/2016			**WEATHERITE SERVICE**	$534.00
	Invoice	Date	Description	Amount	
	L168471	09/15/2016	A/C MAINT-15660 STAFFORD/15559 RAUSCH	$370.00	
	L168382	09/09/2016	A/C MAINT-IMC BLDG	$164.00	
65026	10/27/2016			**WILLDAN ENGINEERING**	$11,695.00
	Invoice	Date	Description	Amount	
	00614540	09/21/2016	ENGINEERING SVC-VARIOUS SITES	$11,695.00	

Checks	Status	Count	Transaction Amount
	Total	104	$2,207,950.04

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 Radecki and Members of the City Council

From: Paul J. Philips, City Manager

Staff: Alex Gonzalez, Director of Development Services and Administration
Kristen Weger, Administrative Analyst KW

Date: October 27, 2016

SUBJECT: Consideration of a License Agreement with Diamond Bar Imports, Inc., for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944 located at 17301 Gale Avenue as a Temporary Overflow Parking Area for Vehicle Inventory

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Diamond Bar Imports, Inc., ("Diamond Honda") contacted the City of Industry ("City") regarding the temporary use of the property located at 17301 Gale Avenue as an overflow parking area for vehicle inventory. The License Agreement shall be for a term of six (6) months, terminating on May 27, 2017. The City Manager, at his sole discretion, may grant two, one year extensions to the Agreement.

Diamond Honda is responsible for maintaining the premises which shall include, but is not limited to, weed abatement and installing a fence around the premises. Diamond Honda shall also provide a site plan to the City, which shall detail the configuration of the vehicles on the premises, and which shall provide sufficient ingress and egress for public safety vehicles. The lot is ideal for overflow vehicle parking due to the close proximity to the Diamond Honda car dealership. The City may, by written notice, terminate the License Agreement at any time. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

Fiscal Impact

Diamond Honda will be leasing two (2) acres at a lease rate of $1,000 per acre per month. Payment of $2,000 per month shall be payable to the City in advance on the first day of each month during the term of the Agreement.

Exhibit

A: License Agreement with Diamond Bar Imports, Inc., dated October 27, 2016

EXHIBIT A

License Agreement with Diamond Bar Imports, Inc., dated October 27, 2016

[Attached]

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**"), dated October 27, 2016, ("**Effective Date**") is entered into by and between the City of Industry, a public body, corporate and politic ("**Licensor/City**"), and Diamond Bar Imports, Inc., a California corporation ("**Licensee**") (Licensor and Licensee are individually referred to as "**Party**" and collectively referred to as the "**Parties**").

RECITALS

WHEREAS, the City is the owner of certain property located at **17301 Gale Avenue, City of Industry, CA 91748**, and Licensee desires to enter the portion of the property generally described as a lot, **Assessor's Parcel No. 8264-001-944 and 8462-001-943**, as set forth in Exhibit A, attached hereto and incorporated herein by reference ("**Premises**").

WHEREAS, Licensee desires to utilize the Premises as an overflow parking area for its vehicle inventory; and

WHEREAS, Licensee acknowledges that Licensee is entering onto the Premises at its sole risk and expense, and Licensor does not have any liability to Licensee under this Agreement.

NOW, THEREFORE, for valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

TERMS

1. License to Enter the Premises. Licensor hereby grants to Licensee a non-exclusive license (the "**License**") granting permission to enter upon the Premises as of the Effective Date of this Agreement, and to use the Premises as an overflow parking area for its vehicle inventory (collectively, "**Permitted Use**"); provided, that Licensee's use of the Premises shall not interfere with the operation of business activities, if any, then being conducted on the Premises, including, but not limited to the use of the surrounding area by other car dealerships for overflow parking for vehicle inventory, and provided Licensee provides written notice to the Licensor at least five (5) days prior to Licensee first entering upon the Premises (said written notice shall state the purpose for the entry upon the Premises, and said entry shall not exceed the stated purpose). Prior to any initial entry pursuant to the License, Licensee shall, provide to Licensor proof of insurance as set forth in Section 7 of this Agreement. Licensee shall not permit any other party, except the duly-authorized representatives, agents, employees and contractors (collectively "**Representatives**") of Licensee to enter or use the Premises during the term of this License, without Licensor's prior written consent, and in all events the sole reason for entry and use of the Premises shall be for the performance of Licensee's Permitted Use. Licensee hereby acknowledges that it is only permitted to utilize the portion of the Premises designated as "Honda" in Exhibit A, and that Licensor may grant a license to other car dealerships to utilize other portions of the Premises (as set forth in Exhibit A), for overflow parking for vehicle inventory.

2. Payment. Licensee shall pay Licensor, and Licensor shall accept Two Thousand Dollars ($2,000.00) ("**License Payment**") per month, for the use of the Premises. Payment shall be due in advance on the first day of each month during the term of the Agreement. For the month of October 2016, the rent shall be pro-rated, and the pro-rata License Payment shall be due upon

execution of the Agreement by Licensee. Payment shall be made to Licensor at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91746.

3. Permitted Use. The Permitted Use is hereby defined to include overflow parking area for vehicle inventory. Further, Licensee shall ensure that upon close of business each day, all vehicles are locked and secured on premises to deter theft, and other criminal activities. Prior to any initial entry on the Premises, Licensee shall provide a site plan to the Licensor, which shall detail the configuration of the vehicles on the Premises, and which shall provide sufficient ingress and egress for public safety vehicles. Licensee shall obtain any and all approvals required by the Los Angeles County Fire Department prior to initial entry on the Premises. Licensee shall exercise due care in the performance of the Permitted Use and such use shall be exercised in a manner which complies with all applicable laws.

4. Maintenance of Premises. Prior to commencement of the Permitted Use, City shall install a fence around the Premises to designate the area in which the Permitted Use shall occur. Licensee shall maintain the Premises, which shall include, but is not limited to, weed abatement. Upon termination of the License, Licensee shall repair any damage done to the Premises by Licensee or its duly authorized Representatives, and shall restore the Premises to its condition as of the Effective Date of this Agreement.

5. Government Regulations and Other Obligations of Licensee. As a condition precedent to commencement of the Permitted Use, if required, Licensee shall obtain at its sole cost and expense all governmental permits and authorizations of whatever nature required, if any ("**Permits**") by any and all governmental authorities having jurisdiction over the Premises for Licensee's exercise of the Permitted Use. Licensor shall use commercially reasonable efforts to cooperate with Licensee and to support any and all applications or request for said Permits submitted by Licensee or on Licensee's behalf. Licensee shall, in all activities undertaken pursuant to this Agreement, comply and cause its Representatives to comply with all federal, state and local laws, statutes, orders, ordinances, rules, regulations, plans, policies and decrees.

6. Liens.

6.1 Licensee shall not cause or permit to be filed, recorded or enforced against the Premises, or any part thereof, any mechanics', material men's, contractors' or subcontractors' liens arising from the Permitted Use or any claim or action affecting the title to the Premises arising from the Permitted Use, and Licensee shall pay or cause to be paid, or otherwise removed or bonded over, the full amount of all such liens or claim within fifteen (15) days of receiving written notice thereof. In addition to and not in limitation of Licensor's other rights and remedies under this Agreement or under law, should Licensee fail within fifteen (15) business days of a written notice from Licensor to pay and discharge or bond over any lien arising out of Licensee's use of the Premises, then a material breach under this Agreement shall be deemed to have occurred which, at Licensor's election, shall entitle Licensor to terminate this License effective upon notice by Licensor to Licensee so stating.

6.2 If Licensee desires to contest in good faith the validity of any lien or any claim or demand that could result in a lien against the Premises or any portion thereof for which Licensor could become liable if not successfully resolved, as a condition to such contest, Licensee shall notify Licensor of Licensee's intent to contest the lien or claim and the grounds for such

contest. Notwithstanding anything to the contrary set forth herein, Licensee shall pay and satisfy any adverse judgment that may be rendered thereon before the enforcement thereof against Licensor or the Premises.

7. Insurance. Prior to entering the Premises and until the termination of this Agreement, Licensee shall maintain at its sole expense insurance limits as stipulated in this section.

7.1 Minimum Scope and Limit of Insurance. Coverage shall be at least as broad as:

(a) Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than $1,000,000 per occurrence and $2,000,000 in the aggregate.

(b) Automobile Liability: Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Licensee has no owned autos, Code 8 (hired) and 9 (non-owned), with limits no less than $1,000,000 per accident for bodily injury and property damage.

(c) Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease.

7.2 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

(a) Additional Insured Status. The Licensor and City Representatives, (as defined in Section 8, below) are to be additional insureds on the CGL policy with respect to liability arising out of Licensee's use of the Premises. General liability coverage can be provided in the form of an endorsement to the Licensee's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

(b) Primary Coverage. For any claims related to this Agreement, the Licensee's insurance coverage shall be primary insurance as respects the Licensor/City Representatives. Any insurance or self-insurance maintained by the Licensor/City Representatives, shall be excess of the Licensee's insurance and shall not contribute with it.

(c) Contractors and Subcontractors. Licensee shall require and verify that all contractors and subcontractors maintain insurance meeting all the requirements stated herein, and Licensee shall ensure that Licensor/City Representatives are additional insureds on insurance required from contractors/subcontractors. For CGL coverage contractors and subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

(d) Notice of Cancellation. Each insurance policy required above shall state that coverage shall not be canceled, except with notice to the City.

(e) Waiver of Subrogation. Licensee hereby grants to City a waiver of any right to subrogation which any insurer of said Licensee may acquire against the City by virtue of

the payment of any loss under such insurance. Licensee agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation provided such endorsement is available on commercially reasonable terms, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(f) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the Licensee to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

(g) Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

(h) Deductibles. All such insurance shall have deductibility limits of not greater than $50,000.00 unless otherwise approved by the City.

(i) Verification of Coverage. Licensee shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language providing the insurance coverage required above. All certificates and endorsements are to be received and approved by the City before exercise of the Permitted use commences. However, failure to obtain the required documents prior to the exercise of the Permitted Use shall not waive the Licensee's obligation to provide them. The City reserves the right to require complete copies of all required insurance policies, including endorsements, required by these specifications, at any time.

(j) Occurrence Basis Coverage. All policies shall be written on an occurrence basis unless otherwise approved by the City.

8. Indemnification. From and after the execution of this Agreement, Licensee hereby agrees to indemnify, defend, protect and hold harmless, with counsel of the Licensor's choosing, the City and any and all predecessors, successors, assigns, agents, officials, employees, members, independent contractors, affiliates, principals, officers, directors, attorneys, accountants, representatives, staff, and council members of the City collectively, the "**City Representatives**", and each of them, from and against all claims, including any claims from any third party beneficiary to this Agreement, causes of action, liabilities, losses, damages, injuries, expenses, charges, penalties, or costs, of whatsoever character, nature and kind, (including attorney's fees and costs incurred by the indemnified Party with respect to legal counsel of its choice), whether to property or to person(s), and whether by direct or derivative action, known or unknown, suspected or unsuspected, latent or patent, existing or contingent (collectively "**Losses and Liabilities**"), related directly or indirectly to, or arising out of or in any way connected with any of the activities of Licensee, its agents, employees, licensees, lessees, representatives, invitees, contractors, subcontractors or independent contractors on the Premises. This indemnification requires Licensee to indemnify the City and any and all City Representatives from and against all Losses and Liabilities, including attorneys' fees, arising out of the use or release of any Hazardous Substances on the Premises by Licensee. Licensee's obligation to defend shall arise regardless of any claim or assertion that the City caused or contributed to the Losses and/or Liabilities, provided, however, that Licensee's liability under this Section 8 will be limited to the extent of any contributory negligence of Licensor.

9. Term, Termination and Remedies. The License shall commence as of the Effective Date of this Agreement, and shall automatically terminate on **May 27, 2017.** The City Manager, at his sole discretion, may grant two, one year extensions to this Agreement. Notwithstanding the foregoing, at any time, for any reason, the Licensee or Licensor may, at their sole and absolute discretion, terminate this Agreement without cause, upon 30 days' written notice to the other Party. Further, in the event Licensor sells or transfers the Premises during the term of this Agreement, this Agreement shall terminate upon seven (7) days written notice to Licensee. In addition, if Licensee shall be in breach of any of its obligations under this Agreement and shall fail to cure such breach within ten (10) business days of written notice from Licensor specifying the nature of any such breach, Licensor shall have the right to terminate this Agreement upon written notice to Licensee. Licensee acknowledges that this License is solely a license, and that Licensee has no rights as an owner, purchaser or tenant by virtue thereof. Upon termination of the Agreement, Licensee shall promptly vacate the Premises and comply with the provisions of Section 4 above. No termination or expiration of this License shall relieve Licensee of its obligations hereunder.

10. Inspection and Access to Premises. Licensor and any of its duly authorized representatives, employees, agents or independent contractors shall be entitled to enter the Premises, to show the Premises to potential purchasers, to inspect the premises, to inspect Licensee's use of the Premises, and for any other purpose, at any time

11. Assignability. This License cannot be assigned by Licensee whether voluntarily or by operation of law, and Licensee shall not permit any use of the Premises, or any part thereof during the Term of this License in violation of the provisions of this License, except with the consent of Licensor (which shall not be unreasonably withheld, conditioned or delayed), and any attempt to do so shall be null and void.

12. Cost of Enforcement. In the event it is necessary for either Party to employ an attorney or other person or commence an action to enforce or interpret any of the provisions of this License or for Licensor to remove Licensee from the Premises, the non-prevailing party agrees to pay to the prevailing party, in addition to such other relief as may be awarded by the court, City or other authority before which such suit or proceeding is commenced, all reasonable costs of enforcement in connection therewith including, but not limited to, reasonable attorneys' fees, expenses and costs of investigation.

13. Notices. All notices, consents, approvals, requests, demands and other communications provided for herein shall be in writing and shall be deemed to have been duly given upon the earlier of when personally delivered or served or twenty-four (24) hours after being deposited with FedEx or any other established overnight courier service to the intended party addressed as follows:

Licensor: Paul Philips
City Manager
15625 East Stafford Street, Suite 100
City of Industry, CA 91744
Tel: (626) 333-2211
paul@cityofindustry.org

With a Copy to:	James M. Casso, City Attorney Casso & Sparks, LLP 13200 Crossroads Parkway North, Suite 345 City of Industry, CA 91746 Tel: (626) 269-2980 jcasso@cassosparks.com
Licensee:	Andrew Keung, General Manager Diamond Bar Imports, Inc. 17525 East Gale Avenue City of Industry, CA 91748 Tel (626) 935-1700

14. No Liability of Licensor. Licensee and Licensor acknowledge and agree that Licensee is entering into the Premises prior to the transfer of the Premises to Licensee and that Licensee does so at its sole risk and expense. The provisions hereof shall inure to the benefit of Licensor's and Licensee's successors and assigns including any Mortgagee.

15. Miscellaneous. This Agreement constitutes the entire agreement between the Parties hereto pertaining to the subject matter hereof, and all prior and contemporaneous agreements, representations and understandings of the Parties hereto, oral or written, are hereby superseded and merged herein. No supplement, modification or amendment of this Agreement shall be binding unless in writing and executed by the Parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions, whether or not similar, nor shall any waiver be a continuing waiver. No waiver shall be binding unless executed in writing by the Party making the waiver. The indemnifications under this Agreement, the obligations of Licensee hereunder to remove liens and Licensee's obligations hereunder with respect to vacating and repairing the Premises shall survive the expiration or termination of the License Term. This Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of California. Any action brought concerning this Agreement shall be brought in the appropriate court for the County of Los Angeles, California. Each Party hereby irrevocably consents to the jurisdiction of said court. Licensee hereby expressly waives all provisions of law providing for a change of venue due to the fact that the City may be a party to such action, including, without limitation, the provisions of California Code of Civil Procedure Section 394. Licensee further waives and releases any right it may have to have any action concerning this Agreement transferred to Federal District Court due to any diversity of citizenship that may exist between City and Licensee. The headings of this Agreement are for purposes of reference only and shall not limit or define the meaning of the provisions hereof. This Agreement may be executed in any number of counterparts, each of which shall be an original, and all of which shall constitute one and the same instrument. Neither this instrument nor a short form memorandum or assignment hereof shall be filed or recorded in any public office without Licensor's or Licensee's prior written consent.

16. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

17. Authority. Each person executing this Agreement hereby represents and warrants (i) their authority to do so, and (ii) that such authority has been duly and validly conferred.

(SIGNATURES ON FOLLOWING PAGE)

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

"LICENSOR"

CITY OF INDUSTRY

By:_____
Paul Philips, City Manager

"LICENSEE"

DIAMOND BAR IMPORTS, INC.

By:_____
Andrew Keung, General Manager

ATTEST:

_____
Diane M. Schlichting, Chief Deputy City Clerk

APPROVED AS TO FORM:

_____
James M. Casso, City Attorney

EXHIBIT A

Legal Description

Assessor's Parcel Numbers (APN) 8264-001-944 and 8264-001-943 located at 17301 Gale Avenue, City of Industry, CA 91748. The area identified as "Honda" in the map below by an arrow and defining yellow lines identifies the area of the Premises, where the Permitted Use shall occur.

Location Map – 17301 Gale Avenue

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: Paul J. Philips, City Manager

Staff: Alex Gonzalez, Director of Development Services and Administration
Kristen Weger, Administrative Analyst KW

Date: October 27, 2016

SUBJECT: Consideration of a License Agreement with Leo Hoffman Chevrolet, Inc., for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944 located at 17301 Gale Avenue as a Temporary Overflow Parking Area for Vehicle Inventory

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Leo Hoffman Chevrolet, Inc., ("Puente Hills Chevrolet") contacted the City of Industry ("City") regarding the temporary use of the property located at 17301 Gale Avenue as an overflow parking area for vehicle inventory. The License Agreement shall be for a term of five (5) months, terminating on March 31, 2017. The City Manager, at his sole discretion, may grant two, one year extensions to the Agreement.

Puente Hills Chevrolet is responsible for maintaining the premises which shall include, but is not limited to, weed abatement and installing a fence around the premises. Puente Hills Chevrolet shall also provide a site plan to the City, which shall detail the configuration of the vehicles on the premises, and which shall provide sufficient ingress and egress for public safety vehicles. The lot is ideal for overflow vehicle parking due to the close proximity to the Puente Hills Chevrolet dealership. The City may, by written notice, terminate the License Agreement at any time. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

Fiscal Impact

Puente Hills Chevrolet will be leasing one (1) acre at a lease rate of $1,000 per acre per month. Payment of $1,000 per month shall be payable to the City in advance on the first day of each month during the term of the Agreement.

Exhibit
A: License Agreement with Leo Hoffman Chevrolet, Inc., dated October 27, 2016
PJP:AG:KW:mk

EXHIBIT A

License Agreement with Leo Hoffman Chevrolet, Inc., dated October 27, 2016

[Attached]

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**"), dated October 27, 2016, ("**Effective Date**") is entered into by and between the City of Industry, a public body, corporate and politic ("**Licensor/City**"), and Leo Hoffman Chevrolet, Inc., a California corporation ("**Licensee**") (Licensor and Licensee are individually referred to as "**Party**" and collectively referred to as the "**Parties**").

RECITALS

WHEREAS, the City is the owner of certain property located at **17301 Gale Avenue, City of Industry, CA 91748**, and Licensee desires to enter the portion of the property generally described as a lot, **Assessor's Parcel No. 8264-001-943 and 8264-001-944**, as set forth in Exhibit A, attached hereto and incorporated herein by reference ("**Premises**").

WHEREAS, Licensee desires to utilize the Premises as an overflow parking area for its vehicle inventory; and

WHEREAS, Licensee acknowledges that Licensee is entering onto the Premises at its sole risk and expense, and Licensor does not have any liability to Licensee under this Agreement.

NOW, THEREFORE, for valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

TERMS

1. License to Enter the Premises. Licensor hereby grants to Licensee a non-exclusive license (the "**License**") granting permission to enter upon the Premises as of the Effective Date of this Agreement, and to use the Premises as an overflow parking area for its vehicle inventory (collectively, "**Permitted Use**"); provided, that Licensee's use of the Premises shall not interfere with the operation of business activities, if any, then being conducted on the Premises, including, but not limited to the use of the surrounding area by other car dealerships for overflow parking for vehicle inventory, and provided Licensee provides written notice to the Licensor at least five (5) days prior to Licensee first entering upon the Premises (said written notice shall state the purpose for the entry upon the Premises, and said entry shall not exceed the stated purpose). Prior to any initial entry pursuant to the License, Licensee shall, provide to Licensor proof of insurance as set forth in Section 7 of this Agreement. Licensee shall not permit any other party, except the duly-authorized representatives, agents, employees and contractors (collectively "**Representatives**") of Licensee to enter or use the Premises during the term of this License, without Licensor's prior written consent, and in all events the sole reason for entry and use of the Premises shall be for the performance of Licensee's Permitted Use. Licensee hereby acknowledges that it is only permitted to utilize the portion of the Premises designated as "Chevy" in Exhibit A, and that Licensor may grant a license to other car dealerships to utilize other portions of the Premises (as set forth in Exhibit A), for overflow parking for vehicle inventory.

2. Payment. Licensee shall pay Licensor, and Licensor shall accept One Thousand Dollars ($1,000.00) ("**License Payment**") per month, for the use of the Premises. Payment shall be due in advance on the first day of each month during the term of the Agreement. For the month of October 2016, the rent shall be pro-rated, and the pro-rata License Payment shall be due upon

execution of the Agreement by Licensee. Payment shall be made to Licensor at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91746.

3. Permitted Use. The Permitted Use is hereby defined to include overflow parking area for vehicle inventory. Further, Licensee shall ensure that upon close of business each day, all vehicles are locked and secured on premises to deter theft, and other criminal activities. Prior to any initial entry on the Premises, Licensee shall provide a site plan to the Licensor, which shall detail the configuration of the vehicles on the Premises, and which shall provide sufficient ingress and egress for public safety vehicles. Licensee shall obtain any and all approvals required by the Los Angeles County Fire Department prior to initial entry on the Premises. Licensee shall exercise due care in the performance of the Permitted Use and such use shall be exercised in a manner which complies with all applicable laws.

4. Maintenance of Premises. Prior to commencement of the Permitted Use, City shall install a fence around the Premises to designate the area in which the Permitted Use shall occur. Licensee shall maintain the Premises, which shall include, but is not limited to, weed abatement. Upon termination of the License, Licensee shall repair any damage done to the Premises by Licensee or its duly authorized Representatives, and shall restore the Premises to its condition as of the Effective Date of this Agreement.

5. Government Regulations and Other Obligations of Licensee. As a condition precedent to commencement of the Permitted Use, if required, Licensee shall obtain at its sole cost and expense all governmental permits and authorizations of whatever nature required, if any ("**Permits**") by any and all governmental authorities having jurisdiction over the Premises for Licensee's exercise of the Permitted Use. Licensor shall use commercially reasonable efforts to cooperate with Licensee and to support any and all applications or request for said Permits submitted by Licensee or on Licensee's behalf. Licensee shall, in all activities undertaken pursuant to this Agreement, comply and cause its Representatives to comply with all federal, state and local laws, statutes, orders, ordinances, rules, regulations, plans, policies and decrees.

6. Liens.

6.1 Licensee shall not cause or permit to be filed, recorded or enforced against the Premises, or any part thereof, any mechanics', material men's, contractors' or subcontractors' liens arising from the Permitted Use or any claim or action affecting the title to the Premises arising from the Permitted Use, and Licensee shall pay or cause to be paid, or otherwise removed or bonded over, the full amount of all such liens or claim within fifteen (15) days of receiving written notice thereof. In addition to and not in limitation of Licensor's other rights and remedies under this Agreement or under law, should Licensee fail within fifteen (15) business days of a written notice from Licensor to pay and discharge or bond over any lien arising out of Licensee's use of the Premises, then a material breach under this Agreement shall be deemed to have occurred which, at Licensor's election, shall entitle Licensor to terminate this License effective upon notice by Licensor to Licensee so stating.

6.2 If Licensee desires to contest in good faith the validity of any lien or any claim or demand that could result in a lien against the Premises or any portion thereof for which Licensor could become liable if not successfully resolved, as a condition to such contest, Licensee shall notify Licensor of Licensee's intent to contest the lien or claim and the grounds for such

contest. Notwithstanding anything to the contrary set forth herein, Licensee shall pay and satisfy any adverse judgment that may be rendered thereon before the enforcement thereof against Licensor or the Premises.

7. Insurance. Prior to entering the Premises and until the termination of this Agreement, Licensee shall maintain at its sole expense insurance limits as stipulated in this section.

7.1 Minimum Scope and Limit of Insurance. Coverage shall be at least as broad as:

(a) Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than $1,000,000 per occurrence and $2,000,000 in the aggregate.

(b) Automobile Liability: Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Licensee has no owned autos, Code 8 (hired) and 9 (non-owned), with limits no less than $1,000,000 per accident for bodily injury and property damage.

(c) Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease.

7.2 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

(a) Additional Insured Status. The Licensor and City Representatives, (as defined in Section 8, below) are to be additional insureds on the CGL policy with respect to liability arising out of Licensee's use of the Premises. General liability coverage can be provided in the form of an endorsement to the Licensee's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

(b) Primary Coverage. For any claims related to this Agreement, the Licensee's insurance coverage shall be primary insurance as respects the Licensor/City Representatives. Any insurance or self-insurance maintained by the Licensor/City Representatives, shall be excess of the Licensee's insurance and shall not contribute with it.

(c) Contractors and Subcontractors. Licensee shall require and verify that all contractors and subcontractors maintain insurance meeting all the requirements stated herein, and Licensee shall ensure that Licensor/City Representatives are additional insureds on insurance required from contractors/subcontractors. For CGL coverage contractors and subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

(d) Notice of Cancellation. Each insurance policy required above shall state that coverage shall not be canceled, except with notice to the City.

(e) Waiver of Subrogation. Licensee hereby grants to City a waiver of any right to subrogation which any insurer of said Licensee may acquire against the City by virtue of

the payment of any loss under such insurance. Licensee agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation provided such endorsement is available on commercially reasonable terms, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(f) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the Licensee to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

(g) Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

(h) Deductibles. All such insurance shall have deductibility limits of not greater than $50,000.00 unless otherwise approved by the City.

(i) Verification of Coverage. Licensee shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language providing the insurance coverage required above. All certificates and endorsements are to be received and approved by the City before exercise of the Permitted use commences. However, failure to obtain the required documents prior to the exercise of the Permitted Use shall not waive the Licensee's obligation to provide them. The City reserves the right to require complete copies of all required insurance policies, including endorsements, required by these specifications, at any time.

(j) Occurrence Basis Coverage. All policies shall be written on an occurrence basis unless otherwise approved by the City.

8. Indemnification. From and after the execution of this Agreement, Licensee hereby agrees to indemnify, defend, protect and hold harmless, with counsel of the Licensor's choosing, the City and any and all predecessors, successors, assigns, agents, officials, employees, members, independent contractors, affiliates, principals, officers, directors, attorneys, accountants, representatives, staff, and council members of the City collectively, the "**City Representatives**", and each of them, from and against all claims, including any claims from any third party beneficiary to this Agreement, causes of action, liabilities, losses, damages, injuries, expenses, charges, penalties, or costs, of whatsoever character, nature and kind, (including attorney's fees and costs incurred by the indemnified Party with respect to legal counsel of its choice), whether to property or to person(s), and whether by direct or derivative action, known or unknown, suspected or unsuspected, latent or patent, existing or contingent (collectively "**Losses and Liabilities**"), related directly or indirectly to, or arising out of or in any way connected with any of the activities of Licensee, its agents, employees, licensees, lessees, representatives, invitees, contractors, subcontractors or independent contractors on the Premises. This indemnification requires Licensee to indemnify the City and any and all City Representatives from and against all Losses and Liabilities, including attorneys' fees, arising out of the use or release of any Hazardous Substances on the Premises by Licensee. Licensee's obligation to defend shall arise regardless of any claim or assertion that the City caused or contributed to the Losses and/or Liabilities, provided, however, that Licensee's liability under this Section 8 will be limited to the extent of any contributory negligence of Licensor.

9. Term, Termination and Remedies. The License shall commence as of the Effective Date of this Agreement, and shall automatically terminate on **March 31, 2017.** The City Manager, at his sole discretion, may grant two, one year extensions to this Agreement. Notwithstanding the foregoing, at any time, for any reason, the Licensor may, at its sole and absolute discretion, terminate this Agreement without cause, upon 30 days' written notice to Licensee. Further, in the event Licensor sells or transfers the Premises during the term of this Agreement, this Agreement shall terminate upon seven (7) days written notice to Licensee. In addition, if Licensee shall be in breach of any of its obligations under this Agreement and shall fail to cure such breach within ten (10) business days of written notice from Licensor specifying the nature of any such breach, Licensor shall have the right to terminate this Agreement upon written notice to Licensee. Licensee acknowledges that this License is solely a license, and that Licensee has no rights as an owner, purchaser or tenant by virtue thereof. Upon termination of the Agreement, Licensee shall promptly vacate the Premises and comply with the provisions of Section 4 above. No termination or expiration of this License shall relieve Licensee of its obligations hereunder.

10. Inspection and Access to Premises. Licensor and any of its duly authorized representatives, employees, agents or independent contractors shall be entitled to enter the Premises, to show the Premises to potential purchasers, to inspect the premises, to inspect Licensee's use of the Premises, and for any other purpose, at any time

11. Assignability. This License cannot be assigned by Licensee whether voluntarily or by operation of law, and Licensee shall not permit any use of the Premises, or any part thereof during the Term of this License in violation of the provisions of this License, except with the consent of Licensor (which shall not be unreasonably withheld, conditioned or delayed), and any attempt to do so shall be null and void.

12. Cost of Enforcement. In the event it is necessary for either Party to employ an attorney or other person or commence an action to enforce or interpret any of the provisions of this License or for Licensor to remove Licensee from the Premises, the non-prevailing party agrees to pay to the prevailing party, in addition to such other relief as may be awarded by the court, City or other authority before which such suit or proceeding is commenced, all reasonable costs of enforcement in connection therewith including, but not limited to, reasonable attorneys' fees, expenses and costs of investigation.

13. Notices. All notices, consents, approvals, requests, demands and other communications provided for herein shall be in writing and shall be deemed to have been duly given upon the earlier of when personally delivered or served or twenty-four (24) hours after being deposited with FedEx or any other established overnight courier service to the intended party addressed as follows:

Licensor:	Paul Philips City Manager 15625 East Stafford Street, Suite 100 City of Industry, CA 91744 Tel: (626) 333-2211 paul@cityofindustry.org
With a Copy to:	James M. Casso, City Attorney Casso & Sparks, LLP

13200 Crossroads Parkway North, Suite 345
City of Industry, CA 91746
Tel: (626) 269-2980
jcasso@cassosparks.com

Licensee: Jeffrey A. Campbell, Controller
Leo Hoffman Chevrolet, Inc.
17300 East Gale Avenue
City of Industry, CA 91748
Tel (626) 913-0440

14. No Liability of Licensor. Licensee and Licensor acknowledge and agree that Licensee is entering into the Premises prior to the transfer of the Premises to Licensee and that Licensee does so at its sole risk and expense. The provisions hereof shall inure to the benefit of Licensor's and Licensee's successors and assigns including any Mortgagee.

15. Miscellaneous. This Agreement constitutes the entire agreement between the Parties hereto pertaining to the subject matter hereof, and all prior and contemporaneous agreements, representations and understandings of the Parties hereto, oral or written, are hereby superseded and merged herein. No supplement, modification or amendment of this Agreement shall be binding unless in writing and executed by the Parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions, whether or not similar, nor shall any waiver be a continuing waiver. No waiver shall be binding unless executed in writing by the Party making the waiver. The indemnifications under this Agreement, the obligations of Licensee hereunder to remove liens and Licensee's obligations hereunder with respect to vacating and repairing the Premises shall survive the expiration or termination of the License Term. This Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of California. Any action brought concerning this Agreement shall be brought in the appropriate court for the County of Los Angeles, California. Each Party hereby irrevocably consents to the jurisdiction of said court. Licensee hereby expressly waives all provisions of law providing for a change of venue due to the fact that the City may be a party to such action, including, without limitation, the provisions of California Code of Civil Procedure Section 394. Licensee further waives and releases any right it may have to have any action concerning this Agreement transferred to Federal District Court due to any diversity of citizenship that may exist between City and Licensee. The headings of this Agreement are for purposes of reference only and shall not limit or define the meaning of the provisions hereof. This Agreement may be executed in any number of counterparts, each of which shall be an original, and all of which shall constitute one and the same instrument. Neither this instrument nor a short form memorandum or assignment hereof shall be filed or recorded in any public office without Licensor's or Licensee's prior written consent.

16. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

17. Authority. Each person executing this Agreement hereby represents and warrants (i) their authority to do so, and (ii) that such authority has been duly and validly conferred.

(SIGNATURES ON FOLLOWING PAGE)

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

"LICENSOR"

CITY OF INDUSTRY

By:_____
Paul Philips, City Manager

"LICENSEE"

LEO HOFFMAN CHEVROLET, INC.

By:_____
Jeffrey A. Campbell, Controller

ATTEST:

_____
Diane M. Schlichting, Chief Deputy City Clerk

APPROVED AS TO FORM:

_____
James M. Casso, City Attorney

EXHIBIT A

Legal Description

Assessor's Parcel Numbers (APN) 8264-001-943 and 8264-001-944 located at 17301 Gale Avenue, City of Industry, CA 91748. The area identified as "Chevy" in the map below by an arrow and defining yellow lines identifies the area of the Premises, where the Permitted Use shall occur.

Location Map – 17301 Gale Avenue

CITY COUNCIL

ITEM NO. 5.4

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: Alex Gonzalez, Director of Development Services and Administration
Kristen Weger, Administrative Analyst KW

Date: October 27, 2016

SUBJECT: Consideration of a License Agreement with PH Diversified, LLC for Access to Assessor's Parcel Numbers 8264-001-943 and 8264-001-944 located at 17301 Gale Avenue as a Temporary Overflow Parking Area for Vehicle Inventory

---

PH Diversified, LLC ("Puente Hills Ford") contacted the City of Industry ("City") regarding the temporary use of the property located at 17301 Gale Avenue as an overflow parking area for vehicle inventory. The License Agreement shall be for a term of fourteen (14) months, terminating on December 31, 2017. The City Manager, at his sole discretion, may grant two, one year extensions to the Agreement.

Puente Hills Ford is responsible for maintaining the premises which shall include, but is not limited to, weed abatement and installing a fence around the premises. Puente Hills Ford shall also provide a site plan to the City, which shall detail the configuration of the vehicles on the premises, and which shall provide sufficient ingress and egress for public safety vehicles. The lot is ideal for overflow vehicle parking due to the close proximity to the Puente Hills Ford dealership. The City may, by written notice, terminate the License Agreement at any time. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

Fiscal Impact

Puente Hills Ford will be leasing six (6) acres at a lease rate of $1,000 per acre per month. Payment of $6,000 per month shall be payable to the City in advance on the first day of each month during the term of the Agreement.

Exhibit
A: License Agreement with PH Diversified, LLC dated October 27, 2016

PJP:AG:KW:mk

EXHIBIT A

License Agreement with PH Diversified, LLC dated October 27, 2016

[Attached]

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("**Agreement**"), dated October 27, 2016, ("**Effective Date**") is entered into by and between the City of Industry, a public body, corporate and politic ("**Licensor/City**"), and PH Diversified, LLC, a California limited liability company ("**Licensee**") (Licensor and Licensee are individually referred to as "**Party**" and collectively referred to as the "**Parties**").

RECITALS

WHEREAS, the City is the owner of certain property located at **17301 Gale Avenue, City of Industry, CA 91748**, and Licensee desires to enter the portion of the property generally described as a lot, **Assessor's Parcel No. 8264-001-944 and 8264-001-943**, as set forth in Exhibit A, attached hereto and incorporated herein by reference ("**Premises**").

WHEREAS, Licensee desires to utilize the Premises as an overflow parking area for its vehicle inventory; and

WHEREAS, Licensee acknowledges that Licensee is entering onto the Premises at its sole risk and expense, and Licensor does not have any liability to Licensee under this Agreement.

NOW, THEREFORE, for valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

TERMS

1. License to Enter the Premises. Licensor hereby grants to Licensee a non-exclusive license (the "**License**") granting permission to enter upon the Premises as of the Effective Date of this Agreement, and to use the Premises as an overflow parking area for its vehicle inventory (collectively, "**Permitted Use**"); provided, that Licensee's use of the Premises shall not interfere with the operation of business activities, if any, then being conducted on the Premises, including, but not limited to the use of the surrounding area by other car dealerships for overflow parking for vehicle inventory, and provided Licensee provides written notice to the Licensor at least five (5) days prior to Licensee first entering upon the Premises (said written notice shall state the purpose for the entry upon the Premises, and said entry shall not exceed the stated purpose). Prior to any initial entry pursuant to the License, Licensee shall, provide to Licensor proof of insurance as set forth in Section 7 of this Agreement. Licensee shall not permit any other party, except the duly-authorized representatives, agents, employees and contractors (collectively "**Representatives**") of Licensee to enter or use the Premises during the term of this License, without Licensor's prior written consent, and in all events the sole reason for entry and use of the Premises shall be for the performance of Licensee's Permitted Use. Licensee hereby acknowledges that it is only permitted to utilize the portion of the Premises designated as "Ford" in Exhibit A, and that Licensor may grant a license to other car dealerships to utilize other portions of the Premises (as set forth in Exhibit A), for overflow parking for vehicle inventory.

2. Payment. Licensee shall pay Licensor, and Licensor shall accept Six Thousand Dollars ($6,000.00) ("**License Payment**") per month, for the use of the Premises. Payment shall be due in advance on the first day of each month during the term of the Agreement. For the month of October 2016, the rent shall be pro-rated, and the pro-rata License Payment shall be due upon

execution of the Agreement by Licensee. Payment shall be made to Licensor at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91746.

3. Permitted Use. The Permitted Use is hereby defined to include overflow parking area for vehicle inventory. Further, Licensee shall ensure that upon close of business each day, all vehicles are locked and secured on premises to deter theft, and other criminal activities. Prior to any initial entry on the Premises, Licensee shall provide a site plan to the Licensor, which shall detail the configuration of the vehicles on the Premises, and which shall provide sufficient ingress and egress for public safety vehicles. Licensee shall obtain any and all approvals required by the Los Angeles County Fire Department prior to initial entry on the Premises. Licensee shall exercise due care in the performance of the Permitted Use and such use shall be exercised in a manner which complies with all applicable laws.

4. Maintenance of Premises. Prior to commencement of the Permitted Use, City shall install a fence around the Premises to designate the area in which the Permitted Use shall occur. Licensee shall maintain the Premises, which shall include, but is not limited to, weed abatement. Upon termination of the License, Licensee shall repair any damage done to the Premises by Licensee or its duly authorized Representatives, and shall restore the Premises to its condition as of the Effective Date of this Agreement.

5. Government Regulations and Other Obligations of Licensee. As a condition precedent to commencement of the Permitted Use, if required, Licensee shall obtain at its sole cost and expense all governmental permits and authorizations of whatever nature required, if any ("**Permits**") by any and all governmental authorities having jurisdiction over the Premises for Licensee's exercise of the Permitted Use. Licensor shall use commercially reasonable efforts to cooperate with Licensee and to support any and all applications or request for said Permits submitted by Licensee or on Licensee's behalf. Licensee shall, in all activities undertaken pursuant to this Agreement, comply and cause its Representatives to comply with all federal, state and local laws, statutes, orders, ordinances, rules, regulations, plans, policies and decrees.

6. Liens.

6.1 Licensee shall not cause or permit to be filed, recorded or enforced against the Premises, or any part thereof, any mechanics', material men's, contractors' or subcontractors' liens arising from the Permitted Use or any claim or action affecting the title to the Premises arising from the Permitted Use, and Licensee shall pay or cause to be paid, or otherwise removed or bonded over, the full amount of all such liens or claim within fifteen (15) days of receiving written notice thereof. In addition to and not in limitation of Licensor's other rights and remedies under this Agreement or under law, should Licensee fail within fifteen (15) business days of a written notice from Licensor to pay and discharge or bond over any lien arising out of Licensee's use of the Premises, then a material breach under this Agreement shall be deemed to have occurred which, at Licensor's election, shall entitle Licensor to terminate this License effective upon notice by Licensor to Licensee so stating.

6.2 If Licensee desires to contest in good faith the validity of any lien or any claim or demand that could result in a lien against the Premises or any portion thereof for which Licensor could become liable if not successfully resolved, as a condition to such contest, Licensee shall notify Licensor of Licensee's intent to contest the lien or claim and the grounds for such

contest. Notwithstanding anything to the contrary set forth herein, Licensee shall pay and satisfy any adverse judgment that may be rendered thereon before the enforcement thereof against Licensor or the Premises.

7. Insurance. Prior to entering the Premises and until the termination of this Agreement, Licensee shall maintain at its sole expense insurance limits as stipulated in this section.

7.1 Minimum Scope and Limit of Insurance. Coverage shall be at least as broad as:

(a) Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than $1,000,000 per occurrence and $2,000,000 in the aggregate.

(b) Automobile Liability: Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Licensee has no owned autos, Code 8 (hired) and 9 (non-owned), with limits no less than $1,000,000 per accident for bodily injury and property damage.

(c) Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than $1,000,000 per accident for bodily injury or disease.

7.2 Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

(a) Additional Insured Status. The Licensor and City Representatives, (as defined in Section 8, below) are to be additional insureds on the CGL policy with respect to liability arising out of Licensee's use of the Premises. General liability coverage can be provided in the form of an endorsement to the Licensee's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used).

(b) Primary Coverage. For any claims related to this Agreement, the Licensee's insurance coverage shall be primary insurance as respects the Licensor/City Representatives. Any insurance or self-insurance maintained by the Licensor/City Representatives, shall be excess of the Licensee's insurance and shall not contribute with it.

(c) Contractors and Subcontractors. Licensee shall require and verify that all contractors and subcontractors maintain insurance meeting all the requirements stated herein, and Licensee shall ensure that Licensor/City Representatives are additional insureds on insurance required from contractors/subcontractors. For CGL coverage contractors and subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

(d) Notice of Cancellation. Each insurance policy required above shall state that coverage shall not be canceled, except with notice to the City.

(e) Waiver of Subrogation. Licensee hereby grants to City a waiver of any right to subrogation which any insurer of said Licensee may acquire against the City by virtue of

the payment of any loss under such insurance. Licensee agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation provided such endorsement is available on commercially reasonable terms, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

(f) Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require the Licensee to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

(g) Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

(h) Deductibles. All such insurance shall have deductibility limits of not greater than $50,000.00 unless otherwise approved by the City.

(i) Verification of Coverage. Licensee shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language providing the insurance coverage required above. All certificates and endorsements are to be received and approved by the City before exercise of the Permitted use commences. However, failure to obtain the required documents prior to the exercise of the Permitted Use shall not waive the Licensee's obligation to provide them. The City reserves the right to require complete copies of all required insurance policies, including endorsements, required by these specifications, at any time.

(j) Occurrence Basis Coverage. All policies shall be written on an occurrence basis unless otherwise approved by the City.

8. Indemnification. From and after the execution of this Agreement, Licensee hereby agrees to indemnify, defend, protect and hold harmless, with counsel of the Licensor's choosing, the City and any and all predecessors, successors, assigns, agents, officials, employees, members, independent contractors, affiliates, principals, officers, directors, attorneys, accountants, representatives, staff, and council members of the City collectively, the "**City Representatives**", and each of them, from and against all claims, including any claims from any third party beneficiary to this Agreement, causes of action, liabilities, losses, damages, injuries, expenses, charges, penalties, or costs, of whatsoever character, nature and kind, (including attorney's fees and costs incurred by the indemnified Party with respect to legal counsel of its choice), whether to property or to person(s), and whether by direct or derivative action, known or unknown, suspected or unsuspected, latent or patent, existing or contingent (collectively "**Losses and Liabilities**"), related directly or indirectly to, or arising out of or in any way connected with any of the activities of Licensee, its agents, employees, licensees, lessees, representatives, invitees, contractors, subcontractors or independent contractors on the Premises. This indemnification requires Licensee to indemnify the City and any and all City Representatives from and against all Losses and Liabilities, including attorneys' fees, arising out of the use or release of any Hazardous Substances on the Premises by Licensee. Licensee's obligation to defend shall arise regardless of any claim or assertion that the City caused or contributed to the Losses and/or Liabilities, provided, however, that Licensee's liability under this Section 8 will be limited to the extent of any contributory negligence of Licensor.

9. Term, Termination and Remedies. The License shall commence as of the Effective Date of this Agreement, and shall automatically terminate on **December 31, 2017.** The City Manager, at his sole discretion, may grant two, one year extensions to this Agreement. Notwithstanding the foregoing, at any time, for any reason, the Licensor may, at its sole and absolute discretion, terminate this Agreement without cause, upon 30 days' written notice to Licensee. Further, in the event Licensor sells or transfers the Premises during the term of this Agreement, this Agreement shall terminate upon seven (7) days written notice to Licensee. In addition, if Licensee shall be in breach of any of its obligations under this Agreement and shall fail to cure such breach within ten (10) business days of written notice from Licensor specifying the nature of any such breach, Licensor shall have the right to terminate this Agreement upon written notice to Licensee. Licensee acknowledges that this License is solely a license, and that Licensee has no rights as an owner, purchaser or tenant by virtue thereof. Upon termination of the Agreement, Licensee shall promptly vacate the Premises and comply with the provisions of Section 4 above. No termination or expiration of this License shall relieve Licensee of its obligations hereunder.

10. Inspection and Access to Premises. Licensor and any of its duly authorized representatives, employees, agents or independent contractors shall be entitled to enter the Premises, to show the Premises to potential purchasers, to inspect the premises, to inspect Licensee's use of the Premises, and for any other purpose, at any time

11. Assignability. This License cannot be assigned by Licensee whether voluntarily or by operation of law, and Licensee shall not permit any use of the Premises, or any part thereof during the Term of this License in violation of the provisions of this License, except with the consent of Licensor (which shall not be unreasonably withheld, conditioned or delayed), and any attempt to do so shall be null and void.

12. Cost of Enforcement. In the event it is necessary for either Party to employ an attorney or other person or commence an action to enforce or interpret any of the provisions of this License or for Licensor to remove Licensee from the Premises, the non-prevailing party agrees to pay to the prevailing party, in addition to such other relief as may be awarded by the court, City or other authority before which such suit or proceeding is commenced, all reasonable costs of enforcement in connection therewith including, but not limited to, reasonable attorneys' fees, expenses and costs of investigation.

13. Notices. All notices, consents, approvals, requests, demands and other communications provided for herein shall be in writing and shall be deemed to have been duly given upon the earlier of when personally delivered or served or twenty-four (24) hours after being deposited with FedEx or any other established overnight courier service to the intended party addressed as follows:

Licensor: Paul Philips
City Manager
15625 East Stafford Street, Suite 100
City of Industry, CA 91744
Tel: (626) 333-2211
paul@cityofindustry.org

With a Copy to:	James M. Casso, City Attorney Casso & Sparks, LLP 13200 Crossroads Parkway North, Suite 345 City of Industry, CA 91746 Tel: (626) 269-2980 jcasso@cassosparks.com
Licensee:	Greg Brown, Managing Member PH Diversified, LLC 17320 E. Gale Avenue City of Industry, CA 91748 Tel (626) 626-2667

14. No Liability of Licensor. Licensee and Licensor acknowledge and agree that Licensee is entering into the Premises prior to the transfer of the Premises to Licensee and that Licensee does so at its sole risk and expense. The provisions hereof shall inure to the benefit of Licensor's and Licensee's successors and assigns including any Mortgagee.

15. Miscellaneous. This Agreement constitutes the entire agreement between the Parties hereto pertaining to the subject matter hereof, and all prior and contemporaneous agreements, representations and understandings of the Parties hereto, oral or written, are hereby superseded and merged herein. No supplement, modification or amendment of this Agreement shall be binding unless in writing and executed by the Parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions, whether or not similar, nor shall any waiver be a continuing waiver. No waiver shall be binding unless executed in writing by the Party making the waiver. The indemnifications under this Agreement, the obligations of Licensee hereunder to remove liens and Licensee's obligations hereunder with respect to vacating and repairing the Premises shall survive the expiration or termination of the License Term. This Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of California. Any action brought concerning this Agreement shall be brought in the appropriate court for the County of Los Angeles, California. Each Party hereby irrevocably consents to the jurisdiction of said court. Licensee hereby expressly waives all provisions of law providing for a change of venue due to the fact that the City may be a party to such action, including, without limitation, the provisions of California Code of Civil Procedure Section 394. Licensee further waives and releases any right it may have to have any action concerning this Agreement transferred to Federal District Court due to any diversity of citizenship that may exist between City and Licensee. The headings of this Agreement are for purposes of reference only and shall not limit or define the meaning of the provisions hereof. This Agreement may be executed in any number of counterparts, each of which shall be an original, and all of which shall constitute one and the same instrument. Neither this instrument nor a short form memorandum or assignment hereof shall be filed or recorded in any public office without Licensor's or Licensee's prior written consent.

16. This Agreement shall only take effect upon transfer of ownership from the Successor Agency to the Industry Urban-Development Agency to the City.

17. Authority. Each person executing this Agreement hereby represents and warrants (i) their authority to do so, and (ii) that such authority has been duly and validly conferred.

(SIGNATURES ON FOLLOWING PAGE)

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

"LICENSOR"

CITY OF INDUSTRY

By:_____

Paul Philips, City Manager

"LICENSEE"

PH DIVERSIFIED, LLC

By:_____

Greg Brown, Managing Member

ATTEST:

_____

Diane M. Schlichting, Chief Deputy City Clerk

APPROVED AS TO FORM:

_____

James M. Casso, City Attorney

EXHIBIT A

Legal Description

Assessor's Parcel Numbers (APN) 8264-001-944 and 8264-001-943 located at 17301 Gale Avenue, City of Industry, CA 91748. The area identified as "Ford" in the map below by an arrow and defining yellow lines identifies the area of the Premises, where the Permitted Use shall occur.

Location Map – 17301 Gale Avenue

CITY COUNCIL

ITEM NO. 5.5

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

TO: Honorable Mayor Radecki and Members of the City Council

FROM: Paul J. Philips, City Manager

DATE: October 27, 2016

SUBJECT: Grant Agreement between the City and the Veterans Benefit Roping Foundation

Per the City Council's previous approval, please find attached (for your additional approval) the final Grant Agreement between the City and the Veterans Benefit Team Roping Foundation.

IT IS RECOMMENDED that the City Council authorize the City Manager and City Attorney to sign the Agreement.

P.O. Box 3366, City of Industry, California 91744-0366 • Administrative Offices: 15625 E. Stafford St. • (626) 333-2211 • Fax (626) 961-6795

CITY OF INDUSTRY
GRANT AGREEMENT

This GRANT AGREEMENT ("Agreement"), is made and effective as October __, 2016 ("Effective Date"), between the City of Industry, a California municipal corporation ("City") and the Veterans Benefit Team Roping Foundation, a California corporation ("Grantee"). The City and Grantee are hereinafter collectively referred to as the "Parties" and individually as "Party."

RECITALS

WHEREAS, Grantee provides a horsemanship, wellness and skill-set program free to all veterans and active duty military, many of whom have suffered from Post-Traumatic Stress Disorder ("PTSD") and other combat-induced injuries; and

WHEREAS, Grantee organizes an annual team roping event at the Industry Hills Expo Center to raise funds for the operation of its programs; and

WHEREAS, Grantee has requested a donation from the City to assist in the operation of its programs; and

WHEREAS, the City's donation serves a public purpose in that the United States Department of Veterans Affairs has determined that participation by veterans in recreational activities, and engaging in good self-care, are foundational aspects of positive psychological functioning, aids in the recovery from PTSD, and assists with the transition from combat to civilian life. The City's donation will allow the Grantee to provide valuable recreational activities to local veterans.

NOW, THEREFORE, and in consideration of the mutual covenants and conditions herein contained, the Parties hereby agree as follows:

1. CITY'S CONTRIBUTION

(a) City shall provide Grantee with a grant in the amount of Forty Thousand Dollars ($40,000.00) ("Grant") per year, for the years 2016, 2017, and 2018, for Grantee's annual team roping event (the "Event").

(b) At least one week prior to any Grant disbursement by the City, Grantee shall submit to the City, in writing, a request for disbursement of funds.

(c) City shall make a reasonable effort to disburse the Grant funds within seven (7) days of receipt of a written request set forth in Section 1(b).

(d) Grantee shall submit its final disbursement request no later than October 31, 2018, unless a request for an extension of time is submitted in writing, and approved by the City Manager.

(e) If the Grantee does not hold the Event in 2017 or 2018, the City shall not disburse the Grant.

2. GRANTEE'S USE OF GRANT FUNDS

(a) Grantee shall use the Grant for costs related to the Event.

(b) If equipment is purchased with the Grant for use at the Event, the equipment shall be the property of Grantee. City is not responsible for inspecting any equipment, or making any determination as to fitness for use. City is not responsible for any defect in the equipment purchased with Grant funds. All equipment purchased with Grant funds shall be used at Grantee's sole and absolute risk. City is not responsible for any injuries resulting from the use of any equipment purchased with Grant funds.

3. TERM

The Term of this Agreement shall commence as of the Effective Date, and shall terminate upon Grantee's expenditure of the Grant funds pursuant to the provisions set forth in Section 1 of this Agreement.

4. TERMINATION

Either Party may terminate this Agreement without cause upon seven (7) calendar days' prior written notice to the other Party.

5. INDEMNIFICATION

(a) Grantee shall indemnify, defend and hold harmless City, and any and all of its employees, officials and agents from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, Grantee's use of the grant funds, and the purchase and use of any equipment under this Agreement by Grantee or by any individual or agency for which Grantee is legally liable, including but not limited to officers, agents, employees, coaches, players and/or program participants, or subcontractors of Grantee.

(b) 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, Grantee shall have an immediate duty to defend the City at Grantee'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.

In the event of any dispute between Grantee and City, as to whether liability arises from the sole negligence of the City or its officers, employees, or agents, Grantee 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. Grantee 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.

6. INSURANCE

Grantee shall maintain commercial general liability insurance with coverage at least as broad

as Insurance Service Office form CG 00 01, in an amount not less than $1,000,000 per occurrence, $2,000,000 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.

7. NOTICE

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:

If to City:

Paul J. Philips, City Manager
City of Industry
15625 East Stafford Street, Suite 100
City of Industry, California 91744
Email: paul@cityofindustry.org
Telephone: (626) 333-2211

With a copy to:

James M. Casso, City Attorney
Casso & Sparks, LLP
13200 Crossroads Parkway North, Suite 345
City of Industry, California 91746
Email: jcasso@cassosparks.com
Telephone: (626) 269-2980

If to Grantee:

Pete Miller, President
Veterans Benefit Team Roping Foundation
c/o Glendora Hyundai
1253 South Lone Hill Avenue
Glendora, California 91740
Telephone: (909) 394-3500

8. GOVERNING LAW/ATTORNEYS' FEES

The City and Grantee 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 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. WAIVER

The waiver by City or Grantee 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 Grantee unless in writing.

14. 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.

15. AUTHORITY TO EXECUTE THIS AGREEMENT

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

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

"GRANTEE"

VETERANS BENEFIT TEAM ROPING FOUNDATION

By: _____
Pete Miller, President

"CITY"

CITY OF INDUSTRY

By: _____
Paul J. Philips, City Manager

ATTEST:

By: _____
Diane M. Schlichting, Chief Deputy City Clerk

APPROVED AS TO FORM:

By: _____
James M. Casso, City Attorney

CITY COUNCIL

ITEM NO. 5.6

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: Clement N. Calvillo, City Engineer, CNC Engineering
Joshua Nelson, Deputy City Engineer, CNC Engineering

Date: October 27, 2016

SUBJECT: Consideration of a Performance Bond with SureTec Insurance Company for Mitigation Measures Related to the Lemon Avenue Interchange Project (MP 03-10)

In conjunction with the Lemon Avenue Interchange Project, the City had to acquire a Performance Bond with the U.S. Army Corps of Engineers due to the effect the project has on an existing natural water course. One of the conditions of the permit requires that the City replace various plants and habitat that will be removed as part of the project, and that the City maintain the new habitat for five years. The U.S. Army Corp requires that the permittee guarantee that the restoration occurs by requiring the City to provide a Performance Bond to cover the cost to restore the habitat and for the five years of maintenance work. The estimate for the work is $148,877.00 and the cost of the bond is $3,478.00.

It is hereby recommended that the City Council approve the Performance Bond and the expenditure, and authorize the issuance of a check for $3,478.00.

PJP/CC/JN:af

Bond No. 4409450

PERFORMANCE BOND

DATE BOND EXECUTED (Must be same or later than date of permit.)
October 7, 2016

PRINCIPAL (Legal name and business address)	Surety(ies) (Legal name(s) and business address(es))
City of Industry, 15625 E. Stafford, Suite 100 City of Industry, CA 91744	SureTec Insurance Company 1330 Post Oak Blvd, Suite 1100 Houston, Tx, 77056
TYPE OF ORGANIZATION ("X"ONE) ___Individual ___Partnership ___Joint Venture ___Corporation	**PENAL SUM OF BOND**
STATE OF INCORPORATION California	**PERMIT DATE** June 24, 2014

Million(s)	Thousand(s)	Hundred(s)	Cent(s)
0	148	877	00

PERMIT NO.
SPL-2013-00058-SJH

OBLIGATION:

We, the Principal and Surety(ies) hereto, are firmly bound as Obligors to the U.S Army Corps of Engineers (hereinafter called the Obligee) in the above penal sum. For the payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. The limit of liability shall be the full amount of the penal sum.

CONDITIONS:

The Principal received the permit identified above.

THEREFORE:

The above obligation is void if the Principal –

(a) Performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the permit during the original term of the permit and any extensions thereof that may be granted by the Obligee, with or without notice to the Surety(ies), and during the life of any guaranty required under the permit, and -

(b) Also performs and fulfills all of the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of the permit that may hereafter be made. Notice of those modifications to the Surety(ies) are waived.

IT IS FURTHER EXPRESSLY PROVIDED THAT:

The Obligee shall have the final authority to determine whether the Principal and Surety(ies) have performed and fulfilled some or all of the undertakings, covenants, terms, conditions and agreements of the permit.

Within thirty (30) days of receiving notice from the Obligee that the Principal has defaulted on some or all of the undertakings, covenants, terms, conditions and agreements of the permit, the Surety(ies) shall either -

(a) Remedy the default of the Principal to the full satisfaction of the Obligee by a certain date determined by the Obligee, or -

(b) Immediately tender to a party or parties identified by the Obligee the portion of the penal sum that the Obligee determines is necessary to remedy the default.

In the event that the Surety(ies) fail(s) to respond to the Obligee's notice of default or to honor commitments under (a) or (b) above of this section, the full penal sum shall immediately become due and owing and paid to a party or parties identified by the Obligee.

WITNESS:

The Principal and Surety(ies) have executed this performance bond and have affixed their seals on the date set forth above.

PRINCIPAL		
Signature 1 (Seal)	Signature 2 (Seal)	Corporate Seal
Name, title 1 (typed)	Name, title 2 (typed)	

INDIVIDUAL SURETY(IES)	
Signature 1 (Seal)	Signature 2 (Seal)
Name, title 1 (typed)	Name, title 2 (typed)

COPORATE SURETY(IES)		
Surety A		
Name & address SureTec Insurance Company 1330 Post Oak Blvd, Suite 1100, Houston, TX 77056	State of Incorporation Texas	Liability limit 8,188,000
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed) David Melman, Attorney in Fact	Name, title 2 (typed)	
Surety B		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	
Surety C		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	
Surety D		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	

Surety E		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	

Surety F		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	

Surety G		
Name & address	State of Incorporation	Liability limit
Signature 1 (Seal)	Signature 2 (Seal)	
Name, title 1 (typed)	Name, title 2 (typed)	

Bond Premium	Rate Per Thou. ($)	Total ($)
3,478.00	25.00 for the first $100,000 20.00 for the next $400,000 15.00 for the next $2,000,000 12.00 for the next $2,500,000 11.00 for the next $2,500,000 10.00 for over $7,500,000	148,877.00

INSTRUCTIONS

1. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.

2. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURET(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.

(b) Where individual sureties are involved, a completed Affidavit of Individual Surety for each individual surety shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning their financial capability.

3. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal", and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.

POA #: 510444

SureTec Insurance Company

LIMITED POWER OF ATTORNEY

Know All Men by These Presents, That SURETEC INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

Ron H. Ballard, Gloria S. Becerra, Dave B. Roalkvam, David Melman, Albert Espino, Arianne Adair

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include waivers to the conditions of contracts and consents of surety for:

Fifteen Million and 00/100 Dollars ($15,000,000.00)

and to bind the Company thereby as fully and to the same extent as if such bond were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney-in-Fact may do in the premises. Said appointment shall continue in force until 05/18/17 and is made under and by authority of the following resolutions of the Board of Directors of the SureTec Insurance Company:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. *(Adopted at a meeting held on 20th of April, 1999.)*

In Witness Whereof, SURETEC INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 21st day of March, A.D. 2013.

SURETEC INSURANCE COMPANY

By: _____

John Knox Jr., President

State of Texas ss:
County of Harris

On this 21st day of March, A.D. 2013 before me personally came John Knox Jr., to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of SURETEC INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.

JACQUELYN MALDONADO
Notary Public
State of Texas
My Comm. Exp. 5/18/2017

Jacquelyn Maldonado, Notary Public
My commission expires May 18, 2017

I, M. Brent Beaty, Assistant Secretary of SURETEC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; and furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

Given under my hand and the seal of said Company at Houston, Texas this 7th day of October, 2016, A.D.

M. Brent Beaty, Assistant Secretary

Any instrument issued in excess of the penalty stated above is totally void and without any validity.
For verification of the authority of this power you may call (713) 812-0800 any business day between 8:00 am and 5:00 pm CST.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of San Diego

On October 7, 2016 before me, Jessica Donaghe , Notary Public

personally appeared David Melman

who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is~~/are~~ subscribed to the within instrument and acknowledged to me that he~~/she/they~~ executed the same in his~~/her/their~~ authorized capacity~~(ies)~~, and that by his~~/her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

JESSICA DONAGHE
NOTARY PUBLIC - CALIFORNIA
COMMISSION # 2064546
SAN DIEGO COUNTY
My Comm. Exp. April 15, 2018

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER
- ☐ PARTNER(S)
- ☐ MEMBER of LLC
- ☒ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR

OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)

SureTec Insurance Company

DESCRIPTION OF ATTACHED DOCUMENT

Title or Type of Document

Number of Pages

Date of Document

Signer(s) other than named above

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: Honorable Mayor and Members of the City Council

From: Paul J. Philips, City Manager

Staff: Alex Gonzalez, Director of Development Services and Administration
Susan Paragas, Director of Finance
Tiffany Bose, RGS, Human Resources Advisor

Date: October 27, 2016

SUBJECT: Consideration of Resolution No. CC 2016-72 - A Resolution of the City Council of the City of Industry, California, Granting Another Designated Period For A "Golden Handshake" For Two Years Additional Service Credit

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BACKGROUND:

The City Council adopted Resolution No. CC 2011-15 on June 23, 2001, to grant two years of additional service credit for eligible local miscellaneous employees of the City of Industry. All retirement-eligible employees, defined as all employees who are at least 50 years old with at least 5 years of CalPERS service credit with any public agency, who currently worked for the City in designated positions, and who retired during the designated time period, were eligible to receive the additional two years' service credit with the City in retirement.

The City desires to amend its contract with CalPERS to grant another designated period for two years' of additional service credit for eligible employees. Retirement-eligible employees must also meet the above criteria. On October 13, 2016, the City Council received and filed Resolution No. CC 2016-72, which detailed the cost of additional service credit for two eligible employees.

DISCUSSION AND ANALYSIS:

During the preparation of the 2016/2017 budget, it was determined that an impending curtailment of, or change in the manner of performing service, would help minimize impacts to the General Fund.

The City desires to grant another designated period for two years' additional service credit for retirement-eligible employees in designated job classifications who are at least 50 years old with at least 5 years of CalPERS service credit. This would apply to those employees currently working in the job classification of Executive Secretary for the Development Services & Administration Department and the Human Resources Director for the Human Resources Department, when they elect to retire within the designated period established by the City.

FINAL ACTION

Government Code Section 7507 requires adoption of the final documents (final reading of the Resolution) be no earlier than two weeks after adoption of the Resolution of Intention to amend the contract at a public meeting. Therefore, a second reading of Resolution No. CC 2016-72 in public has been brought forward for Council consideration.

AMENDMENT EFFECTIVE DATE

Upon approval by the City Council, a designated retirement period of 90 days must commence; which may begin a day after (October 28th) the effective date of Resolution No. CC 2016-72, if adopted by the Council. In this case, the designation period to file for retirement from the City would run from October 28, 2016 through January 28, 2017.

Upon adoption of said Resolution declaring the City's intent to amend the contract, an exhibit copy of the amended contract and various certification forms would be sent to the CalPERS retirement contracts unit.

FISCAL REVIEW

Using CalPERS Procedures for Calculation of Estimated Employer Cost, the cost of providing two years additional service credit was calculated to include the affected individuals. Based on the member's annual reportable compensation, the cost factor and whether the agency's contract provides the Post-Retirement Survivor Allowance (Survivor Continuance) and/or an increased Cost-of-Living Allowance of 3%, the estimated employer cost is $105,287.71 for a total of two (2) eligible employees.

The actual cost to the City may be less than the disclosed estimated employer cost with the difference attributed to the actual number of employees within the identified departments who retire during the designated period. The cost to implement the Golden Handshake program will be financed by cost savings realized from the vacated positions, approximately $158,351.20 in this year's budget and then annually thereafter. Government Code Section 7507 requires that the cost to provide this benefit be made public at a public meeting at least two weeks prior to the adoption of a Resolution to implement such program. Approximate employer costs were calculated based on a CalPERS formula and cost factor.

The added cost to the retirement fund for eligible employees who retire during the specified period will be included in the contracting agency's annual valuation report for the fiscal year that begins two years after the end of the designated period (Fiscal Year 2018-2019). The total cost would be amortized over twenty years.

The City Council is requested to approve Resolution No. CC 2016-72, which approves the cost associated with implementing another Golden Handshake program, and certify that the increase/decrease of the retirement benefit was done by public disclosure.

Exhibits

A. Certification of Compliance with Government Code Section 20903

Certification of Compliance with Government Code Section 7507
Certificate of Governing Body's Action

B. Resolution No. CC 2016-72
C. Estimated Employer Cost

PJP:AG:SP:TB:mk

EXHIBIT A

Certifications [Attached]

Certification of Compliance with Government Code Section 20903
Certification of Compliance with Government Code Section 7507
Certificate of Governing Body's Action

CERTIFICATE OF COMPLAINCE WITH
GOVERNMENT CODE SECTION 20903

In accordance with Government Code Section 20903 and the contract between the California Public Employees' Retirement System; the City Council of the City of Industry hereby certifies that:

Because of an impending curtailment of, or change in the manner of performing service, the best interests of the City would be served by granting such additional service credit.

The added cost to the retirement fund for all eligible employees who retire during the designated window period will be included in the contracting agency's employer contribution rate for the fiscal year that begins two years after the end of the designated period.

The City has elected to become subject to Section 20903 because of impending mandatory transfers, demotions, and layoffs that constitute at least 1 percent of the job classification, department or organizational unit, as designated by the City Council, resulting from the curtailment of, or change in the manner of performing, its services; and

The City's intent at the time Section 20903 becomes operative is to keep all vacancies created by retirements under this section or at least one vacancy in any position in any department or other organizational unit permanently unfilled thereby resulting in an overall reduction in the workforce of such department or organizational unit.

THEREFORE, the City Council of the City of Industry hereby elects to provide the benefits of Government Code Section 20903 to all eligible members who retire within the designation period October 28, 2016 through January 28, 2017.

PASSED, APPROVED AND ADOPTED this 27th day of October 2016.

_____
Mark D. Radecki, Mayor

ATTEST:

_____
Diane Schlichting, Chief Deputy City Clerk

CERTIFICATE OF COMPLAINCE WITH
GOVERNMENT CODE SECTION 7507

I hereby certify that in accordance with Section 7507 of the Government Code the future annual costs as determined by the System Actuary for the increase/change in retirement Benefit(s) have been made public at a public meeting of the City Council of the City of Industry on October 13, 2016 which is at least two weeks prior to the adoption of the Resolution/Ordinance. Adoption of the retirement benefit increase/decrease will not be placed on the consent calendar.

_____
Diane Schlichting, Chief Deputy City Clerk

Date _____

CERTIFICATION OF GOVERNING BODY'S ACTION

I hereby certify that the foregoing is a true and correct copy of a Resolution adopted by the City Council of the City of Industry on October 27, 2016.

_____

Diane Schlichting, Chief Deputy City Clerk

Date _____

EXHIBIT B

Resolution No. CC 2016-72

[Attached]

RESOLUTION NO. CC 2016-72

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, TO GRANT ANOTHER DESIGNATED PERIOD FOR A "GOLDEN HANDSHAKE" FOR TWO YEARS ADDITIONAL SERVICE CREDIT.

WHEREAS, the City Council of the City of Industry is a contracting agency of the California Public Employees' Retirement System ("CalPERS"); and

WHEREAS, said Public Agency desires to provide another designation period for Two Years Additional Service Credit, Section 20903, based on the contract amendment included in said contract which provided for Section 20903, Two Years Additional Service Credit, for eligible members; and

WHEREAS, attached hereto, marked as Exhibit "A", and incorporated herein by this reference, is a copy of the certificates of compliance between the Board of Administration of the California Public Employees' Retirement System and the City Council of the City of Industry.

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 and determines that all the fact, findings and conclusions set forth above are true and correct.

SECTION 2: That said City Council does seek to add another designated period, and does hereby authorize this Resolution, indicating a desire to add a designated period from October 28, 2016 through January 28, 2017 for the Executive Secretary, as an eligible member in the Development Services & Administration Department, and the Human Resources Director, as an eligible member in the Human Resources Department.

SECTION 3: The City Council hereby certifies the attachments in Exhibit "A" and authorizes the Mayor, as the presiding officer, to execute the same on behalf of the City Council.

SECTION 4: 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 this 27th day of October 2016.

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

Mark D. Radecki, Mayor

ATTEST:

Diane Schlichting, Chief Deputy City Clerk

EXHIBIT C

Estimated Employer Cost

[Attached]

Position Title	Age in 2016	Service Credit (as of 08/30/16)	Step 2: Annual Pay rate (using full time pay rate) Hourly rate * 2080	2.7% @ 55 Cost Factor	Step 3: (Annual Pay Rate * Cost Factor)	(Post-retirement Survivor Allowance) Step 6: Column G value * 1.09)	Estimated Cost of Providing additional 2 years service credits (Step 6: Column H value)
Human Resources Director	80 yrs. old	13.00	$87,103.12	0.61	53,132.90	57,914.86	$57,914.86
Executive Assistant	67 yrs. Old	9.00	$71,248.08	0.61	43,461.33	47,372.85	$47,372.85
TOTALS			$158,351.20				$105,287.71

Notes: Post-Retirement Survivor Allowance
Cost of Living Allowance (COLA) = 3%

CITY COUNCIL

ITEM NO. 6.2

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

TO: Honorable Mayor Radecki and Members of the City Council

FROM: Paul J. Philips, City Manager

DATE: October 27, 2016

SUBJECT: Position of Planning Commission – One Term Expires on November 8, 2016

One seat on the City of Industry Planning Commission will be vacant on November 8, 2016. Accordingly, the City noticed the vacancy on the City's website during late September to mid-October, 2016 (30-day period).

Two applications have been received as follows:

Mr. Bert Spivey - Application attached

Ms. Becky Simon - Application attached

IT IS RECOMMENDED that the City Council direct staff accordingly.

P.O. Box 3366, City of Industry, California 91744-0366 • Administrative Offices: 15625 E. Stafford St. • (626) 333-2211 • Fax (626) 961-6795

CITY OF INDUSTRY

Incorporated June 18, 1957

'16 SEP 28 PM 2:29:32

CITY OF INDUSTRY

APPLICATION FOR CITY COMMISSION OR AUTHORITY

To: The Honorable Mayor and Members of the City Council

Please accept this correspondence as my formal interest in serving on the City of Industry PLANNING COMMISSION.

I very much appreciate your consideration.

Sincerely,

Bert M Spivey

Print your name

Address

Phone Number

Email Address

Bert M Spivey

Signature

9-28-16

Date

P.O. Box 3366, City of Industry, California 91744-0366 • Administrative Offices: 15625 E. Stafford St. • (626) 333-2211 • Fax (626) 961-6795

CITY OF INDUSTRY

Incorporated June 18, 1957

CITY OF INDUSTRY

APPLICATION FOR CITY COMMISSION OR AUTHORITY

To: The Honorable Mayor and Members of the City Council

Please accept this correspondence as my formal interest in serving on the City of Industry Planning Commission.

I very much appreciate your consideration.

Sincerely,

Becky Simon
Print your name

Address

Phone Number

Email Address

Becky Simon
Signature

9-27-16
Date

RECEIVED
SEP 27 2016
CITY OF INDUSTRY

P.O. Box 3366, City of Industry, California 91744-0366 • Administrative Offices: 15625 E. Stafford St. • (626) 333-2211 • Fax (626) 961-6795

CITY COUNCIL

ITEM NO. 6.3

15651 Stafford Street
City of Industry, California 91744
(626) 968-3737 Fax (626) 330-5060
www.industrychamber.org

Ron Whittemore
Executive Director

INDUSTRY MANUFACTURERS COUNCIL

BOARD OF DIRECTORS
CARL BENNITT
KEN BRYAN
CLEMENT N. CALVILLO
LAURIE MARSHALL
DAVID M. PEREZ
KENT VALLEY
DEAN YAMAGATA

October 18, 2016

Mr. Paul Phillips
City Manager, City of Industry
15625 E. Stafford Street
City of Industry, CA 91744-0336

Subject: **Land of the Free Foundation**

The Land of the Free Foundation was formed and started to recognize the men and women of our armed forces and their families who work and sacrifice every day to ensure that we will always live in the "Land of the Free". The founders of the Foundation are Ed Roski, Kent Valley, and John Semcken. They also are the Board of Directors of the Foundation.

The foundation is committed to celebrating the men and women of the Armed Forces of the United States. The Foundation supports programs that help our armed service personnel and their families and will ensure that the commitment of our nation's heroes will never be taken for granted and that all Americans recognize the great sacrifices of our armed forces personnel.

The Land of the Free Foundation partners with the Pacific Palms Resort and Conference Center and the Industry Hills Golf Club to host the annual "Land of the Free Veterans Day Golf Classic". This is the main fundraising event for the Foundation.

The Industry Manufacturers Council has been a supporter of the Foundation's "Land of the Free Veterans Day Golf Classic" in the following amounts:

2011—$10,000.00
2012—$5,000.00
2013—$5,000.00
2014—$5,000.00
2015—$5,000.00

In addition, the IMC staff has usually volunteered their time to work at the event during the day.

Ronald Whittemore
Executive Director
Industry Manufacturers Council

CITY COUNCIL

ITEM NO. 6.4

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

To:	Honorable Mayor Radecki and Members of the City Council
From:	Paul J. Philips, City Manager
Staff:	Tim Kolset, Project Manager, Cordoba Corporation TK
Date:	October 27, 2016
SUBJECT:	**Bid Documents – Solicitation of Public Bids for 2016-2017 Industry Business Center East Side Street Streetlight and Cabling Plan (CITY-1430)**

At the direction of City Staff, Butsko Engineering has prepared plans and specifications for the above project. This project will be implemented as Contract No. CITY-1430, subject to the approval by the City Council.

The proposed project will consist of procuring and installing a 12 kV underground distribution system and the removal and replacement of streetlights located along Grand Avenue between Valley Blvd and Hwy 60 in conjunction with the Grand Ave street widening project. The proposed 12 kV underground distribution system will provide power to streetlights and support the initial development of the Industry Business Center East. The contract scope of the work will include all labor, materials, and equipment to construct and install a 12 kV underground distribution system and streetlights along Grand Avenue.

City Staff is reviewing, and will make a determination on if this project is subject to CEQA review. The work falls under an existing exemption. Included with this Authorization to Bid package is the letter requesting a Categorical Exemption.

The estimated cost for this project is $1,090,000.00.

It is hereby recommended that the City Council approve the plans and specifications and to authorize the solicitation of public bids.

Exhibits:

A. Notice Inviting Sealed Bids
B. Cost Estimate Sheet/Engineer's Estimate
C: Section A-Contract 1430
D: CEQA: Notice of Exception

PJP: TK:

FOR PUBLICATION

NOTICE INVITING SEALED BIDS FOR:

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 430

Industry Business Center East Side Street Light and Cabling Plan

CONTRACT NO. 1430

The **INDUSTRY PUBLIC UTILITIES COMMISSION**, hereinafter referred to as the **IPUC**, will receive bids for the construction of the above project via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through http://www.cityofindustry.org/?p=proposal-and-bid.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Digital versions of the plans and specifications are available on the vendor portal. Hard copies will no longer be available for purchase at CORDOBA CORPORATION.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Digital versions of the plans and specifications are available on the vendor portal. Hard copies will no longer be available for purchase.

At the time of submission of the bid and thereafter, each bidder must have current and similar experience in working directly for at least three California electric utilities in the past three years and currently be in good standing with those utilities. The California utilities must be Investor Owned Utilities (IOU's) such as SDG&E, SCE, and PGE: or, Municipal Utilities such as City of Riverside, City of Anaheim, City of Rancho Cucamonga, City of Corona, City of Moreno Valley, or City of Victorville and be licensed as a **Class A-General Engineering, C-10 Electrical, C-12 Earthwork and Paving, C-31 Construction Zone Traffic Control** contractor or subcontractor as defined in Sections 7055-7058 of the Business and Professions Code and qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the California Labor Code. Please note: It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded. Any bids submitted without proof that bidder and any

The **IPUC** reserves the right to award the contract to the contractor with another license class if the **IPUC** determines that the license class is proper for the proposed work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

1. **<u>The Scope of Work is as follows</u>:**

The City of Industry's Industry Public Utilities Commission (IPUC) seeks a Contractor to construct, install and procure a 12kV Distribution System, streetlights and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, street light foundations, pole erections, electrical wire pulling, light bulb installation, and the testing and commissioning of the IPUC System streetlights to ensure safe and reliable operation of the 12kV distribution system, streetlights and associated equipment. In addition to the 12kV distribution system, streetlight installation and construction work, The Contractor will be required to submit to the City's IPUC, As-Built drawings and configuration records of the facilities.

As part of the Scope of work the Contractor shall, at a minimum, provide the following:

- Prepare and maintain a safe work area
- Provide all equipment and labor needed to connect, tie or link the Industry Business Center East Side street lights and 12 kV distribution system into the IPUC system
- Procure all equipment, streetlights poles and lamps
- Tie-in, link and connect the proposed Industry Business Center East Side streetlight system and 12kV distribution system into the IPUC's designated connection point(s) as detailed in the IPUC's streetlight and cabling plan or as directed by the IPUC or designated representative. This work may include one (1) or more connection points.

- Contractor will work with the IPUC and/or IPUC designated representatives on the review and approval of the connection and tie-in work, and obtain IPUC approval prior to commencing with dependent work items.
- Contractor will restore or repair, public and private right of ways and property back to pre-installation conditions and to the standards set forth by city or state regulations.
- Coordinate with Local and State entities, and the IPUC to ensure that all conditions and standards of state and local construction are understood and met.
- Provide technical information for the installed equipment and material used in the installation and construction of the Industry Business Center_East Side Street Light and Cabling Plan, including, but not limited to cables, switches, connectors.

1.1 As-Builts and Configuration Control

The Contractor, upon final installation and construction of the 12 kV distribution system, streetlights and associated streetlight facilities and equipment, shall submit CAD As-Built Drawings to the City's IPUC. Prior to the submittal of the final As-Built drawings the Contractor will make the files available to IPUC and its contractors for review and approval. Final As-Built Drawings and records of configuration changes will be submitted to the IPUC upon approval and acceptance of the City and its contractors.

1.2 Forecasting, Performance Debrief and Reporting

Forecasting and Scheduling

Schedule forecast of construction and installation of the IPUC System streetlights in accordance with Section D "General Provisions".

Plans and Specifications are available for inspection at the City Administrative Offices and at the City's IPUC Offices located at 15625 E. Stafford Street, Suite 100, City of Industry CA 91744.

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 1430

Industry Business Center East Side Street Light and Cabling Plan

CONTRACT NO. 1430

Each bid shall be accompanied by a bid guarantee in the form of a Certified or Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, made payable to the **INDUSTRY PUBLIC UTILITIES COMMISSION**.

The contractor may, at his own expense, substitute securities for monies to be withheld to ensure performance under the contract.

By the order of the **INDUSTRY PUBLIC UTILITIES COMMISSION** dated **10-13-16.**

Diane Schlichting, Chief Deputy City Clerk

ESTIMATE FOR:

INDUSTRY PUBLIC UTILITIES COMMISSION

PROJECT NO. 1430

Industry Business Center East Side Street Light and Cabling Plan

CONTRACT NO. 1430

ENGINEER'S ESTIMATE
$ 1,090,000.00

SECTION A

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 1430

Industry Business Center East Side Street Light and Cabling Plan

CONTRACT NO. 1430

The **INDUSTRY PUBLIC UTILITIES COMMISSION**, hereinafter referred to as the **IPUC**, will receive bids for the construction of the above project via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through http://www.cityofindustry.org/?p=proposal-and-bid.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Digital versions of the plans and specifications are available on the vendor portal. Hard copies will no longer be available for purchase.

At the time of submission of the bid and thereafter, each bidder must be licensed as a **Class A-General Engineering, C-10 Electrical, C-12 Earthwork and Paving, C-31 Construction Zone Traffic Control** contractor or subcontractor as defined in Sections 7055-7058 of the Business and Professions Code and qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the California Labor Code. Please note: It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded. Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City. Each bidder shall set forth on the Bidder's Information Sheet and the Contractor's License Affidavit the classification and number of the requisite license which that bidder holds. This is a prevailing wage project.

The **IPUC** reserves the right to award the contract to the contractor with another license class if the **IPUC** determines that the license class is proper for the proposed work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

The Scope of Work is as follows:

The City of Industry's IPUC seeks a Contractor to construct and install a 12kV Distribution System, streetlights and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, street light foundations, pole erections, electrical wire pulling, light bulb installation, and the testing and commissioning of the IPUC System streetlights to ensure safe and reliable operation of the 12kV distribution system, streetlights and associated equipment. In addition to the 12kV distribution system, streetlight installation and construction work, The Contractor will be required to submit to the City's IPUC, As-Built drawings and configuration records of the facilities.

As part of the Scope of work the Contractor shall, at a minimum, provide the following:

- Prepare and maintain a safe work area
- Provide all equipment and labor needed to connect, tie or link the IBC street lights and 12 kV distribution system into the IPUC system
- Tie-in, link and connect the proposed IBC streetlight system and 12kV distribution system into the IPUC's designated connection point(s) as detailed in the IPUC's streetlight and cabling plan or as directed by the IPUC or designated representative. This work may include one (1) or more connection points.
- Contractor will work with the IPUC and/or IPUC designated representatives on the review and approval of the connection and tie-in work, and obtain IPUC approval prior to commencing with dependent work items.

- Contractor will restore, attempt to restore, or repair, public and private right of ways and property back to pre-installation conditions and to the standards set forth by city or state regulations.
- Coordinate with Local and State entities, the IPUC and the SA to ensure that all conditions and standards of state and local construction are understood and met.

1.1 As-Builts and Configuration Control

The Contractor, upon final installation and construction of the 12 kV distribution system, streetlights and associated streetlight facilities and equipment, shall submit CAD As-Built Drawings to the City's IPUC. Prior to the submittal of the final As-Built drawings the Contractor will make the files available to IPUC and its contractors for review and approval. Final As-Built Drawings and records of configuration changes will be submitted to the IPUC upon approval and acceptance of the City and its contractors.

1.2 Forecasting, Performance Debrief and Reporting

Forecasting and Scheduling

Schedule forecast of construction and installation of the IPUC System streetlights in accordance with Section D "General Provisions".

Plans and Specifications are available for inspection at the City Administrative Offices and at the City's IPUC Offices located at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91744.

The bid shall be accompanied by a bid guarantee in the form of a Certified or Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, payable to the **INDUSTRY PUBLIC UTILITIES COMMISSION**. The bid guarantee is to insure that the bidder, if awarded the work, will enter into a contract with the IPUC. Failure of a contractor to enter into a contract within ten (10) days following award will cause the bid guarantee to be forfeited.

The IPUC may, upon refusal or failure of a successful responsible bidder to accept the contract, award it to the next lowest bidder. If the IPUC awards the contract to the second lowest bidder, the amount of the lowest bidder's bid guarantee shall be applied by the IPUC to the difference between the low bid and the second lowest bid; the surplus, if any, shall be returned to the lowest bidder if cash is used, or to the surety company if a bond is used.

The successful bidder will be required to furnish a labor and materials bond in an amount equal to one hundred percent (100%) of the contract price and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price. A maintenance bond equal to ten percent (10%) of the total bid price amount is to remain in force for one (1) year after the date of completion of work, shall be submitted prior to

execution of contract. The above bonds shall be secured by a surety company satisfactory to the IPUC, and licensed as a Surety Insurer in the State of California and rated at least B+:V in the latest "Best's Insurance Guide." The attached bond forms shall be used without exception.

CONTRACTOR

LIABILITY INSURANCE

Contractor shall obtain and maintain at all times during the term of this agreement Comprehensive General Liability insurance protecting Contractor in amounts not less than $1,000,000.00 and Automobile Liability Insurance protecting Contractor in amounts not less than $1,000,000.00. If an umbrella or excess coverage is in effect, it must follow the form of the underlying coverage. Such insurance shall name CORDOBA CORPORATION; City of Industry; Successor Agency to the Industry Urban-Development Agency; Civic-Recreational-Industrial Authority DBA Industry Hills Recreation and Conference Center; Majestic Industry Hills, LLC; Parking Authority of the City of Industry; City of Industry Waterworks System; Industry Hills Recreation and Conference Center; and their Officers, Employees, Elected Officials and Members of Boards or Commissions as additional insured parties. Coverage shall be in accordance with the sample certificates and endorsements attached hereto and must include the coverage and provisions indicated.

Contractors using the new I.S.O. form of coverage shall include Endorsement #CG25031185, which provides limits for each separate project that is being undertaken by said contractor.

Contractor shall file and maintain the required certificate(s) of insurance with the Lessor to this agreement at all times during the term of this agreement. The certificate(s) is to be filed prior to the commencement of the work or event and should state clearly:

(1) The additional insured requested.

(2) A minimum of ten (10) days prior written notice of cancellation for non-payment of premium and a minimum of thirty (30) days' notice of cancellation for any other reason.

(3) That the insurance is primary to that of the additional insured.

(4) Included coverage.

(5) Cross-Liability clause.

WORKER'S COMPENSATION INSURANCE

Contractor shall obtain and maintain at all times during the term of this agreement Worker's Compensation and Employer's Liability insurance and furnish the Additional Insured with a certificate showing proof of such coverage. Insurance company must waive subrogation rights against the above-named additional insureds. An endorsement to that effect must accompany the certificate of coverage.

INSURANCE COMPANIES

Insurance companies must be admitted in California and rated at least B+:XIII in *Best's Insurance Guide*. Non-admitted insurance companies will be considered if they are rated at least A:XIII or better and have a ratio of 3:1 for premium to policy holder surplus or lower in the latest *Best's Insurance Guide*.

Furnish additional insured with an endorsement waiving subrogation against them by the insurance carrier.

All liability insurance policies shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policies for any reason whatsoever, the IPUC shall be notified by registered mail, return receipt requested, giving a sufficient time before the date thereof to comply with any applicable law or statute, but in no event less than 10 days in advance of the effective date of cancellation due to non-payment of premium and not less than 30 days in advance of the effective date of cancellation for any other reason or for a policy change.

Notification for all above insurance items shall be submitted to: City of Industry Engineering Offices, 255 North Hacienda Blvd., Suite 222, City of Industry, CA 91744, Attention: Rachel Gonzalez. Failure to provide the IPUC with written notice of cancellation or any change in required insurance may constitute a material breach of the Contract, in the sole discretion of the IPUC, upon which the IPUC may suspend or terminate the Contract.

EXPERIENCE AND SAFETY

The successful bidder may be required to submit a statement attesting to its financial responsibility, technical ability, experience, and safety record.

PREVAILING WAGES

Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the contractor is required to pay not less than the general prevailing rate of wages for each craft, classification, or type of workman needed in the execution of the public work under the jurisdiction of the IPUC. The general prevailing wages shall be these determined by the Director of the Department of Industrial Relations of the State of California. Copies of the applicable determination by the IPUC are on file in the office of

the IPUC and are hereby incorporated and made a part hereof the same as though fully set forth herein. Copies of the applicable determination may be obtained at the office of the IPUC.

CONTRACTOR REGISTRATION PROGRAM

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

LABOR COMPLIANCE MONITORING AND ENFORCEMENT

The project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (California Labor Code Section 1771.4).

AGREEMENT

When the award of a contract is made to a corporation, the Agreement must be signed by the Secretary/Treasurer of the corporation in addition to the signature of the President/Vice President, or the public agency needs to receive a copy of a resolution adopted by the Board of Directors of the corporation indicating that the party executing the contract has the authority to bind the corporation.

SURETY BONDS

All surety bonds issued in connection with projects for public works must be accompanied by a power of attorney from the surety company authorizing the person executing the bond to sign on behalf of the company. The bonds must also be acknowledged by a Notary Public to the effect that the signature by the surety's representative is that of the person designated in the Power of Attorney.

By the order of the **INDUSTRY PUBLIC UTILITIES COMMISSION** dated **10-13-16**.

_____

Diane Schlichting, Chief Deputy City Clerk

NOTICE OF EXEMPTION

To: County Clerk
County of Los Angeles
Environmental Filings
12400 East Imperial Highway #2001
Norwalk, CA 90650

From: City of Industry
15625 E. Stafford Street, Suite 100
City of Industry, CA 91744

Project Title: Industry Business Center East Side Streetlight and Cabling Plan

Project Location - Specific: Grand Ave between HWY 60 and Valley Blvd

Project Location-City: City of Industry **Project Location-County:** Los Angeles

Description of Project: The City of Industry's IPUC seeks a Contractor to construct and install a 12kV Distribution System, streetlights and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, street light foundations, pole erections, electrical wire pulling, light bulb installation, and the testing and commissioning of the IPUC System streetlights to ensure safe and reliable operation of the 12kV distribution system, streetlights and associated equipment.
.

Name of Public Agency Approving Project: City Council, City of Industry

Name of Person or Agency Carrying Out Project: Industry Public Utilities Commission

Exempt Status: *(check one)*

☐ Ministerial (Sec. 21080(b)(1); 15268);
☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☑ Categorical Exemption. *State type and section number:* 15303 (d)
☐ Statutory Exemptions. *State code number:*

Reasons why project is exempt: Section 15303 (d), exempts water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction. The Industry Business Center East Side Streetlight and Cabling Plan project will construct and tie the new IPUC streetlights into the existing IPUC electrical system.

Lead Agency
Contact Person: Troy Helling Telephone: (626)333-2211

Signature: _____ Date: _____

Title: Senior Planner

CITY COUNCIL

ITEM NO. 6.5

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

To:	Honorable Mayor Radecki and Members of the City Council
From:	Paul J. Philips, City Manager
Staff:	Tim Kolset, Project Manager, Cordoba Corporation TK
Date:	October 27, 2016
SUBJECT:	**Bid Documents – Solicitation of Public Bids for 2016-2017 Grand Crossing Substation – Phase 1, 2, and 3 Substructure and Cabling Plan (CITY-1431)**

At the direction of City Staff, Butsko Engineering has prepared plans and specifications for the above project. This project will be implemented as Contract No. CITY-1431, subject to the approval by the City Council.

The proposed project will consist of procuring and installing underground cabling for the IPUC's distribution system located along Waddingham Way, Old Ranch Road and Ferrero Parkway. This project is intended to connect and utilize the existing Grand Crossing 66 kV substation to the IPUC's distribution network. The contract scope of the work will include all labor, materials, and equipment to construct and install a 12 kV underground distribution system.

City Staff is reviewing, and will make a determination on if this project is subject to CEQA review. The work falls under an existing exemption. Included with this Authorization to Bid package is the letter requesting a Categorical Exemption.

The estimated cost for this project is $605,000.00.

It is hereby recommended that the City Council approve the plans and specifications and authorize the solicitation of public bids.

Exhibits:
A. Notice Inviting Sealed Bids
B. Cost Estimate Sheet/Engineer's Estimate
C: Section A-Contract 1431
D: CEQA: Notice of Exception

PJP: TK:

FOR PUBLICATION

NOTICE INVITING SEALED BIDS FOR:

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 1431

Grand Crossing Substation- Phase 1,2,3 Substructure & Cabling

CONTRACT NO. 1431

The **INDUSTRY PUBLIC UTILITIES COMMISSION**, hereinafter referred to as the **IPUC**, will receive bids for the construction of the above project via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through http://www.cityofindustry.org/?p=proposal-and-bid.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Digital versions of the plans and specifications are available on the vendor portal. Hard copies will no longer be available for purchase.

At the time of submission of the bid and thereafter, each bidder must be licensed as a **Class A-General Engineering, C-10 Electrical, C-12 Earthwork and Paving, C-31 Construction Zone Traffic Control** contractor or subcontractor as defined in Sections 7055-7058 of the Business and Professions Code and qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the California Labor Code. Please note: It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded. Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City. Each bidder shall set forth on the Bidder's Information Sheet and the Contractor's License Affidavit the classification and number of the requisite license which that bidder holds. This is a prevailing wage project.

The **IPUC** reserves the right to award the contract to the contractor with another license class if the **IPUC** determines that the license class is proper for the proposed work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

1. **The Scope of Work is as follows:**

The City of Industry's IPUC seeks a Contractor to connect, install and construct a complete underground 12 kV system including cabling, substructure, conduits and the intercept work needed to install to PME switches and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, electrical wire pulling, testing, commissioning and energizing of the IPUC System to ensure safe and reliable operation of the 12kV distribution system and associated equipment. In addition to the underground 12kV distribution system, The Contractor will be required to submit to the City's IPUC, As-Built drawings and configuration records of the facilities.

As part of the Scope of work the Contractor shall, at a minimum, provide the following:

- Prepare and maintain a safe work area
- Provide all equipment and labor needed to construct, install, connect, tie or link the underground 12 kV distribution system into the IPUC's existing 12kV system
- Preform equipment testing, cable testing, commissioning and energizing of IPUC new and reconfigured distribution system
- Install and construct all work in accordance with IPUC plans and equipment/material specifications meeting the IPUC and Southern California Edison standards and specifications
- Provide traffic control meeting County and City requirements
- Coordinate, cooperate and work with other contractors working within the vicinity

- Work as directed by the IPUC or its designated representatives. This may include working in phases, weekends, evenings or other manner to minimize disruptions to the IPUC customers

- Contractor will restore or repair, public and private right of ways and property back to pre-installation conditions and to the standards set forth by city or state regulations.
- Coordinate with Local and State entities, the IPUC and the SA to ensure that all conditions and standards of state and local construction are understood and met.

1.1 As-Builts and Configuration Control

The Contractor, upon final installation and construction of the 12 kV distribution system, and associated equipment, shall submit CAD As-Built Drawings to the City's IPUC. Prior to the submittal of the final As-Built drawings the Contractor will make the files available to IPUC and its contractors for review and approval. Final As-Built Drawings and records of configuration changes will be submitted to the IPUC upon approval and acceptance of the City and its contractors.

1.2 Forecasting, Performance Debrief and Reporting

Forecasting and Scheduling

Schedule forecast of construction and installation of the IPUC 12kV Distribution System in accordance with Section D "General Provisions".

Plans and Specifications are available for inspection at the City Administrative Offices and at the City's IPUC Offices located at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91744.

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 1431

Grand Crossing Substation- Phase 1,2,3 Substructure & Cabling

CONTRACT NO. 1431

Each bid shall be accompanied by a bid guarantee in the form of a Certified or Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, made payable to the **INDUSTRY PUBLIC UTILITIES COMMISSION**.

The contractor may, at his own expense, substitute securities for monies to be withheld to ensure performance under the contract.

By the order of the **INDUSTRY PUBLIC UTILITIES COMMISSION** dated **10-13-16.**

_____
Diane Schlichting, Chief Deputy City Clerk

ESTIMATE FOR:

INDUSTRY PUBLIC UTILITIES COMMISSION

PROJECT NO. 1431

Grand Crossing Substation- Phase 1,2,3 Substructure & Cabling

CONTRACT NO. 1431

ENGINEER'S ESTIMATE
$ 605,000.00

SECTION A

INDUSTRY PUBLIC UTILITIES COMMISSION
PROJECT NO. 1431

Grand Crossing Substation- Phase 1,2,3 Substructure & Cabling

CONTRACT NO. 1431

The **INDUSTRY PUBLIC UTILITIES COMMISSION**, hereinafter referred to as the **IPUC**, will receive bids for the construction of the above project, via the City of Industry's PlanetBids™ vendor portal. Bids are to be submitted through http://www.cityofindustry.org/?p=proposal-and-bid.

Postmarks, mailed, emailed, or hard copy bids will not be accepted. Late bids will not be accepted.

It is the responsibility of the bidder to be sure the bid is submitted prior to the date and time indicated above. Digital versions of the plans and specifications are available on the vendor portal. Hard copies will no longer be available for purchase.

At the time of submission of the bid and thereafter, each bidder must be licensed as a **Class A-General Engineering, C-10 Electrical, C-12 Earthwork and Paving, C-31 Construction Zone Traffic Control** contractor or subcontractor as defined in Sections 7055-7058 of the Business and Professions Code and qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5 of the California Labor Code. Please note: It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded. Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City. Each bidder shall set forth on the Bidder's Information Sheet and the Contractor's License Affidavit the classification and number of the requisite license which that bidder holds. This is a prevailing wage project.

The **IPUC** reserves the right to award the contract to the contractor with another license class if the **IPUC** determines that the license class is proper for the proposed work.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section

1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

The Scope of Work is as follows:

1. **The Scope of Work is as follows:**

The City of Industry's Industry Public Utilities Commission (IPUC) seeks a Contractor to procure, connect, install and construct a complete underground 12 kV system including cabling, substructure, conduits and the intercept work needed to install to PME switches and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, electrical wire pulling, testing, commissioning and energizing of the IPUC System to ensure safe and reliable operation of the 12kV distribution system and associated equipment. In addition to the underground 12kV distribution system, The Contractor will be required to submit to the City's IPUC, As-Built drawings and configuration records of the facilities.

As part of the Scope of work the Contractor shall, at a minimum, provide the following:

- Prepare and maintain a safe work area
- Provide all equipment and labor needed to construct, install, connect, tie or link the underground 12 kV distribution system into the IPUC's existing 12kV system
- Preform equipment testing, cable testing, commissioning and energizing of IPUC new and reconfigured distribution system
- Install and construct all work in accordance with IPUC plans and equipment/material specifications meeting the IPUC and Southern California Edison standards and specifications
- Procure all equipment and materials needed to construct, install and operate the IPUC's underground 12 kV system
- Provide traffic control meeting County and City requirements
- Coordinate, cooperate and work with other contractors working within the vicinity

- Work as directed by the IPUC or its designated representatives. This may include working in phases, weekends, evenings or other manner to minimize disruptions to the IPUC customers

- Contractor will restore or repair, public and private right of ways and property back to pre-installation conditions and to the standards set forth by city or state regulations.
- Coordinate with Local and State entities, and the IPUC to ensure that all conditions and standards of state and local construction are understood and met.
- Provide technical information for the installed equipment and material used in the installation and construction of the Industry Business Center_East Side Street Light and Cabling Plan, including, but not limited to cables, switches, connectors.

1.1 As-Builts and Configuration Control

The Contractor, upon final installation and construction of the 12 kV distribution system, and associated equipment, shall submit CAD As-Built Drawings to the City's IPUC. Prior to the submittal of the final As-Built drawings the Contractor will make the files available to IPUC and its contractors for review and approval. Final As-Built Drawings and records of configuration changes will be submitted to the IPUC upon approval and acceptance of the City and its contractors.

1.2 Forecasting, Performance Debrief and Reporting

Forecasting and Scheduling

Schedule forecast of construction and installation of the IPUC 12kV Distribution System in accordance with Section D "General Provisions".

Plans and Specifications are available for inspection at the City Administrative Offices and at the City's IPUC Offices located at 15625 E. Stafford Street, Suite 100, City of Industry, CA 91744.

The bid shall be accompanied by a bid guarantee in the form of a Certified or Cashier's Check or Bidder's Bond for not less than ten percent (10%) of the total amount of the bid, payable to the **INDUSTRY PUBLIC UTILITIES COMMISSION**. The bid guarantee is to insure that the bidder, if awarded the work, will enter into a contract with the IPUC. Failure of a contractor to enter into a contract within ten (10) days following award will cause the bid guarantee to be forfeited.

The IPUC may, upon refusal or failure of a successful responsible bidder to accept the contract, award it to the next lowest bidder. If the IPUC awards the contract to the second lowest bidder, the amount of the lowest bidder's bid guarantee shall be applied by the IPUC to the difference between the low bid and the second lowest bid; the surplus, if any,

shall be returned to the lowest bidder if cash is used, or to the surety company if a bond is used.

The successful bidder will be required to furnish a labor and materials bond in an amount equal to one hundred percent (100%) of the contract price and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price. A maintenance bond equal to ten percent (10%) of the total bid price amount is to remain in force for one (1) year after the date of completion of work, shall be submitted prior to execution of contract. The above bonds shall be secured by a surety company satisfactory to the IPUC, and licensed as a Surety Insurer in the State of California and rated at least B+:V in the latest "Best's Insurance Guide." The attached bond forms shall be used without exception.

CONTRACTOR

LIABILITY INSURANCE

Contractor shall obtain and maintain at all times during the term of this agreement Comprehensive General Liability insurance protecting Contractor in amounts not less than $1,000,000.00 and Automobile Liability Insurance protecting Contractor in amounts not less than $1,000,000.00. If an umbrella or excess coverage is in effect, it must follow the form of the underlying coverage. Such insurance shall name CORDOBA CORPORATION; City of Industry; Successor Agency to the Industry Urban-Development Agency; Civic-Recreational-Industrial Authority DBA Industry Hills Recreation and Conference Center; Majestic Industry Hills, LLC; Parking Authority of the City of Industry; City of Industry Waterworks System; Industry Hills Recreation and Conference Center; and their Officers, Employees, Elected Officials and Members of Boards or Commissions as additional insured parties. Coverage shall be in accordance with the sample certificates and endorsements attached hereto and must include the coverage and provisions indicated.

Contractors using the new I.S.O. form of coverage shall include Endorsement #CG25031185, which provides limits for each separate project that is being undertaken by said contractor.

Contractor shall file and maintain the required certificate(s) of insurance with the Lessor to this agreement at all times during the term of this agreement. The certificate(s) is to be filed prior to the commencement of the work or event and should state clearly:

(1) The additional insured requested.

(2) A minimum of ten (10) days prior written notice of cancellation for non-payment of premium and a minimum of thirty (30) days' notice of cancellation for any other reason.

(3) That the insurance is primary to that of the additional insured.

(4) Included coverage.

(5) Cross-Liability clause.

WORKER'S COMPENSATION INSURANCE

Contractor shall obtain and maintain at all times during the term of this agreement Worker's Compensation and Employer's Liability insurance and furnish the Additional Insured with a certificate showing proof of such coverage. Insurance company must waive subrogation rights against the above-named additional insureds. An endorsement to that effect must accompany the certificate of coverage.

INSURANCE COMPANIES

Insurance companies must be admitted in California and rated at least B+:XIII in *Best's Insurance Guide*. Non-admitted insurance companies will be considered if they are rated at least A:XIII or better and have a ratio of 3:1 for premium to policy holder surplus or lower in the latest *Best's Insurance Guide*.

Furnish additional insured with an endorsement waiving subrogation against them by the insurance carrier.

All liability insurance policies shall bear an endorsement or shall have attached a rider whereby it is provided that, in the event of expiration or proposed cancellation of such policies for any reason whatsoever, the IPUC shall be notified by registered mail, return receipt requested, giving a sufficient time before the date thereof to comply with any applicable law or statute, but in no event less than 10 days in advance of the effective date of cancellation due to non-payment of premium and not less than 30 days in advance of the effective date of cancellation for any other reason or for a policy change.

Notification for all above insurance items shall be submitted to: City of Industry Engineering Offices, 255 North Hacienda Blvd., Suite 222, City of Industry, CA 91744, Attention: Rachel Gonzalez. Failure to provide the IPUC with written notice of cancellation or any change in required insurance may constitute a material breach of the Contract, in the sole discretion of the IPUC, upon which the IPUC may suspend or terminate the Contract.

EXPERIENCE AND SAFETY

The successful bidder may be required to submit a statement attesting to its financial responsibility, technical ability, experience, and safety record.

PREVAILING WAGES

Pursuant to the provisions of Section 1773 of the Labor Code of the State of California, the contractor is required to pay not less than the general prevailing rate of wages for each craft, classification, or type of workman needed in the execution of the public work under the jurisdiction of the IPUC. The general prevailing wages shall be these determined by the Director of the Department of Industrial Relations of the State of California. Copies of the applicable determination by the IPUC are on file in the office of the IPUC and are hereby incorporated and made a part hereof the same as though fully set forth herein. Copies of the applicable determination may be obtained at the office of the IPUC.

CONTRACTOR REGISTRATION PROGRAM

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. ***Please note:*** *It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.* Any bids submitted without proof that bidder and any listed subcontractor(s) are currently registered and qualified to perform public work, pursuant to Labor Code Section 1725.5, may not be accepted by the City.

LABOR COMPLIANCE MONITORING AND ENFORCEMENT

The project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (California Labor Code Section 1771.4).

AGREEMENT

When the award of a contract is made to a corporation, the Agreement must be signed by the Secretary/Treasurer of the corporation in addition to the signature of the President/Vice President, or the public agency needs to receive a copy of a resolution adopted by the Board of Directors of the corporation indicating that the party executing the contract has the authority to bind the corporation.

SURETY BONDS

All surety bonds issued in connection with projects for public works must be accompanied by a power of attorney from the surety company authorizing the person executing the bond to sign on behalf of the company. The bonds must also be acknowledged by a Notary Public to the effect that the signature by the surety's representative is that of the person designated in the Power of Attorney.

By the order of the **INDUSTRY PUBLIC UTILITIES COMMISSION** dated **10-13-16.**

_____

Diane Schlichting, Chief Deputy City Clerk

NOTICE OF EXEMPTION

To: County Clerk
County of Los Angeles
Environmental Filings
12400 East Imperial Highway #2001
Norwalk, CA 90650

From: City of Industry
15625 E. Stafford Street, Suite 100
City of Industry, CA 91744

Project Title: Grand Crossing Substation – Phases 1, 2, 3 Substructure & Cabling

Project Location - Specific: Waddingham Way and intersection of Ferrero Parkway & Old Ranch Road

Project Location-City: City of Industry **Project Location-County:** Los Angeles

Description of Project: The City of Industry's IPUC seeks a Contractor to connect, install and construct a complete underground 12 kV system including cabling, substructure, conduits and the intercept work needed to install to PME switches and associated equipment for the IPUC System including, at a minimum; securing permits, placement of the electrical wire, electrical wire pulling, testing, commissioning and energizing of the IPUC System to ensure safe and reliable operation of the 12kV distribution system and associated equipment.

Name of Public Agency Approving Project: City Council, City of Industry

Name of Person or Agency Carrying Out Project: Industry Public Utilities Commission

Exempt Status: *(check one)*

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☑ Categorical Exemption. *State type and section number:* 15303 (d)
- ☐ Statutory Exemptions. *State code number:*

Reasons why project is exempt: Section 15303 (d), exempts water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction. The Grand Crossing Substation – Phases 1, 2, 3 Substructure & Cabling project will construct and tie the Grand Crossing substation into the existing IPUC electrical system.

Lead Agency
Contact Person: Troy Helling Telephone: (626)333-2211

Signature: _____ Date: _____

Title: Senior Planner

CITY COUNCIL

ITEM NO. 6.6

CITY OF INDUSTRY

Incorporated June 18, 1957

MEMORANDUM

To: Honorable Mayor Radecki and Members of the City Council

From: Paul J. Philips, City Manager

Staff: Tim Kolset, Project Manager, Cordoba Corporation TK

Date: October 27, 2016

SUBJECT: Consideration of Third Amendment to Professional Services Agreement with Trimark Associates, Inc., for Data Acquisition System, Met Station, Remote Intelligent Gateway and Revenue Meter Services Agreement Services in an amount not to exceed $126,050.00 from October 27, 2016 – October 27, 2019

On August 22, 2013, the City Council approved a Professional Services Agreement with Trimark Associates, Inc., ("Trimark") for Data Acquisition System, Met Station, Remote Intelligent Gateway and Revenue Meter Services Agreement Services. On September 25, 2014, City Council approved the First Amendment to the Professional Services Agreement. On August 13, 2015, City Council approved the Second Amendment to the Professional Services Agreement.

Trimark has provided their services at the Metrolink Solar Facility for the last four years, and remain necessary for the continued operation of facility equipment. Trimark's contract has previously been approved and was renewed twice, giving a total of $82,880 spent to date. Staff reviewed and determined that the term of the contract needed to be extended for three (3) years and the compensation of the Agreement increased to cover the term of service. The agreement was reviewed considering Section 3.04.055 of the City of Industry Municipal Code.

Fiscal Impact

Annual cost of the agreement will be unchanged from the original agreement. The fiscal year 2016-2017 adopted budget requires an appropriation of $22,446.67 from Electric Utility Reserves to the Electric Utility Fund Budget – Repair and Maintenance Equipment (account no. 161-300-5550) for Third Amendment to Professional Services Agreement with Trimark Associates, Inc. The annual cost shall not exceed the approved budget without City Council authorization. Total cost for the next three years will be a total of $63,886.67.

Recommendation

Staff recommends that the City Council approve and execute Third Amendment to Professional Services Agreement for Consulting Services with Trimark Associates, Inc., in an amount not to exceed $126,050.00 from October 27, 2016 – October 27, 2019.

Exhibits

A. Professional Services Agreement with Trimark Associates, Inc., dated August 22, 2013
B. First Amendment to Professional Services Agreement with Trimark Associates, Inc., dated September 1, 2014
C. Second Amendment to Professional Services Agreement with Trimark Associates, Inc., dated September 1, 2015
D. Third Amendment to Professional Services Agreement with Trimark Associates, Inc., dated October 27, 2016

PJP/TK

EXHIBIT A

Professional Services Agreement with Trimark Associates, Inc., dated August 22, 2013

[Attached]

City of Industry

PROFESSIONAL SERVICES AGREEMENT

With

Trimark Associates, Inc.

Effective Date: August 22, 2013

4820-5727-4383 v3

TABLE OF CONTENTS

		Page No.
Section 1.	Term of Agreement.	1
Section 2.	Scope and Performance of Services.	1
Section 3.	Additional Services and Changes in Services.	2
Section 4.	Familiarity with Services and Site.	2
Section 5.	Compensation and Payment.	3
Section 6.	Required Documentation Prior to Performance.	3
Section 7.	Time of Performance; Excusable Delays; Extensions.	4
Section 8.	Cooperation by City.	4
Section 9.	Project Documents.	4
Section 10.	Confidential Information; Release of Information.	5
Section 11.	Consultant's Books and Records.	5
Section 12.	Status of Consultant.	6
Section 13.	Compliance with Applicable Laws.	6
Section 14.	Unauthorized Aliens.	7
Section 15.	Conflicts of Interest.	7
Section 16.	Indemnification.	8
Section 17.	Insurance.	9
Section 18.	Assignment.	10
Section 19.	Default; Limitations on Liability.	10
Section 20.	Termination of Agreement.	10
Section 21.	Notices.	11
Section 22.	General Provisions.	11
EXHIBIT A - SCOPE OF SERVICES		A-1
EXHBIT B – KEY PERSONNEL & COMPENSATION		B-1
EXHIBIT C - INSURANCE		C-1

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT ("Agreement") is effective as of August 22, 2013 ("Effective Date"), and is between the City of Industry, a California municipal corporation and charter city ("City") and Trimark Associates, Inc., a California corporation ("Consultant").

Section 1. Term of Agreement.

Subject to the provisions of Section 20 ("Termination of Agreement"), the term of this Agreement will be for a period commencing on the Effective Date and will terminate upon the completion of Consultant's services.

Section 2. Scope and Performance of Services.

2.1 Consultant agrees to perform the services set forth in Exhibit A ("Scope of Services"), which is made a part of this Agreement.

2.2 Consultant will furnish all of the labor, technical, administrative, professional and other personnel, all supplies and materials, equipment, printing, vehicles, transportation, office space and facilities, and all tests, testing and analyses, calculations, and all other means whatsoever, except as otherwise expressly specified in this Agreement, necessary to perform the services required of Consultant under this Agreement.

2.3 Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are listed in Exhibit B ("Key Personnel & Compensation"), which is made a part of this Agreement.

2.4 Consultant must make every reasonable effort to maintain the stability and continuity of Consultant's key personnel and subcontractors, if any, listed in Exhibit B to perform the services required under this Agreement. Consultant must notify City and obtain City's written approval with respect of any changes in key personnel prior to the performance of any services by replacement personnel.

2.5 Consultant must obtain City's prior written approval before utilizing any subcontractors to perform any services under this Agreement. This written approval must include the identity of the subcontractor and the terms of compensation.

2.6 Consultant represents and warrants that it has the qualifications, experience and facilities necessary to properly perform the services required under this Agreement in a thorough, competent and professional manner. Consultant will at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described in this Agreement. In meeting its obligations under this Agreement, Consultant must employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement.

2.7 City may inspect and accept or reject any of Consultant's work under this Agreement, either during performance or when completed. Acceptance of any of Consultant's work by City will not constitute a waiver of any of the provisions of this Agreement.

2.8 The Consultant must maintain any work site in the City in a safe condition, free of hazards to persons and property resulting from its operations.

Section 3. Additional Services and Changes in Services.

3.1 Consultant will not be compensated for any services rendered in connection with its performance of this Agreement that are in addition to or outside of those set forth in the Scope of Services or otherwise required by this Agreement, unless such additional services are authorized in advance and in writing by City.

3.2 If Consultant believes that additional services are needed to complete the Scope of Services, Consultant will provide the City Manager with written notification describing the proposed additional services, the reasons for such services, and a detailed proposal regarding cost.

3.3 City may order changes to the Scope of Services, consisting of additions, deletions, or other revisions, and the compensation to be paid Consultant will be adjusted accordingly. All such changes must be authorized in writing, and executed by Consultant and City. The cost or credit to City resulting from changes in the services will be determined by the written agreement between the parties.

Section 4. Familiarity with Services and Site.

4.1 By executing this Agreement, Consultant warrants that Consultant:

(a) has thoroughly investigated and considered the Scope of Services to be performed;

(b) has carefully considered how the services should be performed;

(c) understands the facilities, difficulties, and restrictions attending performance of the services under this Agreement; and

(d) possesses all licenses required under local, state or federal law to perform the services contemplated by this Agreement, and will maintain all required licenses during the performance of this Agreement.

4.2 If services involve work upon any site, Consultant warrants that Consultant has or will investigate the site and is or will be fully acquainted with the conditions there existing, before commencing its services. Should Consultant discover any latent or unknown conditions that may materially affect the performance of services, Consultant will immediately inform City of such fact and will not proceed except at Consultant's own risk until written instructions are received from City.

Section 5. Compensation and Payment.

5.1 Subject to any limitations set forth in this Agreement, City agrees to pay Consultant the amounts specified in Exhibit B ("Key Personnel & Compensation"). The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit B, unless additional compensation is approved in writing by City.

5.2 The use of subconsultants will not be considered a reimbursable expense, and such costs must be applied towards the approved budgeted amount.

5.3 Each month during the term of this Agreement, Consultant must furnish City with an original invoice for all services performed and expenses incurred during the preceding month in accordance with the fee schedule set forth in Exhibit B. The invoice must detail charges by the following categories: labor (by subcategory), reimbursable costs, subcontractor contracts and miscellaneous expenses. The invoice must list, as applicable, the hours worked and hourly rates for each personnel category, the tasks performed, the percentage of the task completed during the billing period, the cumulative percentage completed for each task, and the total cost of the services. If applicable, the invoice must also provide a budget summary including the total amounts previously invoiced and paid, the current invoice amount and the budget remaining.

5.4 City will review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement. In the event that no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by City, the invoice will be returned by City to Consultant for correction and resubmission.

5.5 Except as to any charges for work performed or expenses incurred by Consultant that are disputed by City, City will cause Consultant to be paid within 30 days of receipt of Consultant's invoice.

5.6 Payment to Consultant for services performed under this Agreement may not be deemed to waive any defects in the services performed by Consultant, even if such defects were known to City at the time of payment.

5.7 City reserves the right to withhold future payment to Consultant if any aspect of the Consultant's work is found substantially inadequate.

Section 6. Required Documentation Prior to Performance.

6.1 Consultant may not perform any services under this Agreement until:

(a) Consultant furnishes proof of insurance as required under Exhibit C;

(b) Consultant provides City with a Taxpayer Identification Number;

(c) Consultant obtains a City business tax certificate and license, if applicable, and provides proof of compliance; and

(d) City gives Consultant a written notice to proceed.

6.2 The City will have no obligation to pay for any services rendered by Consultant in advance of receiving written authorization to proceed, and Consultant acknowledges that any such services are at Consultant's own risk.

Section 7. Time of Performance; Excusable Delays; Extensions.

7.1 Consultant must adhere to all schedules and deadlines set forth in this Agreement.

7.2 Consultant will not be liable for damages, including liquidated damages, if any, caused by delay in performance or failure to perform due to causes beyond the control of Consultant. Such causes include, but are not limited to, acts of God, acts of terrorism, acts of federal, state or local governments, acts of City, court orders, fires, floods, epidemics, strikes, embargoes, and unusually severe weather.

7.3 If Consultant is delayed by any cause beyond Consultant's control, City may grant, but is not required to, a time extension for the completion of services. If delay occurs, Consultant must notify City within 48 hours, in writing, of the cause and the extent of the delay and how such delay interferes with Consultant's performance of services.

Section 8. Cooperation by City.

All public information, data, reports, records, and maps as are existing and available to City as public records, and which are necessary for carrying out the Scope of Services will be furnished to Consultant in every reasonable way to facilitate, without undue delay, the services to be performed under this Agreement.

Section 9. Project Documents.

9.1 All original computer programs, data, designs, drawings, files, maps, memoranda, models, notes, photographs, reports, studies, surveys and other documents (collectively, "Project Documents") prepared, developed or discovered by Consultant in the course of providing services under this Agreement will become the sole property of City and may be used, reused or otherwise disposed of by City without the permission of Consultant. Consultant will take such steps as are necessary to perfect or protect the ownership interest of City in such Project Documents. Upon completion, expiration or termination of this Agreement or upon request by City, Consultant must turn over to City all such original Project Documents in its possession; provided, however, that Consultant may retain copies of Project Documents. City acknowledges and agrees that use of Consultant's completed work product, for purposes other than identified in this Agreement, or use of incomplete work product, is at City's own risk. If necessary, Consultant agrees to execute all appropriate documents to assign to City the copyright or intellectual property rights to the Project Documents created pursuant to this Agreement.

9.2 Except as necessary for the performance of services under this Agreement, no Project Documents prepared under this Agreement, will be released by Consultant to any other person or entity without City's prior written approval.

Section 10. Confidential Information; Release of Information.

10.1 All information gained or work product produced by Consultant in performance of this Agreement will be considered confidential, unless such information is in the public domain or already known to Consultant. Consultant may not release or disclose any such information or work product to persons or entities other than City without prior written authorization from the City Manager, except as may be required by law.

10.2 Consultant, its officers, employees, or agents, may not, without prior written authorization from the City Manager or unless requested by the City Attorney of City, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the services performed under this Agreement. Response to a subpoena or court order will not be considered "voluntary" provided Consultant gives City notice of such court order or subpoena.

10.3 If Consultant, or any officer, employee, or agent of Consultant, provides any information or work product (including Project Documents) in violation of this Agreement, then City will have the right to reimbursement and indemnity from Consultant for any damages, costs and fees, including attorneys fees, caused by or incurred as a result of Consultant's conduct.

10.4 Consultant must promptly notify City should Consultant, its officers, employees, or agents be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. City retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with City and to provide City with the opportunity to review any response to discovery requests provided by Consultant. However, this right to review any such response does not imply or mean the right by City to control, direct, or rewrite such response.

10.5 All media and press releases, including graphic display information, must be approved and distributed solely by City, unless otherwise agreed to in writing by City. All media interviews regarding the performance of services under this Agreement are prohibited unless expressly authorized by City.

Section 11. Consultant's Books and Records.

11.1 Consultant must maintain all documents and records demonstrating or relating to Consultant's performance of services under this Agreement, including ledgers, books of account, invoices, vouchers, canceled checks, or other documents or records evidencing or relating to work, services, expenditures and disbursements charged to City under this Agreement. All financial documents or records must be maintained in accordance with generally accepted accounting principles and all other documents must be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Consultant under this Agreement. All such documents or records must be maintained for at least three years following the final payment under this Agreement.

11.2 Any and all records or documents required to be maintained by this section must be made available for inspection, audit and copying, at any time during regular business hours, upon written request by City or its designated representative. Copies of such documents or records must be provided directly to City for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed upon, such documents and records must be made available at Consultant's address indicated for receipt of notices in this Agreement.

11.3 Where City has reason to believe that any of the documents or records required to be maintained by this section may be lost or discarded due to dissolution or termination of Consultant's business, City may, by written request, require that custody of such documents or records be given to a person or entity mutually agreed upon and that such documents and records thereafter be maintained by such person or entity at Consultant's expense. Access to such documents and records must be granted to City, as well as to its successors-in-interest and authorized representatives.

Section 12. Status of Consultant.

12.1 Consultant is and will at all times remain a wholly independent contractor and not an officer or employee of City. Consultant has no authority to bind City in any manner, or to incur any obligation, debt or liability of any kind on behalf of or against City, whether by contract or otherwise, unless such authority is expressly conferred under this Agreement or is otherwise expressly conferred in writing by City.

12.2 The personnel performing the services under this Agreement on behalf of Consultant will at all times be under Consultant's exclusive direction and control. Neither City, nor any elected or appointed boards, officers, officials, employees or agents of City, will have control over the conduct of Consultant or any of Consultant's officers, employees or agents, except as provided in this Agreement. Consultant warrants that it will not at any time or in any manner represent that Consultant or any of Consultant's officers, employees or agents are in any manner officials, officers, or employees of City.

12.3 Neither Consultant, nor any of Consultant's officers, employees or agents, will obtain any rights to retirement, health care or any other benefits which may otherwise accrue to City's employees. Consultant expressly waives any claim to any such rights or benefits.

Section 13. Compliance with Applicable Laws.

13.1 **In General.** Consultant must use the standard of care in its profession to keep itself informed of and comply with all federal, state and local laws, statutes, codes, ordinances, regulations and rules in effect during the term of this Agreement that apply to the services performed by Consultant.

13.2 **Professional Licenses and Approvals.** Consultant represents and warrants that it will, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, insurance and approvals that are legally required for Consultant to practice its profession.

13.3 **Employment Laws**. Consultant warrants that it will comply with all applicable federal and state employment laws including those that relate to minimum hours and wages, occupational health and safety, and workers compensation insurance. Consultant further warrants that it is an equal opportunity employer and in performing services under this Agreement agrees to comply with all applicable federal and state laws governing equal opportunity employment, and further agrees that it will not discriminate in the employment of persons to perform services under this Agreement on the basis of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, or sexual orientation of any such person, except as may be permitted by California Government Code section 12940.

Section 14. Unauthorized Aliens.

Consultant agrees to comply with all of the applicable provisions of the Federal Immigration and Nationality Act (8 U.S.C. § 1101 *et seq.*), as it may be amended, and further agrees not to employ unauthorized aliens as defined under the Act. Should Consultant employ any unauthorized aliens for the performance of any work or services covered by this Agreement, and should any liability or sanctions be imposed against City for the use of unauthorized aliens, Consultant agrees to reimburse City for the amount of all such liabilities or sanctions imposed, together with any and all related costs, including attorneys' fees, incurred by City.

Section 15. Conflicts of Interest.

15.1 Consultant covenants that neither Consultant, nor any officer, principal or employee of its firm, has or will acquire any interest, directly or indirectly, that would conflict in any manner with the interests of City or that would in any way hinder Consultant's performance of services under this Agreement. Consultant's attention is directed to the conflict of interest rules applicable to governmental decision-making contained in the Political Reform Act (California Government Code Section 87100 and following) and its implementing regulations (California Code of Regulations, Title 2, Section 18700 et seq.), and California Government Code section 1090.

15.2 Consultant covenants that neither Consultant, nor any officer, principal or employee of its firm will make, participate in the making, or in any way attempt to use the position of Consultant to influence any decision of the City in which Consultant knows or has reason to know that Consultant, or any officer, principal or employee of Consultant has any of the financial interests listed in Government Code section 87103.

15.3 If Consultant discovers that it has employed a person with a direct or indirect interest that would conflict with its performance of this Agreement, Consultant must promptly disclose the relationship to City and take such action as City may direct to remedy the conflict.

15.4 City understands and acknowledges that Consultant is, as of the Effective Date, independently involved in the performance of non-related services for other governmental agencies and private parties. Consultant represents that, except as otherwise disclosed to City, it is unaware of any stated position of City relative to these projects. Any future position of City on these projects will not be considered a conflict of interest for purposes of this section.

Section 16. Indemnification.

16.1 The parties agree that City should, to the fullest extent permitted by law, be protected from any and all loss, injury, damage, claim, lawsuit, cost, expense, attorneys' fees, litigation costs, or any other cost arising out of or in any way related to the performance by Consultant of this Agreement. Accordingly, the provisions of this section are intended by the parties to be interpreted and construed to provide the City with the fullest protection possible under the law. Consultant acknowledges that City would not enter into this Agreement in the absence of Consultant's commitment to indemnify and defend City as set forth in this section.

16.2 For the purposes of this section, "City" includes City's officers, officials, employees, agents and volunteers, and "Consultant" includes Consultant's officers, officials, employees, agents and subcontactors.

16.3 Consultant agrees to (1) immediately defend and (2) indemnify City from and against, any and all claims and liabilities, regardless of the nature or type, that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant committed in performing any services under this Agreement or the failure to comply with any of the obligations of this Agreement (collectively, "Claims"). The Claims subject to Consultant's duties to defend and indemnify include, without limitation, all claims, actions, causes of action, proceedings, suits, losses, damages, penalties, fines, judgments, liens, levies, and associated investigation and administrative expenses. Such Claims also include defense costs, including reasonable attorneys' fees and disbursements, expert fees, court costs, and costs of alternative dispute resolution.

16.4 Consultant must notify City within five days of receipt of notice of any Claim made or legal action initiated that arises out of or pertains to Consultant's performance of services under this Agreement.

16.5 Consultant's duty to defend is a separate and distinct obligation from Consultant's duty to indemnify. Consultant is obligated to defend City in all legal, equitable, administrative, or special proceedings, with counsel approved by City, immediately upon tender to Consultant of the Claim in any form or at any stage of an action or proceeding, whether or not liability is established. An allegation or determination that persons other than Consultant are responsible for the Claim does not relieve Consultant from its separate and distinct obligation to defend under this section. The obligation to defend extends through final judgment, including exhaustion of any appeals. The defense obligation includes an obligation to provide independent defense counsel if Consultant asserts that liability is caused in whole or in part by the negligence or willful misconduct of any City indemnified party. If it is finally adjudicated or agreed by City that liability was caused by the comparative active negligence or willful misconduct of any City indemnified party, then Consultant may submit a claim to City for reimbursement of reasonable attorneys' fees and defense costs in proportion to the established or agreed upon comparative liability of the City indemnified party.

16.6 Consultant agrees that its defense and indemnity obligation under this section, includes the reasonable costs of attorney fees incurred by City's City Attorney office to monitor and consult with Consultant regarding the defense of any Claim, including providing direction with regard to strategy, preparation of pleadings, settlement discussions, and attendance at court

hearings, mediations, or other litigation related appearances. City will use its best efforts to avoid duplicative attorney work or appearances in order to keep litigation costs to a reasonable minimum.

16.7 Consultant agrees that settlement of any Claim against City requires the consent of City. City agrees that its consent will not be unreasonably withheld provided that Consultant is financially able (based on demonstrated assets including insurance) to fulfill its obligation to indemnify City for the costs of any such settlement as required under this Agreement.

16.8 Consultant's obligation to indemnify City applies unless it is finally adjudicated or agreed by City that the liability was caused by the sole active negligence or sole willful misconduct of a City indemnified party. If a Claim is finally adjudicated and a determination made that liability was caused by the sole active negligence or sole willful misconduct of a City indemnified party or the City otherwise agrees to such a determination, then Consultant's indemnification obligation will be reduced in proportion to the established comparative liability.

16.9 The insurance required to be maintained by Consultant under this Agreement is intended to ensure Consultant's obligations under this section, but the limits of such insurance do not limit the liability of Consultant.

16.10 Notwithstanding any provision of this Agreement to the contrary, design professionals are required to defend and indemnify the City only to the extent permitted by Civil Code section 2782.8, which limits claims to those that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional. The term "design professional," is defined in Section 2782.8, and includes licensed architects, licensed landscape architects, registered professional engineers, professional land surveyors and the business entities that offer such services in accordance with the applicable provisions of the Business and Professions Code.

16.11 Consultant agrees to obtain executed indemnity agreements with provisions identical to those set forth in this section from each subcontractor or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. If Consultant fails to obtain such indemnity obligations from others as required, Consultant will be fully responsible for all obligations under this section. City's failure to monitor compliance with this requirement imposes no additional obligations on City and will in no way act as a waiver of any rights under this Agreement.

16.12 In the event of any Claim made against City, City may, in its sole discretion, reserve, retain or apply any funds due to Consultant under this Agreement for the purpose of resolving such Claim.

16.13 The provisions of this section will survive the expiration or earlier termination of this Agreement.

Section 17. Insurance.

Consultant agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance coverages listed in Exhibit C ("Insurance"), which is made a part of this Agreement. All

insurance policies are subject to approval by City as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the City Manager or City Attorney.

Section 18. Assignment.

The expertise and experience of Consultant are material considerations for this Agreement. City has an interest in the qualifications of and capability of the persons and entities that will fulfill the duties and obligations imposed upon Consultant under this Agreement. In recognition of that interest, Consultant may not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Consultant's duties or obligations under this Agreement without the prior written consent of City, which may be withheld in the City's sole discretion. Any attempted assignment will be null and void, and will constitute a material breach of this Agreement entitling City to any and all remedies at law or in equity, including summary termination of this Agreement.

Section 19. Default; Limitations on Liability.

19.1 In the event that Consultant is in default under the terms of this Agreement, City will have no obligation or duty to continue compensating Consultant for any services performed after City provides written notice to Consultant of such default.

19.2 Consultant agrees that no City official, officer, employee or agent will be personally liable to Consultant in the event of any default or breach of City, or for any amount which may become due to Consultant, or for any obligations directly or indirectly incurred under this Agreement.

19.3 City's liability under this Agreement is limited to payment of Consultant in accordance with the terms of this Agreement and excludes any liability whatsoever for consequential or indirect damages even if such damages are foreseeable.

Section 20. Termination of Agreement.

20.1 City may terminate this Agreement, with or without cause, at any time by written notice of termination to Consultant. In the event such notice is given, Consultant must cease immediately all work and services in progress.

20.2 Consultant may terminate this Agreement at any time upon 30 days prior written notice of termination to City.

20.3 Upon termination of this Agreement by either Consultant or City, all property belonging to City that is in Consultant's possession must be returned to City. Consultant must promptly deliver to City a final invoice for all outstanding services performed and expenses incurred by Consultant as of the date of termination. Compensation for work in progress not based on an hourly rate will be prorated based on the percentage of work completed as of the date of termination.

20.4 Consultant acknowledges City's rights to terminate this Agreement as provided in this section, and hereby waives any and all claims for damages that might otherwise arise from City's termination of this Agreement.

Section 21. Notices.

21.1 All written notices required or permitted to be given under this Agreement will be deemed made when received by the other party at its respective address as follows:

To City:

City of Industry
15625 East Stafford Street, Suite 100
City of Industry, CA 91744
Attention: Kevin Radecki

(Tel.) (626) 333-2211
(Fax) (626) 961-6795
(E-Mail) kradecki@cityofindustry.org

To Consultant:

Trimark Associates, Inc.
193 Blue Ravine Road
Folsom, CA 95630
Attention: Mark Morosky

(Tel.) (916) 357-5970
(Fax) (916) 357-5971
(E-mail) mmorosky@trimarkassoc.com

21.2 Notice will be deemed effective on the date personally delivered or electronically transmitted by facsimile. If the notice is mailed, notice will be deemed given three days after deposit of the same in the custody of the United States Postal Service, postage prepaid, for first class delivery, or upon delivery if using a major courier service with tracking capabilities.

21.3 Any party may change its notice information by giving notice to the other party in compliance with this section.

Section 22. General Provisions.

22.1 **Authority to Execute; Counterparts.** Each party represents and warrants that all necessary action has been taken by such party to authorize the undersigned to execute this Agreement and to bind it to the performance of its obligations hereunder. This Agreement may be executed in several counterparts, each of which will constitute one and the same instrument and will become binding upon the parties when at least one copy has been signed by both parties.

22.2 **Entire Agreement.** This Agreement, including the attached Exhibits A through C, is the entire, complete, final and exclusive expression of the parties with respect to the matters addressed in this Agreement and supersedes all other agreements or understandings, whether oral or written, between Consultant and City prior to the execution of this Agreement.

22.3 **Binding Effect.** This Agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties.

22.4 **Modification of Agreement.** No amendment to or modification of this Agreement will be valid unless made in writing and approved by Consultant and by the City Council or City Manager, as applicable. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.

22.5 **Facsimile Signatures.** Amendments to this Agreement will be considered executed when the signature page of a party is delivered by electronic transmission. Such electronic signatures will have the same effect as an original signature.

22.6 **Waiver.** Waiver by any party to this Agreement of any term, condition, or covenant of this Agreement will not constitute a waiver of any other term, condition, or covenant. Waiver by any party of any breach of the provisions of this Agreement will not constitute a waiver of any other provision, or a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by City of any services by Consultant will not constitute a waiver of any of the provisions of this Agreement.

22.7 **Interpretation.** This Agreement will be interpreted, construed and governed according to the laws of the State of California. Each party has had the opportunity to review this Agreement with legal counsel. The Agreement will be construed simply, as a whole, and in accordance with its fair meaning. It will not be interpreted strictly for or against either party.

22.8 **Severability.** If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement will not be affected and the Agreement will be read and construed without the invalid, void or unenforceable provision.

22.9 **Venue.** In the event of litigation between the parties, venue in will be exclusively in a state court in the County of Los Angeles.

[Signatures on the following page.]

THE UNDERSIGNED AUTHORIZED REPRESENTATIVES OF the parties hereby execute this Agreement as follows:

CITY OF INDUSTRY

Tim Spohn, Mayor

ATTEST:

Jodi Scrivens, City Clerk

APPROVED AS TO FORM:

Michele Vadon, City Attorney

CONSULTANT:

Trimark Associates, Inc., a California Corporation

By
Name: Dean F. Schoeder
Title: Chief Operating Officer

By
Name: Robert Hinchman
Title: Regional Director

EXHIBIT A

SCOPE OF SERVICES

[Attached]

EXHIBIT A

TRIMARK ASSOCIATES, INC.

DATA ACQUISITION SYSTEN (DAS), MET STATION, STANDARD RIG, AND REVENUE METER SERVICE AGREEMENT

This Service Agreement is for a Data Acquisition System (DAS), MET Station, Remote Intelligence Gateway (RIG), electric power Revenue Meters, and all related equipment between (CITY), with general offices located at 15625 Stafford St. City of Industry, CA 91744 and, Trimark Associates, Inc. whose principal offices are located at 193 Blue Ravine Road, Suite #120, Folsom, CA. 95630.

Scope of Work

For purposes of repairing failures and maintaining DAS, MET, RIG, and Revenue Meter Equipment including the TI-S, Historian, and PowerViewer application and any TRIMARK provided communications or interface devices (EQUIPMENT) on the premises of the CITY location identified in Appendix C, TRIMARK agrees to perform the following services (collectively, the "Services") in exchange for the consideration to be pain by CITY pursuant to Section 3 below as described in APPENDIX A.

a. Support for Failures (RIG):

- (CITY) representatives can request service and report problems during normal business hours by calling TRIMARK's help desk at 866-995-5970. Upon receipt of the request, TRIMARK will respond as noted below depending on the nature of the request. After normal business hours, (CITY) representatives should call one of the following TRIMARK team members to report the service request:
    1. Dean Schroeder (312) 576-2160
    2. Jae Kim (818) 825-0205
    3. Tom Finch (916) 337-5396

These individuals will select an appropriate TRIMARK technical staff member to follow up on the service request with (CITY) staff members.

- Provide remote network or dial-in support service to troubleshoot and make repairs of the RIG for any reported failures related to the RIG within four business hours

- Provide support service at the premises (if necessary) where the RIG resides within one business day following a reported failure related to the RIG - travel & "out of pocket" expenses may be charged as described in APPENDIX A,
- Maintain current configuration and documentation on the RIG including RIG database, configuration details and other RIG related software and/or application drivers,
- Provide one (1) Annual Emergency Site Visit (if required) without charge to repair or replace the failed RIG, including travel and expenses for TRIMARK staff to travel to and work at the effected site.

b. EQUIPMENT Maintenance and Monitoring

- Conduct a routine maintenance inspection and assessment of the installed EQUIPMENT
- Provide one (1) Annual Maintenance visit without charge, to clean the computer equipment perform backups and updates, and renew the RIG security certificate.
- Provide one (1) Annual Maintenance visit without charge to replace the meter battery (on two year cycle) and to conduct a meter registration test (yearly).
- Inspect for any corrosion, deterioration, or other pending circumstances that may lead to or make failure eminent.

EXHIBIT A

TRIMARK ASSOCIATES, INC.

- 24/hour 7day system status monitoring via TRIMARK's Spiceworks monitor.

c. Software Provision

- Provide and install remote access software for managing Equipment
- Provide annual upgrade of the T1-S, Historian, and Power Viewer software.
- Provide Operating System Security patches as they are available and tested.
- Maintain current configuration and documentation on EQUIPMENT including DAS, RIG and MET databases, configuration details for DAS, RIG , MET and Revenue Meters and other related software and / or application drivers
- Coordinate any RIG diagnostics or program changes with the RIG software provider and
- Manage access for authorized users and restrict access for unauthorized users.

COVERED SERVICE AGREEMENT SITES

SITE NAME	# of DAS or RIG's	# of MET stations/ Sensor	# Primary Meters	# of Back Up Meters	# of Aux Meters	Effective Date
City of Industry Metrolink PV DAS(DAS includes TI-S, Historian, and PowerViewer Software)	1	1/5	0	0	0	August 22, 2013
City of Industry Metrolink PV RIG	1	0	1	0	1	August 22, 2013

EXHIBIT B

KEY PERSONNEL & COMPENSATION

1. Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are: Dean Schoeder.

2. Total compensation under this Agreement, including reimbursement for actual expenses, may not exceed: $20,720.00.

FEE SCHEDULE

(See attached schedule)

KEY PERSONNEL:

Name	Title/Position	Rate (Per Hour)

SUBCONSULTANTS:

Name	Title/Position	Rate (Per Hour)

EXHIBIT B

TRIMARK ASSOCIATES, INC.

RIG SERVICE AGREEMENT/TIME AND MATERIALS COSTS

RIG SERVICE AGREEMENT / TIME AND MATERIALS COSTS **Service**	**Rate**
SERVICE AGREEMENT for DAS and MET Station (See Appendix C below)	$12,000/Year (Billed Monthly)
SERVICE AGREEMENT for RIG and Meters (See Appendix C below)	$8,720/ Year (Billed Monthly)
Total	$20,720 (Billed Monthly)
Travel Costs for additional services	Billed at actual cost
System Integration Engineer for additional services	$185 / Hour

EXHIBIT B

Trimark
ASSOCIATES, INC.

Trimark Labor Rates June 2013 – May 2014

Area	Classification	Hourly Rate
Management and Consulting	Program Manager / Executive QA	$240
	Senior Management Consultant	$225
	Director of Engineering	$220
	Senior Project Manager	$195
	Associate Project Manager	$185
	System Integration Manager	$195
	Project Coordinator	$160
Engineering / Systems Integration	Senior Engineer	$195
	Electrical Engineer	$190
	Systems Integration Engineer	$185
	Communications Engineer	$170
	Communications Technician	$150
	Field Systems Specialist	$155
	CAD Manager	$140
	CAD Technician	$125
Electric Metering	Meter Engineer	$185
	Metering Supervisor / Superintendent	$175
	Certified CAISO Metering Inspector	$155
	Journey Meterman	$145
	Apprentice Meterman	$125
Meter Data Management	MDMA Manager	$185
	Senior Data Analyst	$175
	Data Acquisition Systems Specialist	$165
	Database Manager	$155
	Associate Data Analyst	$140
Electrical Contracting / Construction	Journey Electronics Technician	$185
	Electronics Technician	$155
	Journey Electrician	$135
	Apprentice Electrician	$115
	Administrative	$75
Expenses	Parts and Material	Cost +12%
	Out-of-Pocket. Expenses	Cost +12%
	Travel (Mileage)	$0.565 / Mile
	Travel labor Time (75% of Billing Rate)	
Overtime rates of (1 5 * normal rate) apply to work conducted outside core business hours of 8AM to 5PM. Sunday's and holiday's are double time		

EXHIBIT C

INSURANCE

A. **General Requirements**. Before commencing the performance of services under this Agreement, and at all other times this Agreement is effective, Consultant must procure and maintain the following types of insurance with coverage limits complying, at a minimum, with the limits set forth below:

Type of Insurance	Limits (combined single)
Commercial General Liability:	$1,000,000
Business Automobile Liability	$1,000,000
Professional Liability	$1,000,000
Workers Compensation	Statutory Requirement.

B. **Commercial General Liability Insurance**. Commercial general liability insurance must have coverage at least as broad as Insurance Services Office (ISO) CGL Form No. CG 00 01 . The amount of insurance set forth above must be a combined single limit per occurrence for bodily injury, personal injury, and property damage, including without limitation, blanket contractual liability for the policy coverage. The insurance must be on an "occurrence" not a "claims made" basis.

C. **Business Automobile Insurance**. Automobile insurance must have coverage at least as broad as ISO Business Auto Coverage Form CA 00 01 covering bodily injury and property damage, including coverage for any owned, hired, non-owned or rented vehicles. If Consultant or Consultant's employees will use personal autos in connection with the provision of services under this Agreement, Consultant will provide evidence of personal auto liability coverage for each such person.

D. **Professional Liability (Errors & Omissions) Insurance**. This coverage must be on a "claims made" basis, including coverage for contractual liability. The Professional Liability Insurance required by this Agreement must be endorsed to be applicable to claims based upon, arising out of or related to services performed under this Agreement. Insurance must be maintained and evidence of insurance must be provided for at least three years after completion of Consultant's services. If coverage is cancelled or non-renewed and not replaced with another claims made policy form with a retroactive date prior to the Effective Date, Consultant must purchase extended period coverage for a minimum of three years after completion of services.

E. **Workers Compensation**. Consultant must have a State of California approved policy form providing the statutory benefits required by law with employer's liability limits of no less than $1,000,000 per accident for all covered losses, or Consultant must provide evidence of an approved self-insurance program. Consultant certifies that it is aware of the provisions of the California Labor Code, which require every employee to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the Labor Code. Consultant certifies that it will comply with such provisions before commencing performance of services under this Agreement and thereafter maintain such coverage as required by the Labor Code.

F. **Additional Insureds**. Each Commercial General Liability Insurance policy and Business Auto Insurance policy must provide that the City, its officials, officers, employees, agents and volunteers are "additional insureds" under the terms of the policy, and must provide that an act or omission of one the insureds will not reduce or avoid coverage to the other insureds.

G. **Deductibles and Self-Insured Retention**. Any deductibles or self-insured retentions applicable to the insurance policies required under this Agreement must be declared to and approved by City. In no event may any required insurance policy have a deductible, self-insured retention or other similar policy provision in excess of $50,000 without prior written approval by City in its sole discretion. At the option of City, either the insurer will reduce or eliminate such deductibles or self-insured retentions with respect to the City's additional insureds or Consultant will procure a bond guaranteeing payment of any losses, damages, expenses, costs or settlements up to the amount of such deductibles or self-insured retentions.

H. **Primary Insurance**. Each of the insurance policies maintained by Consultant under this Agreement must state that such insurance will be deemed "primary" so that any insurance that may be carried by City will be deemed excess to that of Consultant. This endorsement must be reflected on ISO Form No. CG 20 10 11 85 or 88, or current equivalent form acceptable to City.

I. **Certificates of Insurance and Endorsements; Notice of Termination or Changes to Policies**. Prior to commencing any services under this Agreement, Consultant must file with the City certificates of insurance and endorsements evidencing the existence of all insurance required by this Agreement, along with such other evidence of insurance or copies of policies as may reasonably be required by City. These certificates of insurance and endorsements must be in a form approved by the City Attorney. Consultant must maintain current certificates and endorsements on file with City during the term of this Agreement reflecting the existence of all required insurance. Each of the certificates must expressly provide that no termination or cancellation of the required coverage will be effective except upon 30 days' prior written notice to City. The delivery to City of any certificates of insurance or endorsements that do not comply with the requirements of this Agreement will not waive the City's right to require compliance. In the event that Consultant's policies are materially changed, Consultant must provide the City with at least 30 days' prior written notice of the applicable changes.

J. **Insurance Rating**. All insurance required to be maintained by Consultant under this Agreement must be issued by companies licensed by or admitted to conduct insurance business in the State of California by the California Department of Insurance and must have a rating of A or better and Class VII or better by the latest edition of A.M. Best's Key Rating Guide.

K. **Aggregate Limits**. The aggregate limits for each insurance policy required under this Agreement must apply separately and solely to the services performed under this Agreement. If the required policies do not have an endorsement providing that the aggregate limit applies separately to the services being performed, or if defense costs are included in the aggregate limit, then the required aggregate limits must be increased to an amount satisfactory to City.

L. **Excess or Umbrella Liability Insurance (Over Primary)**. If an excess or umbrella liability policy is used to meet limit requirements, the insurance must provide coverage at least as broad as specified for the underlying coverages. Any such coverage provided under an excess or umbrella liability policy must include a "drop-down provision" providing primary coverage above a maximum $25,000 self-insured retention for liability not covered by primary but covered by the umbrella. Coverage must be provided on a "pay-on-behalf" basis, with defense costs payable in addition to policy limits. There may be no cross-liability exclusion precluding coverage for claims or suits by one insured against another. Coverage must be applicable to City for injury to employees of Consultant, its subcontractors or others performing work to satisfy Consultant's obligations under this Agreement. The scope of coverage provided is subject to approval of City following receipt of proof of insurance as required herein. Limits are subject to review, but in no event may be less than $4,000,000 per occurrence and aggregate.

M. **Waiver of Subrogation Rights**. Consultant and each insurer providing any insurance required by this Agreement must waive all rights of subrogation against City, its officials, officers, employees, agents and volunteers, and each insurer must issue a certificate to the City evidencing this waiver of subrogation rights.

N. **Subcontractor Insurance**. Should the Consultant subcontract out any of the work or services required under this Agreement, it must include all subcontractors as insured's under its policies or maintain separate certificates and endorsements for each subcontractor. As an alternative, the Contractor may require all subcontractors to provide at their own expense evidence of all the required coverages listed in this Exhibit C. If this option is exercised, both City and Consultant must be named as additional insured under the subcontractor's General Liability policy. All coverages for subcontractors will be subject to all the requirements of this Exhibit C. The City reserves the right to perform an insurance audit during the term of this Agreement to verify compliance with requirements.

O. **Failure to Maintain Required Insurance**. If Consultant, for any reason, fails to obtain and maintain the insurance required by this Agreement, City may obtain such coverage at Consultant's expense and deduct the cost of such insurance from payments due to Consultant under this Agreement or may terminate the Agreement.

P. **Effect of Coverage**. The existence of the required insurance coverage under this Agreement will not be deemed to satisfy or limit Consultant's indemnity obligations under this Agreement. Consultant acknowledges that the insurance coverage and policy limits set forth in this Agreement constitute the minimum coverage and policy limits required. Any insurance proceeds available to City in excess of the limits and coverage required by this Agreement, and which is applicable to a given loss, must be made available to City to compensate it for such losses.

Q. **Higher Limits of Insurance**. If Consultant maintains higher limits of insurance than the minimums shown above, City will be entitled to coverage for the higher limits maintained by Consultant.

R. **Evaluation and Revision of Coverage**. City retains the right to modify, delete, alter or change the insurance requirements set forth in this Exhibit C upon not less than 90 days prior written notice. If any such change results in a substantial additional cost to Consultant, the City and Consultant may renegotiate Consultant's compensation under this Agreement.

EXHIBIT B

First Amendment to Professional Services Agreement with Trimark Associates, Inc., dated September 1, 2014

[Attached]

FIRST AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT

THIS **FIRST AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT** ("First Amendment") is between the CITY OF INDUSTRY, a California municipal corporation and charter city ("City") and TRIMARK ASSOCIATES, INC., a California corporation ("Consultant"), and is effective as of September 1, 2014.

Recitals

A. The parties have entered into that certain "Professional Services Agreement" effective as of August 22, 2013 ("Agreement").

B Except as expressly modified in this First Amendment, the terms referenced in this First Amendment will have the same meanings as the terms defined in the Agreement.

C. The City and Consultant desire to update the scope of services and related compensation under the Agreement.

Agreement

1. Amendment to Exhibit A (Scope of Services). The Scope of Services exhibit attached to the Agreement as Exhibit A is hereby amended and replaced with the Scope of Services attached to this First Amendment as Exhibit A.

2. Amendment to Exhibit B (Key Personnel & Compensation). The Key Personnel & Compensation exhibit attached to the Agreement as Exhibit B is hereby amended and replaced with the Key Personnel & Compensation exhibit attached to this First Amendment as Exhibit B.

3. Ratification of Agreement. Except as expressly modified by this First Amendment, City and Consultant hereby ratify that all terms and provisions of the Agreement remain in full force and effect.

///

THE UNDERSIGNED AUTHORIZED REPRESENTATIVES OF THE PARTIES have executed this First Amendment effective as of the date written above.

CITY OF INDUSTRY

By: _____
Kevin Radecki, City Manager

Attest:

By: _____
Jodi Scrivens, City Clerk

TRIMARK ASSOCIATES, INC.

By: _____ – COO
Name & Title

By: _____
Name & Title
Harry Dhillon, VP Finance

LA #4832-1221-2766 v1

EXHIBIT A

SCOPE OF SERVICES

[Attached]

EXHIBIT A

TRIMARK ASSOCIATES, INC.

- 24/hour 7Day system status monitoring via TRIMARK's Spiceworks monitor

c. Software Provision

- Provide and install remote access software for managing Equipment
- Provide annual upgrade of the T1-S, Historian, and Power Viewer software
- Provide Operating System Security patches as they are available and tested
- Maintain current configuration and documentation on EQUIPMENT including DAS, RIG and MET databases, configuration details for DAS, RIG, MET and Revenue Meters and other related software and/or application drivers
- Coordinate and RIG diagnostics or program changes with the RIG software provider
- Manage access for authorized users and restrict access for unauthorized users

COVERED SERVICE AGREEMENT SITES

SITE NAME	# of DAS or RIG's	# of MET stations / Sensor	# Primary Meters	# of Back Up Meters	# of Aux Meters	Effective Date
City of Industry Metrolink PV DAS(DAS includes TI-S, Historian, and PowerViewer Software)	1	1/5	0	0	0	September 1, 2014
City of Industry Metrolink PV RIG	1	0	1	0	1	September 1, 2014

EXHIBIT B

KEY PERSONNEL & COMPENSATION

1. Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are: Dean Schroeder.

2. Total compensation under this Agreement, including reimbursement for actual expenses, may not exceed $20,720 for any one year period beginning on September 1 and ending the following August 31 of such year.

FEE SCHEDULE

(See attached Schedule)

EXHIBIT B

RIG SERVICE AGREEMENT / TIME AND MATERIALS COSTS

Service	Rate
SERVICE AGREEMENT for DAS and MET Station (See Appendix C below)	$12,000/Year (Billed Monthly)
SERVICE AGREEMENT for RIG and Meters (See Appendix C below)	$8,720/ Year (Billed Monthly)
Total	$20,720 (Billed Monthly)
Travel Costs for additional services	Billed at actual cost
System Integration Engineer for additional services	$195 / Hour

Trimark
ASSOCIATES, INC.

Trimark Labor Rates 2014 –2015

Area	Classification	Hourly Rate
Management and Consulting	Program Manager / Executive QA	$240
	Senior Management Consultant	$225
	Director of Engineering	$220
	Senior Project Manager	$195
	Associate Project Manager	$185
	System Integration Manager	$195
	Project Coordinator	$160
Engineering / Systems Integration	Senior Engineer	$195
	Electrical Engineer	$185
	Systems Integration Engineer	$175
	Communications Engineer	$170
	Communications Technician	$150
	Field Systems Specialist	$155
	CAD Manager	$140
	CAD Technician	$125
Electric Metering	Meter Engineer	$185
	Metering Supervisor / Superintendent	$175
	Certified CAISO Metering Inspector	$155
	Journey Meterman	$145
	Apprentice Meterman	$125
Meter Data Management	MDMA Manager	$185
	Senior Data Analyst	$175
	Data Acquisition Systems Specialist	$165
	Database Manager	$155
	Associate Data Analyst	$140
Electrical Contracting / Construction	Journey Electronics Technician	$185
	Electronics Technician	$155
	Journey Electrician	$135
	Apprentice Electrician	$115
	Administrative	$75
Expenses	Parts and Material	Cost +12%
	Out-of-Pocket. Expenses	Cost +12%
	Travel (Mileage)	$0.565 / Mile
	Travel labor Time (75% of Billing Rate)	
Overtime rates of (1.5 * normal rate) apply to work conducted outside core business hours of 8AM to 5PM. Sunday's and holiday's are double time		

EXHIBIT C

Second Amendment to Professional Services Agreement with Trimark Associates, Inc., dated September 1, 2015

[Attached]

SECOND **AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT**

THIS SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT ("First Amendment") is between the CITY OF INDUSTRY, a California municipal corporation and charter city ("City") and TRIMARK ASSOCIATES, INC., a California corporation ("Consultant"), and is effective as of September 1, 2015.

Recitals

A. The parties have entered into that certain "Professional Services Agreement" effective as of August 22, 2013 ("Agreement").

B. The parties have entered into that certain "First Amendment to the Professional Services Agreement" effective September 25, 2014.

C. Except as expressly modified in this Second Amendment, the terms referenced in this Second Amendment will have the same meanings as the terms defined in the Agreement.

D. The City and Consultant desire to update the scope of services and related compensation under the Agreement.

Agreement

1. Amendment to Exhibit A (Scope of Services). The Scope of Services exhibit attached to the Agreement as Exhibit A is hereby amended and replaced with the Scope of Services attached to this Second Amendment as Exhibit A.

2. Amendment to Exhibit B (Key Personnel & Compensation). The Key Personnel & Compensation exhibit attached to the Agreement as Exhibit B is hereby amended and replaced with the Key Personnel & Compensation exhibit attached to this Second Amendment as Exhibit B.

3. Ratification of Agreement. Except as expressly modified by this Second Amendment. City and Consultant hereby ratify that all terms and provisions of the Agreement remain in full force and effect.

///

THE UNDERSIGNED AUTHORIZED REPRESENTATIVES OF THE PARTIES have executed this Second Amendment effective as of the date written above.

CITY OF INDUSTRY

By: _____
Mark D. Radecki, Mayor

Attest:

By: _____
Cecelia Dunlap, Deputy City Clerk

TRIMARK ASSOCIATES, INC.

By: _____
Name & Title
Mark Morosky, President

By: _____
Name & Title

LA #4832-1221-2766 v1

EXHIBIT A

SCOPE OF SERVICES

[Attached]

Exhibit A

Trimark ASSOCIATES, INC.

DATA ACQUISITION SYSTEN (DAS), MET STATION, STANDARD RIG, AND REVENUE METER SERVICE AGREEMENT

This Service Agreement is for a Data Acquisition System (DAS), MET Station, Remote Intelligence Gateway (RIG), electric power Revenue Meters, and all related equipment between (CITY), with general offices located at 15625 Stafford St. City of Industry, CA 91744 and, Trimark Associates, Inc. whose principal offices are located at 2365 Iron Point Rd. Suite 100 Folsom, CA 95630

1. Effective Date, Term and Termination

This Agreement is effective upon the execution of this Agreement by both parties as signed. TRIMARK will provide the Services for an initial one (1) year term and this Agreement shall automatically renew for one (1) year terms unless, prior to an extension, either party provides the other with no less than sixty (60) days' prior written notice of its intention to terminate this Agreement.

Notwithstanding the above, (CITY),) shall have the right to terminate all or part of this Agreement, with Sixty (60) days written notice to TRIMARK, if TRIMARK breaches any material term or condition of this Agreement.

If TRIMARK determines that it will not continue to provide Services in any Area of Service under this Agreement, it shall notify(CITY), in writing at least Sixty (60) days in advance of termination of the Agreement. (CITY),), at its discretion, shall have the right to terminate all or part of this Agreement at that time and shall notify TRIMARK of its election.

2. Scope of Work

For purposes of repairing failures and maintaining DAS, MET, RIG, and Revenue Meter Equipment including the TI-S, Historian, and PowerViewer application and any TRIMARK provided communications or interface devices (EQUIPMENT) on the premises of the CITY location identified in Appendix C, TRIMARK agrees to perform the following services (collectively, the "Services") in exchange for the consideration to be pain by CITY pursuant to Section 3 below as described in APPENDIX A.

a. Support for Failures (RIG):

- (CITY) representatives can request service and report problems during normal business hours by calling TRIMARK's help desk at 866-995-5970. Upon receipt of the request, TRIMARK will respond as noted below depending on the nature of the request. After normal business hours, (CITY) representatives should call one of the following TRIMARK team members to report the service request:
    1. Dean Schroeder (312) 576-2160
    2. Jae Kim (818) 825-0205
    3. Tom Finch (916) 337-5396

These individuals will select an appropriate TRIMARK technical staff member to follow up on the service request with (CITY) staff members.

- Provide remote network or dial-in support service to troubleshoot and make repairs of the RIG for any reported failures related to the RIG within four business hours
- Provide support service at the premises (if necessary) where the RIG resides within one business day following a reported failure related to the RIG - travel & "out of pocket" expenses may be charged as described in APPENDIX A,
- Maintain current configuration and documentation on the RIG including RIG database, configuration details and other RIG related software and/or application drivers,
- Provide one (1) Annual Emergency Site Visit (if required) without charge to repair or replace the failed RIG, including travel and expenses for TRIMARK staff to travel to and work at the effected site.

b. EQUIPMENT Maintenance and Monitoring
- Conduct a routine maintenance inspection and assessment of the installed EQUIPMENT
- Provide one (1) Annual Maintenance visit without charge, to clean the computer equipment perform backups and updates, and renew the RIG security certificate.
- Provide one (1) Annual Maintenance visit without charge to replace the meter battery (on two year cycle) and to conduct a meter registration test (yearly).
- Inspect for any corrosion, deterioration, or other pending circumstances that may lead to or make failure eminent.
- 24/hour 7day system status monitoring via TRIMARK's Spiceworks monitor.

c. Software Provision
- Provide and install remote access software for managing Equipment
- Provide annual upgrade of the T1-S, Historian, and Power Viewer software.
- Provide Operating System Security patches as they are available and tested.
- Maintain current configuration and documentation on EQUIPMENT including DAS, RIG and MET databases, configuration details for DAS, RIG , MET and Revenue Meters and other related software and / or application drivers
- Coordinate any RIG diagnostics or program changes with the RIG software provider and
- Manage access for authorized users and restrict access for unauthorized users.

3. Pricing, Invoices and Payment

(CITY) will pay to TRIMARK a monthly Service Fee for each site and for the deliverables in accordance with Appendix A B and C and as specified in Task Orders related to specific projects not covered under the service agreement. TRIMARK may directly invoice (CITY), for products and services described in task orders and in amendments as provided by TRIMARK and its suppliers.

The Service Fee shall be applicable to the EQUIPMENT covered under this Service Agreement. The Service Fee for the initial one (1) year term of this Agreement is in force and is stated in Appendix C. It is the parties' intent to review and negotiate in good faith Service Fee changes and Task Authorization changes, if any, prior to any extension of this

Exhibit A

Trimark Associates, Inc.

COVERED SERVICE AGREEMENT SITES

SITE NAME	# of DAS or RIG's	# of MET stations / Sensor	# Primary Meters	# of Back Up Meters	# of Aux Meters	Effective Date
City of Industry Metrolink PV DAS(DAS includes TI-S, Historian, and PowerViewer Software)	1	1/5	0	0	0	September 1, 2015
City of Industry Metrolink PV RIG	1	0	1	0	1	September 1, 2015

EXHIBIT B

KEY PERSONNEL & COMPENSATION

1. Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are: Dean Schroeder.

2. Total compensation under this Agreement, including reimbursement for actual expenses, may not exceed $20,720.00 for any one year period beginning on September 1 and ending the following August 31 of such year.

FEE SCHEDULE

(See attached Schedule)

Exhibit B

Trimark Associates, Inc.

RIG SERVICE AGREEMENT / TIME AND MATERIALS COSTS

Service	Rate
SERVICE AGREEMENT for DAS and MET Station (See Appendix C below)	$12,000/Year (Billed Monthly)
SERVICE AGREEMENT for RIG and Meters (See Appendix C below)	$8,720/ Year (Billed Monthly)
Total	$20,720 (Billed Monthly)
Travel Costs for additional services	Billed at actual cost
System Integration Engineer for additional services	$185 / Hour

Exhibit B

Trimark ASSOCIATES, INC.

Trimark Labor Rates 2015–2016

Item	Description	Hourly Rate
Management and Consulting	Program Manager / Executive QA	$285
	Senior Management Consultant	$270
	Director of Engineering	$265
	Senior Project Manager	$235
	Associate Project Manager	$220
	System Integration Manager	$235
	Project Coordinator	$190
Engineering / Systems Integration	Senior Developer	$240
	Senior Engineer	$230
	Electrical Engineer	$225
	Systems Integration Engineer	$215
	Software Developer	$215
	Communications Engineer	$205
	Communications Technician	$185
	Field Systems Specialist	$190
	CAD Manager	$170
	CAD Technician	$145
Electric Metering	Meter Engineer	$220
	Metering Supervisor / Superintendent	$210
	Certified CAISO Metering Inspector	$190
	Journey Meterman	$175
	Apprentice Meterman	$140
Meter Data Management	MDMA Manager	$220
	Senior Data Analyst	$210
	Data Acquisition Systems Specialist	$200
	Database Manager	$190
	Associate Data Analyst	$170
Electrical Contracting / Construction	Journey Electronics Technician	$220
	Electronics Technician	$190
	Journey Electrician	$170
	Apprentice Electrician	$135
	Administrative	$95
Expenses	Parts and Material	Cost +12%
	Out-of-Pocket. Expenses	Cost +12%
	Travel (Mileage)	$0.56 / Mile – *adjusted for IRS rates
	Travel labor Time (75% of Billing Rate)	
Overtime rates of (1.5 * normal rate) apply to work conducted outside core business hours of 8AM to 5PM. Sunday's and holiday's are double time		

EXHIBIT D

Third Amendment to Professional Services Agreement with Trimark Associates, Inc., dated October 27, 2016

[Attached]

AMENDMENT NO. 3
TO PROFESSIONAL SERVICES AGREEMENT

This Amendment No. 3 to the Professional Services Agreement ("Agreement"), is made and entered into this 27th day of October, 2016, ("Effective Date") by and between the City of Industry, a California municipal corporation ("City") and Trimark Associates, Inc., a California corporation ("Consultant"). The City and Consultant are hereinafter collectively referred to as the "Parties."

RECITALS

WHEREAS, on or about August 22, 2013, the City Council approved an Agreement for Consulting Services with Trimark Associates, Inc., to provide data acquisition system ("DAS"), met station, remote intelligent gateway ("RIG"), and revenue meter service agreement services; and

WHEREAS, on or about August 22, 2013, the Agreement was entered into and executed between the City and Consultant to perform data acquisition system ("DAS"), met station, remote intelligent gateway ("RIG"), and revenue meter service agreement services for the City; and

WHEREAS, on or about September 25, 2014, the City Council approved the First Amendment to Professional Services Agreement with Trimark Associates, Inc., to provide data acquisition system ("DAS"), met station, remote intelligent gateway ("RIG"), and revenue meter service agreement services; and

WHEREAS, on or about August 13, 2015, the City Council approved the Second Amendment to Professional Services Agreement with Trimark Associates, Inc., to provide data acquisition system ("DAS"), met station, remote intelligent gateway ("RIG"), and revenue meter service agreement services; and

WHEREAS, the Parties desire to amend the Agreement to increase the compensation of the Agreement by $63,886.67, to allow Consultant to continue assisting the City with planning support and consulting services; and

WHEREAS, the Parties desire to amend the Agreement to extend the contract term by three (3) years but in no event later than October 27, 2019, unless sooner terminated pursuant to the provisions of this Agreement; and

WHEREAS, for the reasons set forth herein, the City and Consultant desire to enter into this Amendment No. 1, as set forth below.

AMENDMENT

NOW, THEREFORE, in consideration of the mutual covenants, promises and agreements set forth herein, it is agreed the aforesaid Agreement, a copy of which is attached hereto as Exhibit A, and incorporated herein by reference, shall remain in full force and effect except as otherwise hereinafter provided:

Section 1. **Term**

Section 1 is hereby amended to read in its entirety as follows:

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 October 27, 2019, unless sooner terminated pursuant to the provisions of this Agreement.

Section 5. Compensation and Payment.

The second sentence of Section 5.1 is hereby amended to read in its entirety as follows:

This amount shall not exceed One Hundred Twenty Four Thousand Dollars ($126,050.00) for the total Term of the Agreement unless additional payment is approved in writing, by the City.

Section 21. Notices

Section 21 shall be revised to include the following contact information for the City Attorney.

James M. Casso
Casso & Sparks, LLP
13200 Crossroads Parkway North, Suite 345
City of Industry, CA 91746
(Tel.): (626) 269-2980
(E-mail): jcasso@cassosparks.com

Exhibit B

Section 2 of Exhibit B is hereby rescinded in its entirety.

IN WITNESS WHEREOF, the Parties have executed this Amendment No. 3 to the Agreement as of the Effective Date.

"CITY"
City of Industry

By: _____
Paul Philips, City Manager

"CONSULTANT"
Trimark Associates, Inc.

By: _____
Mark Morosky, President

Attest:

By: _____
Diane M. Schlichting, Chief Deputy City Clerk

APPROVED AS TO FORM

By: _____
James M. Casso, City Attorney

CITY COUNCIL

ITEM NO. 6.7

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: Alex Gonzalez, Director of Development Services and Administration
Kristen Weger, Administrative Analyst

Date: October 27, 2016

SUBJECT: **Consideration of Recommendations regarding the Request for Proposals for Operations and Maintenance ("O&M") Services of the City of Industry Metrolink Station 2MWdc Solar Carport Facility located at 600 South Brea Canyon Road, and Consideration of Approval of a Maintenance Services Agreement with SST Construction, LLC, in an amount not to exceed $105,000.00 from October 27, 2016 through October 27, 2019**

A Request for Proposals ("RFP") for Operations and Maintenance ("O&M") Services at the City of Industry Metrolink Station 2 MWdc Solar Carport Facility, 600 S. Brea Canyon Road was prepared to invite contractors to submit proposals to the City of Industry ("City"). The RFP was advertised on August 15, 2016 and August 22, 2016 in the San Gabriel Valley Tribune. It was also posted on BidAmerica, Southern California Builders Association, Dodge Data & Analytics and Construction BidBoard, Inc on August 15, 2016. A non-mandatory job walk was held for proposers on September 1, 2016 at 1:30 pm at the Metrolink Solar Carport Facility located at 600 S. Brea Canyon Road. Questions were received from proposers up until September 9, 2016 at 1:00 pm via PlanetBids.

Proposals were due to the City via PlanetBids by September 15, 2016 at 1:00 pm. The City received four (4) proposals from Borrego Solar Systems, Inc., ENCO Utility Services LLC, MaxGen Energy Services and SST Construction, LLC.

The selection panel evaluated the proposals received by each contractor based on the following criteria, as outlined in the RFP:

Base Price Quote: O&M Tasks Items #1 Monitoring, Coordination, Dispatch, Forecast, Debrief and Reporting and #2 Preventive Maintenance should be a fixed price ($ per year) based on the tasks identified in Sections 2.4, 3.1, 3.7 and Appendix 1.	30%

O&M Qualifications: Company licensing, financial stability and insurance compliance determine minimum eligibility of respondents. O&M Contractor can differentiate by demonstrating superior, relevant O&M experience, technical knowledge of support personnel and/or ability to leverage Company economies-of-scale in current operations. (The qualifications of any proposed subcontractors will be considered part of the qualifying experience.)	25%
Local Presence: The availability of nearby personnel should enable the O&M Contractor to reduce response time and the cost of response for service and repair operations.	20%
O&M Plan: The City seeks to adopt the best solar O&M management and contracting practices for the Facility. One of RFP objectives is to finalize an O&M Plan that adopts the best solar O&M management practices. The City is seeking input from the O&M provider to develop and finalize the O&M Plan.	25%
Total	**100%**

The review committee rated the proposals based on the above criteria. The following table summarizes the rankings of the proposals.

Table 1 – Summary of Written Proposal Evaluation Ratings

Firm	Rank
Borrego Solar Systems, Inc.	1
ENCO Utility Services LLC	2
SST Construction, LLC	2
MaxGen Energy Services	3

ENCO Utility Services LLC and SST Construction, LLC ranked second after the written proposals were evaluated.

Following the written proposal evaluations, all (4) firms were determined by the selection panel to be qualified and invited for an oral interview on September 23, 2016. The selection panel evaluated the oral interviews of each firm based on the same criteria as the proposals submitted. The following table summarizes the rankings of the oral interviews.

Table 2 – Summary of Oral Presentation Ratings

Firm	Rank
Borrego Solar Systems, Inc.	2
ENCO Utility Services LLC	3
SST Construction, LLC	1
MaxGen Energy Services	4

Based on the oral interview rankings, a reference check was completed for SST Construction, LLC. Representatives from Google HQ, Sun Power Corporation, and Aerojet all confirmed that SST Construction, LLC had successfully completed the project listed for their representative companies and that the companies were satisfied with the contractor's performance.

Fiscal Impact

The fiscal year 2016-2017 adopted budget requires an appropriation of $35,000 from Electric Utility Reserves to the Electric Utility Fund Budget – Repair and Maintenance Equipment (account no. 161-300-5550) for the Maintenance Services Agreement.

Recommendation

1.) Based on the oral interview rankings and reference check, staff recommends that SST Construction, LLC be awarded a Maintenance Services Agreement in an amount not to exceed $105,000.00 for three (3) years. The annual cost shall not exceed the approved budget without Council authorization; and
2.) Approve an appropriation of $35,000 from Electric Utility Reserves to the Electric Utility Fund Budget – Repair and Maintenance Equipment (account no. 161-300-5550) for the Maintenance Services Agreement.

Upon City Council approval and execution of the attached Maintenance Services Agreement, SST Construction, LLC is prepared to begin providing services to the City.

Exhibits
A. Maintenance Services Agreement with SST Construction, LLC in an amount not to exceed $105,000.00 for from October 27, 2016 through October 27, 2019
B. Base Price Quote Comparison compiled from Borrego Solar Systems, Inc., ENCO Utility Services LLC, MaxGen Energy Services and SST Construction, LLC proposals submitted September 15, 2016
C. Proposals Received from Firms in Response to Request for Proposals ("RFP") for Operations and Maintenance ("O&M") Services at the City of Industry Metrolink Station 2 MWdc Solar Carport Facility, 600 S. Brea Canyon Road (on file in City of Industry City Clerk's Office)

PJP:AG:KW:mk

EXHIBIT A

Maintenance Services Agreement with SST Construction, LLC in an amount not to exceed $105,000.00 for from October 27, 2016 through October 27, 2019

[Attached]

CITY OF INDUSTRY

MAINTENANCE SERVICES AGREEMENT

This MAINTENANCE SERVICES AGREEMENT ("Agreement"), is made and effective as of October 27, 2016 ("Effective Date"), between the City of Industry, a municipal corporation ("City") and SST Construction, LLC, a limited liability company ("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 October 27, 2019, 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 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 solar facility operations and maintenance 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

City's 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 monthly, in accordance with the payment rates and terms and the 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. This amount shall not exceed One Hundred Five Thousand Dollars ($105,000.00) for the total Term of the Agreement unless additional payment is approved as provided in this Agreement.

(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.

5. LABOR CODE AND PREVAILING WAGES

(a) Consultant represents and warrants that it is aware of the requirements of California Labor Code Section 1720, *et seq.*, and 1770, *et seq.*, as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "Public Works" and "Maintenance" projects. If the Services are being performed as part of an applicable "Public Works" or "Maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is $15,000.00 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. City shall provide Consultant with a copy of the prevailing rates of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and any location where the Services are performed. Consultant shall indemnify, defend and hold harmless, the City, its elected officials, officers, employees and agents, from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, Consultant's or by any individual or agency for which Consultant is legally liable, including but not limited to officers, agents, employees or subcontractors of Consultant, failure or alleged failure to comply with Prevailing Wage Laws.

(b) In accordance with the requirements of Labor Code Section 1776, Consultant shall keep accurate payroll records which are either on forms provided by the Division of Labor Standards Enforcement or which contain the same information required by such forms. Consultant shall make all such records available for inspection at all reasonable hours.

(c) To the extent applicable, Cosultant shall comply with the provisions of Section 1777.5 of the Labor Code with respect to the employment of properly registered apprentices upon public works.

(d) Consultant shall comply with the legal days work and overtime requirements of Sections 1813 and 1815 of the Labor Code.

(e) If the Services are being performed as part of an applicable Public works or Maintenance project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants performing such Services must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Agreement and require the same of any subconsultants, as applicable. This Services set forth in this Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

(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.

6. 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.

7. 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.

8. 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) Indemnity for other than professional liability

Other than in the performance of professional services and to the full extent permitted by law, Consultant shall indemnify, defend and hold harmless City, and any and all of its employees, officials and agents from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including legal counsel fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Consultant or by any individual or agency for which Consultant is legally liable, including but not limited to officers, agents, employees or subcontractors of Consultant.

(c) 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. 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:	City of Industry 15625 E. Stafford, Suite 100 City of Industry, CA 91744 Attention: City Manager
With a Copy To:	James M. Casso, City Attorney

13200 Crossroads Parkway North, Suite 345

City of Industry, CA 91746

To Consultant: Derek Chase, President
SST Construction, LLC
2731 Citrus Road, Suite D
Rancho Cordova, CA 95742

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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.

22. 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.

23. 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.

24. 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.

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

"CITY"
City of Industry

By:_____
Paul Philips, City Manager

"CONSULTANT"
SST Construction, LLC

By_____
Derek Chase, President

Attest:

By:_____
Diane Schlichting, Chief 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 have full Operations & Maintenance ("O&M") responsibility for the Metrolink Solar Carport Facility ("Facility") located at 600 South Brea Canyon Road. Consultant will provide 24/7 monitoring, coordination and dispatching of vendors subcontracted for security and landscaping, and provide CAISO communication functions (CAISO is defined as the "California Independent System Operator or its regulatory successor, as applicable"); and to perform all Facility O&M including response services, corrective maintenance, preventive maintenance, warranty compliance and technical support, as necessary to ensure reliable, optimized operations. In addition, the Consultant will maintain As-Built drawings and configuration records of the facilities. The Consultant will also be required to perform some modest forecasting and reporting tasks.

1. Monitoring, Coordination and Dispatching (24/7 Dispatcher)

- Consultant shall have on-call service 24/7 and be able to provide onsite response within 24 hours of notification. Notification could be from the City, but primarily from Power Viewer web based solar monitoring system that triggers alarms and presents Facility data in near real-time. Consultant responsible to:
- Acknowledge, assess severity and nature of alarm (i.e., false positive, restore service or repair as required, etc.) and prioritize ("Alert Triage").
- Determine if performance is outside range of acceptable parameters.
- Determine required action: clear alarm, dispatch Consultant's personnel to troubleshoot or inform City and City's subcontracted service providers of required action.

2. Dispatching of Subcontractors and Own Employees

Consultant shall monitor, inform the City and its vendors, coordinate and dispatch required services for subcontracted services, including but not limited to:

1) EV and PV Switchgear: All alarms, corrective and preventive maintenance to be coordinated with the City. Consultant is to perform work or provide an acceptable subcontractor to accomplish the work; all subcontractors are to be approved by the City.
2) CAISO Meter: All alarms or loss of meter read to be coordinated with City, CAISO and approved subcontractor. Troubleshooting could involve AT&T, Verizon and other vendors. Consultant is to perform work or provide an acceptable Metering subcontractor or approved personnel to the City.
3) Network Facilities: All network cabling issues to be coordinated with City and City network staff.
4) DAS/RIG: Contact and coordinate with City and DAS/RIG subcontractor for response to issues related to CAISO and metering, alarms or loss of communication from DAS, RIG, networking, or

communication equipment, and loss of access to Power Viewer solar monitoring system. Consultant shall provide qualified personnel or an acceptable subcontractor to the City.

5) Monitor wireless security system alarms. Communicate and coordinate with City monitoring company's customer service center for wireless system alarms.

6) Monitor cameras for proper function. Install software (from City) on computer at Dispatcher's call center to remotely view security cameras. Coordinate with City security staff.

7) Primary communication coordinator for:

- On-site security reporting of suspicious activities or facility concerns.
- Issues related to vegetation that may impact solar generation or other O&M functions. Notify City to dispatch municipal maintenance contractor.

3. Troubleshooting and Service Response

If alarms or performance outside of acceptable parameters indicate the need for onsite operations, Consultant shall visit the site within 24 hours to troubleshoot the Facility and determine whether a service or repair operation is needed to restore system performance. For equipment not included in the Consultant's Scope of Services, the City- hired vendor must be contacted within 4 hours and dispatched within 24 hours to complete Service operations. Service operations refer to operations that restore equipment performance without repair such as the resetting of switches and circuit breakers. A log of troubleshooting, service and repairs performed at the MetroLink Solar Facility since December 2013 is provided in Appendix 5.

4. Corrective Maintenance

Corrective or unscheduled maintenance primarily will involve performing any service or replacing any part of the Facility that becomes unfit or unavailable for use and performing the repair necessary to restore full operation. Appendix 2 provides a list of corrective or reactive maintenance measures that would be expected to be performed to fix problems. The Consultant shall be responsible to maintain an ongoing corrective maintenance report.

5. Routine Inspections and Preventive Maintenance

Consultant shall establish a routine inspection schedule for the Facility and perform preventive maintenance for the solar, interconnection and CAISO metering facilities[1]. Consultant shall perform preventive maintenance intended to follow the industry standard for proactive maintenance: 1) to keep Facility equipment in good repair, safe operating condition, appearance and working order; 2) to keep Facility equipment in compliance with the manufacturer's recommendations, warranties and standard practices but in no event less than prudent industry practices; 3) to properly service all Facility equipment following manufacturer's written operating and servicing procedures. Routine inspection and preventive maintenance provided by Consultant shall include, but is not limited to, the following tasks (detailed in Appendix 1):

[1] While included in routine inspection, no preventive maintenance will be performed on electric vehicle (EV) charging and LED lighting facilities.

- Visual inspection of and reporting damage to carport structures
- Visual inspection for damage or foreign debris for all Facility equipment
- Identification of potential shading and equipment encroachments
- Inspect and verify wire connections for proper torque
- Calibration of Facility equipment per manufacturer specification
- Infrared scan of PV modules and other equipment connections
- Inspect and test fuses and breakers
- Inspect and test sensor equipment, DAS and weather station
- Inspect and maintain disconnects and combiner boxes
- Transformers and associated AC electrical distribution
- Wear and Tear Repairs

Appendix 1 provides a detailed preliminary list of routine inspection and preventive maintenance tasks.

6. As-Builts and Configuration Control

Consultant, upon any and all maintenance to the facility and its equipment, shall update all CAD As-Built Drawings to reflect the changes that were made previously or at the time of service. These files shall be made available to the City in order to keep the operations and maintenance manual up-to-date as the facility is reconfigured. Also, all As-Built Drawings and records of configuration changes shall be made freely available to City and its contractors.

7. Forecasting, Performance Debrief and Reporting

PPA and CAISO Forecasting and Scheduling

- Schedule forecast of Facility hourly electric output using SCE's web-based system (SCE PCI Module) per requirements for forecasting electric energy to be received by SCE. The City will provide initial hourly forecast based on historical generation.
- Schedule any generation outages using SCE PCI Module.

Performance Debrief (via telephone)

- City shall prepare and provide to Consultant quarterly performance report similar to Appendix 6 which Consultant and City shall jointly review and assess.

Reporting (can be provided electronically to City)

- Provide documentation of any troubleshooting, service or repair completed during site visit. Documentation of site visit is condition for payment.
- Document observations or findings from routine inspection.
- Document preventive maintenance or testing operation and provide City with brief outline on recommended measures.

- Promptly furnish or cause to be furnished any information as may be required to enable the City to respond to CAISO or SCE.
- Provide current as built information and updated drawings to maintain configuration control

PM Activity	Facility Component	Description of Preventive Maintenance Task	Interval	Provider
		General		
Manage	Facility	Document program to Inspect and maintain equipment as specified by manufacturer /supplier.	Per Man Spec Per Man Spec	Consultant
		Compile data sheets and maintenance checklists and confirm with manufacturer /supplier.		
Full Inspection	Facility	Ensure that there is appropriate signage and warnings that identifies potential hazards.	Annual	
Full Inspection	Facility	Ensure facility components (inverters, combiner boxes, disconnect switches, switchgear, etc.) are not accessible to unqualified personnel, and require tools or have locks to prevent unauthorized access to the equipment.	Annual	Consultant
Visual Inspection	Facility	Look for any signs of intrusion by pests such as insects and rodents. Remove any nests from electrical boxes (junction boxes, pull boxes, combiner boxes) or arrays. Use safe sanitation practices because pests may carry disease.	Annual	Other
Service	Facility	For any service ensure proper use of lockout/tagout procedures, personal protective equipment (PPE) and appropriate procedures for safely disconnecting live circuits.	Continual	Consultant
Service	Facility	Use torque marks on specified connections to ensure lugs are tightened to proper torque values. If not visible, technician can mark lug after torqueing during maintenance visit. Proper torque mark is made with specialized torque marking pen. The mark is a straight line through the lug and the housing.	Continual	Consultant
		PV ARRAYs		
Visual Inspection	PV Array	Confirm modules are securely attached. Inspect modules for excessive soiling from dirt buildup or animal droppings. Check for shading from vegetation growth.	Annual	PV Array Technician
Visual Inspection	PV Array	Inspect PV modules for defects that can appear in the form of burn marks, discoloration, delamination, or broken glass.	Annual	PV Array Technician
Visual Inspection	PV Racking	Inspect racking system for defects including rust, corrosion, sagging, and missing or broken clips or bolts.	Annual	PV Array Technician
Visual Inspection	PV Array	Ensure module wiring is secure, not hanging loose and exposed to potential damage, bent to unapproved radius, or stretched across sharp or abrasive surfaces. Check for aging & corrosion.	Annual	PV Array Technician
Full Inspection	PV Array	Test open circuit voltage of series strings of modules	Annual	PV Array Technician
Full Inspection	PV Modules	Use infrared camera to inspect for hot spots	Annual	PV Array Technician
Full Inspection	PV Modules	PV module torque check & visual inspection. Racking torque check and inspection.	5-Years	PV Array Technician
		Balance of System (BOS) - AC		

Visual Inspection	AC Wiring	Verify condition of wire transition junction boxes for weatherproofing, corrosion and security of internal wiring connections. Seal boxes if required.	Annual	Electrician
Full Inspection	AC Wiring	Verify physical condition of AC conduits and ensure all connections still weather tight.	Annual	Electrician
Visual Inspection	AC Wiring	Verify condition of AC disconnect(s). Open and look for signs of corrosion or damage. Check to make sure cabinet penetrations are properly sealed and no evidence of water ingress. Check	Annual	Electrician

PM Activity	Facility Component	Description of Preventive Maintenance Task	Interval	Provider
Visual Inspection	AC Wiring	Check position of AC disconnect switches and breakers.	Annual	Electrician
Service	AC Wiring	Re-torque all electrical connections on AC side of system.	Annual	Electrician
		Balance of System (BOS) - DC		
Visual Inspection	DC Wiring	Verify condition of DC conduits and connections, inspect for proper support, bushings, and expansion joints, where needed.	Annual	Electrician
Visual Inspection	DC Wiring	Verify condition of DC disconnect(s). Open and look for signs of corrosion or damage. Check to make sure cabinet penetrations are properly sealed and there is no evidence of water ingress. Check torque marks on field terminations.	Annual	Electrician
Visual Inspection	DC Wiring	Check proper position of DC disconnect switches.	Annual	Electrician
Visual Inspection	Combiner Boxes, DC Wiring	Verify external and interior condition of DC combiner boxes. Look for debris inside boxes and any evidence of damaging water intrusion. Look for discoloration on the terminals, boards, and fuse holders. Check torque marks on field connections.	Annual	Electrician
Full Inspection	DC Wiring	Inspect cabling for signs of cracks, defects, pulling out of connections; overheating, arcing, short or open circuits and ground faults.	Annual	Technician
Full Inspection	Combiner Boxes, DC Wiring	Scan combiner boxes with Infrared camera to identify loose or broken connections (loose connections warmer than good connections when passing current).	Annual	Technician
Service	DC Wiring	Re-torque all electrical connections in combiner box	Annual	Electrician
		Weather Station		
Full Inspection	Instruments	Inspect pyranometers (irradiance) & wind sensors. Irradiance sensors should be cleaned to remove dirt and bird droppings. Wind sensors should spin freely.	Annual	Technician
Full Inspection	Instruments	Ensure sensors are in the correct location and at the correct tilt and azimuth. Global horizontal irradiance sensor should be flat, and plane of array irradiance sensor should be installed to the same pitch and orientation as the array.	Annual	Technician
Service	Instruments	Inspect & tighten all connections.	Annual	Technician
Service	Instruments	Exchange or re-calibrate instruments.	Per Man Spec	Technician
Inverter - *Inverter manufacturer has specific requirements for inspection, testing, services, and documentation to meet warranty obligations*				

Visual Inspection	Inverter	Verify that current software is installed.	Per Man Spec	Inverter Technician
Visual Inspection	Inverter	Record and validate all voltages and production values from the HMI display. Record last logged system error.	Per Man Spec	Inverter Technician
Visual Inspection	Inverter	Inspect interior and exterior of the inverter for signs of water, rodent, or dust intrusion into the inverter.	Per Man Spec	Inverter Technician
Visual Inspection	Inverter	Check for torque marks on the field terminations.	Per Man Spec	Inverter Technician
Service	Inverter	Check and clean inside of inverter cabinet, ventilation system and exposed surfaces. Clean fan and heat sink (heat rejection fins).	Per Man Spec	Inverter Technician
Visual Inspection	Inverter	Inspect gasket seal, weather stripping, replace as necessary.	Per Man Spec	Inverter Technician
Full			Per Man	Inverter

PM Activity	Facility Component	Description of Preventive Maintenance Task	Interval	Provider
Full Inspection	Inverter	Inspect and test fans, replace as necessary.	Per Man Spec	Inverter Technician
Full Inspection	Inverter	Check fuses and surge suppressors such as MOV's.	Per Man Spec	Inverter Technician
Visual Inspection	Inverter	Look for discoloration from excessive heat buildup or corrosion on inverter components and connections.	Per Man Spec	Inverter Technician
Full Inspection	Inverter	Check operation of all inverter safety devices (E-stop, door switches)	Per Man Spec	Inverter Technician
Full Inspection	Inverter	Complete thermal scan of inverter connections, wiring and electronics.	Annual	Inverter Technician
Test	Inverter	Check integrity of lightning arrestors.	Annual	Inverter Technician
Test	Inverter	Check continuity of system ground and equipment grounding.	Annual	Inverter Technician
Test	Inverter	Test overvoltage surge suppressors in inverter.	Annual	Inverter Technician
Service	Inverter	Replace transient voltage surge suppression devices.	5-Years	Inverter Technician
Step-Up Transformer				
Visual Inspection	Transformer	Inspect transformer. Check meter, oil and temperature gauges.	Per Man Spec	Electrician
Switchgear & Meter				
Visual Inspection	Transformer	Inspect switchgear.	Per Man Spec	Electrician
EV Chargers				
Visual Inspection	Transformer	Inspect transformer that supplies Level 2 Chargers for proper operation.	Per Man Spec	Electrician
Visual Inspection	Panel	Inspect distribution panel that supply Level 2 Chargers for proper	Per Man Spec	Electrician

Weather Station				
Service	Instruments	**Weather Station - Instruments** **• Compact weather station/Pyranometer: Lufft USA WS501-UMB** o Annual maintenance § Visual inspection of the equipment for soiling § Check the sensors by carrying out a measurement request § Check the operation of the fan (not on WS200-UMB) **• Pyranometer: Campbell Scientific: CMP6, CMP11, CMP21** o Annual maintenance § At regular intervals, physically inspect the pyranometer to ensure that: • Dome is free of dirt, condensation, and ice (see Section 8.1.1, Cleaning Domes (p. 17)). • Desiccant granules are orange and opaque (see Section 8.1.2, Changing the Desiccant (p. 17)). • Mounting is secure. • Pyranometer is level (if mounted horizontally). • Cables are in good condition. § Cleaning Dome • Clean the outer dome at regular intervals (e.g., every week or so). Remove any accumulated dust, condensation, or ice from the dome and pyranometer body using a soft cloth dampened with water or alcohol. § Changing the Desiccant • A desiccant-filled drying cartridge prevents dew from forming on the inner sides of the domes; Campbell Scientific pn 27052 is the replacement desiccant for this cartridge. The optional CVF4 Heater/Ventilator Unit is also available to keep the pyranometer dome free from ice and dew (see Appendix C, CVF4 Ventilation Unit (p. C-1)). In some applications, the CVF4 may also reduce the deposition of dust on the pyranometer dome, and therefore reduce the cleaning interval frequency. **• Temp Sensor: Campbell Scientific 110PV** o Annual Maintenance § The 110PV probe requires minimal maintenance. Periodically check cabling for proper connections, signs of damage, and possible moisture intrusion	Annual	Technician

EXHIBIT B

RATE SCHEDULE

O&M Task Description	Price
1) Monitoring, Coordination, Dispatch, Forecast, Debrief & Reporting	$0/Yr
2) Preventive Maintenance (Appendix 1)	$5,600/Yr
3) Troubleshoot, Service & Repair (Appendix 2)	$120/hr
4) Travel Time (to and from site)	25 minutes (17miles)
5) Panel Wash (Appendix 3)	
$7,700 per occurrence, as needed	$7,700 (per occurrence)
Deionized Water	$3,000/Occur.
6) Other Tasks (Appendix 4)	
Calibration of Electric Meter	$5,500 on demand
Short circuit testing of strings	$3,300/Yr
IV curve testing	Included w/ short circuit test
Megger test of conductors	$3,300/Yr
Thermal imaging	$5,500/Yr
100% IV Curve Measurement and Trace Report	Included
ITR Thermal Imaging Report	Included
7) Vehicle & Equipment	Included

Hourly Rates (prevailing wage rates)

Qualification Per Task	Hourly Rate
Journeyman Electrician	$100/hr
Electrician	$90/hr
Master Electrician	$120/hr
Service Tech	$80/hr

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 specfied 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.

EXHIBIT B

Base Price Quote Comparison compiled from Borrego Solar Systems, Inc., ENCO Utility Services LLC, MaxGen Energy Services and SST Construction, LLC proposals submitted September 15, 2016

[Attached]

Contract No. 2015-1003R/(MP 06-18 #10)
Operations and Maintenance ("O&M") Services at the City of Industry Metrolink Station 2 MWdc Solar Carport Facility, 600 S. Brea Canyon Road
Cost Comparison

Base Price Quote is graded as 30% of the score for proposals: "O&M Tasks Items # 1 Monitoring, Coordination, Dispatch, Forecast, Debrief and Reporting and #2 Preventive Maintenance should be a fixed price ($ per year) based on the tasks identified in Sections 2.4, 3.1, 3.7 and Appendix 1."

	ENCO Utility Services	Borrego Solar	MaxGen Energy Services	SunSystem Technology
Monitoring, Coordination, Dispatch, Forecast, Debrief, Reporting	$38,200.00	$15,595.00	$53,000.00	$0.00
Preventive Maintenance	$37,500.00			$5,600.00
Annual Base Price Total	**$75,700.00**	**$15,595.00**	**$53,000.00**	**$5,600.00**
	Services As Required			
Panel Wash	$20,000.00	$11,583.00	$26,875.00	$10,700.00
Calibration of Electric Meter	$5,100.00	$2,000.00	Time & Materials	$5,500.00
Short circuit (Isc) testing of strings	$960.00	"Unecessary with IV Curve Test"		$3,300/year
Insulation resistance tests ("megger" tests) of conductors at specified voltage	$240.00	$5,500 AC/DC $3,500 Feeder Wiring		$3,300/year
Current-voltage (IV) curve testing of strings	$960.00	$0.00		$0.00
Thermal images of combiner box	Included in IRT	Included in PM, $1,200 as separate		Included in IRT
IRT Thermal Imaging Report	$18,000.00	$2,300 ("Redundant Service")		$5,500/year
Estimated yearly cost of additional services	$45,260.00	$25,883.00	$26,875.00	$28,300.00
Estimated total yearly cost	$120,960.00	$41,478.00	$79,875.00	$33,900.00

*Actual yearly cost is liable to change based on performance of facility and necessity of additional testing or services. Pricing is based on estimated need for additional services on an annual basis

EXHIBIT C

Proposals Received from Firms in Response to Request for Proposals ("RFP") for Operations and Maintenance ("O&M") Services at the City of Industry Metrolink Station 2 MWdc Solar Carport Facility, 600 S. Brea Canyon Road

[On file in City of Industry City Clerk's Office]

CITY COUNCIL

ITEM NO. 6.8

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

From: Paul J. Philips, City Manager

Staff: Troy Helling, Senior Planner

Date: October 27, 2016

Subject: Development Plan 16-1 and Lot Line Adjustment 80 – 14700 Nelson Avenue

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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 15-21 and Lot Line Adjustment 80 are proposed by S & C Property Development Inc. to develop two new industrial warehouse buildings on two parcels at 14700 Nelson Avenue. Parcel 1 will have a 63,240 square foot building and parcel 2 will have a 167,970 square foot building.

Location and Surroundings

As shown on the location map (Attachment 1), the project site is located on the south side of Nelson Avenue at 14700 Nelson Avenue. The site is 11.49 acres, comprised of 500,717 square feet. The Los Angeles County Tax Assessor Parcel Numbers (APN) 8208-066-900, 901 and 902. The new building on parcel 1 will be on 3.12 acres (135,707 square feet) and the new building on parcel 2 will be on 8.38 acres (365,010 square feet) (Attachment 2). Warehouses and manufacturing facilities are located to the west and east. Residential and a church are to the north across Nelson Avenue, and the elevated railroad tracks and Valley Boulevard are located to the south of the project site.

Project Description

Parcel 1

As shown in the site plan (Attachment 3), the proposed building on parcel 1 will be 63,240 square feet on a 3.12 acre lot (135,707 square feet). The building will include office area that will not exceed the maximum 33% of the total square footage of the building. The loading area for the building on parcel 1 will be located on the south side of the building and will be screened from Nelson Avenue by the building, and by an eight foot tall concrete screen wall. There will be seven, dock-high loading bays, and two grade-level loading doors in the loading area. The building will be accessed from Nelson Avenue by one 40 foot wide driveway. Parcel 1 requires 101 parking spaces and 101 spaces are provided as follows:

- 76 standard spaces (9'x19');
- 20 compact spaces (8'x16'); and

- 5 ADA accessible spaces
- In addition, there will be two bike racks for 8 bikes.

There will be a total of 18,250 square feet of landscaping (13.45 percent) for Parcel 1. A trash enclosure containing a trash bin and a recycling bin is provided in the parking area adjacent to the new building.

As shown on the elevations for the building on Parcel 1 (Attachment 4), the building is proposed to be approximately 37'-6" feet tall and the elevations include variations in wall height and will be adorned with glazing to differentiate office area from the warehouse area.

Parcel 2
As shown in the site plan (Attachment 5), the proposed building on parcel 2 will be 167,970 square feet on a 8.38 acre lot (365,010 square feet). The building will include office area that will not exceed the maximum 33% of the total square footage of the building.

The loading area for the building on parcel 2 will be located on the north side of the building and will be screened from the new building on parcel 1 and the existing water tanks to the north and by a new eight foot tall concrete screen wall. There would be 19 dock-high loading bays and two grade-level loading doors in the loading area. The building will be accessed from Nelson Avenue by one 40 foot wide driveway on the west side of the property and one 45 foot driveway on the east side of the property. Parcel 2 requires 218 parking spaces and 219 spaces are provided as follows:

- 168 standard spaces (9'x19');
- 43 compact spaces (8'x16'); and
- 7 ADA accessible spaces
- In addition, there will be three bike racks for 12 bikes.

There will be a total of 46,980 square feet of landscaping (12.87 percent) for Parcel 2. A trash enclosure containing a trash bin and a recycling bin is provided in the parking area adjacent to the new building.

As shown on the elevations for the building on Parcel 2 (Attachment 6), the building is proposed to be approximately 40 feet tall and includes variations in wall height and will be adorned with glazing to differentiate office area from the warehouse area.

Lot Line Adjustment
City Council approval is required for lot line adjustments. The applicant is proposing Lot Line Adjustment 80 to remove and adjust existing lot lines on three existing parcels, as the subject site is currently configured (Attachment 7). As proposed, the three lots would be reconfigured to make two lots. Parcel 1 will be 135,707 square feet, and Parcel 2 will be 365,010 square feet. (Attachment 8)

Staff Analysis

Development Plan Application
The proposed development project is consistent with the Zoning ("I" – Industrial) 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 for both buildings are located on the south and the north side of the buildings, and are each placed behind an eight foot tall screen wall and steel gate.
- 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 buildings are set back at least 103 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 buildings 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 buildings, which will provide a green separation between the street and the facility.
- 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, 101 parking spaces are required for parcel 1 and 101 are provided and 218 parking spaces are required for parcel 2 and 219 are provided. In addition, Section 17.36.060K of the Municipal Code limits the amount of compact parking to 20 percent of the total parking. There are 20 compact spaces provided for parcel 1 and 43 compact spaces provided for parcel 2 (20 percent) proposed in compliance with the development standards.
- Meets 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 would provide access from Nelson Avenue on the west side of the property and a second 45 driveway will provide access from Nelson Avenue from the east side of the property. Drive-aisle widths of 26 feet 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, 6 bicycles are required for parcel 1 and 8 are provided and 11 bicycles racks are required for parcel 2 and 12 are provided.
- Complies with drainage and water quality requirements. The applicant has submitted a preliminary Low Impact Development (LID) Plan to the City Engineer per Chapter 13.16 of the Municipal Code and the project can meet drainage and water quality requirements. The LID improvements will be implemented prior to issuance of the grading plan and/or final approval of the building.

Staff recommends that the City Council approve Development Plan 16-1 and Lot Line Adjustment 80 based on the following findings:

- The project site is suitable for development in accordance with the proposed project because the site was previously 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 industrial development.

- 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 proposed project would add approximately 1,078 vehicle trips, which equates to approximately 91 AM peak hour

trips and 98 PM peak hour trips, which would not significantly impact road capacity. In addition, the proposed project provides the necessary setback of the building and loading areas, adequately screens the loading area, presents a professional and coordinated architectural and landscape design. 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.

- The development is in general accord with all elements of the Industry Zoning Ordinance because, with the approval of the Development Plan, the project complies with development standards in regards to building setbacks, height, parking, access, screening, and design.

- The development is consistent with the provisions of the General Plan because the Property is designated as Employment, which allows the development of buildings for industrial 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. The proposed project has the potential for significant effects in environmental topics that include Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation/Traffic, but each of those potential impacts is mitigated to less than significant with the mitigation measures identified in the proposed Mitigated Negative Declaration. The mitigation measures are contained in a Mitigated Negative Declaration, 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 (Attachment 9, Exhibit B and C).

The Notice of Intent to Adopt a Mitigated Negative Declaration (Attachment 9, Exhibit A) was posted on the site, fire stations, City Hall and Council Chambers, and published in the San Gabriel Valley Tribune on September 23, 2016.

AB 52 Tribal Consultation

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.

Fiscal Impact

The projects fiscal impact will include increased property tax revenue to the City, but will also result in increased street lighting and sewer maintenance costs.

Recommendation

Because the Development Plan and Lot Line application proposes a project that complies with the 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 2016-73 (Attachment 9) approving the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program; and

2) Adopt Resolution No. CC 2016-74 (Attachment 10) approving Development Plan No. 16-1 and Lot Line Adjustment 80 with the Standard Requirements and Conditions of Approval contained in the Resolution.

Attachments

- Attachment 1: Location Map
- Attachment 2: Overall Site Plan
- Attachment 3: Parcel 1 Site Plan
- Attachment 4: Parcel 1 Elevations
- Attachment 5: Parcel 2 Site Plan
- Attachment 6: Parcel 2 Elevations
- Attachment 7: Existing Lot Lines
- Attachment 8: Proposed Lot Lines
- Attachment 9: Resolution No. CC 2016-73 including the Notice of Intent to Adopt a Mitigated Negative Declaration for Development Plan 16-1; Initial Study/Mitigated Negative Declaration for Nelson Avenue Business Park, October 2016; and Mitigation Monitoring and Reporting Program
- Attachment 10: Resolution No. CC 2016-74 approving Development Plan No. 16-1 and Lot Line Adjustment 80 with the Standard Requirements and Conditions of Approval contained in the Resolution

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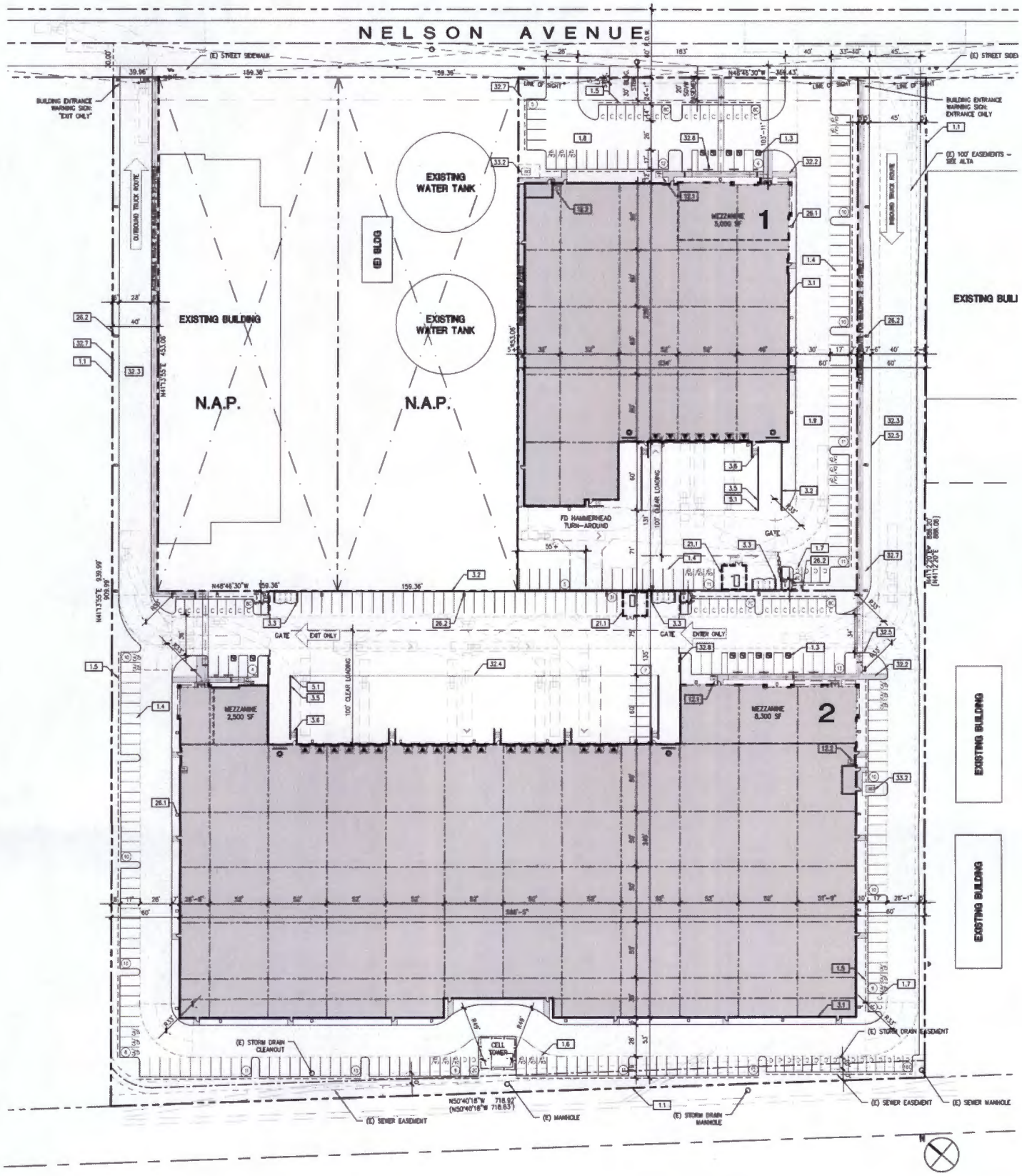
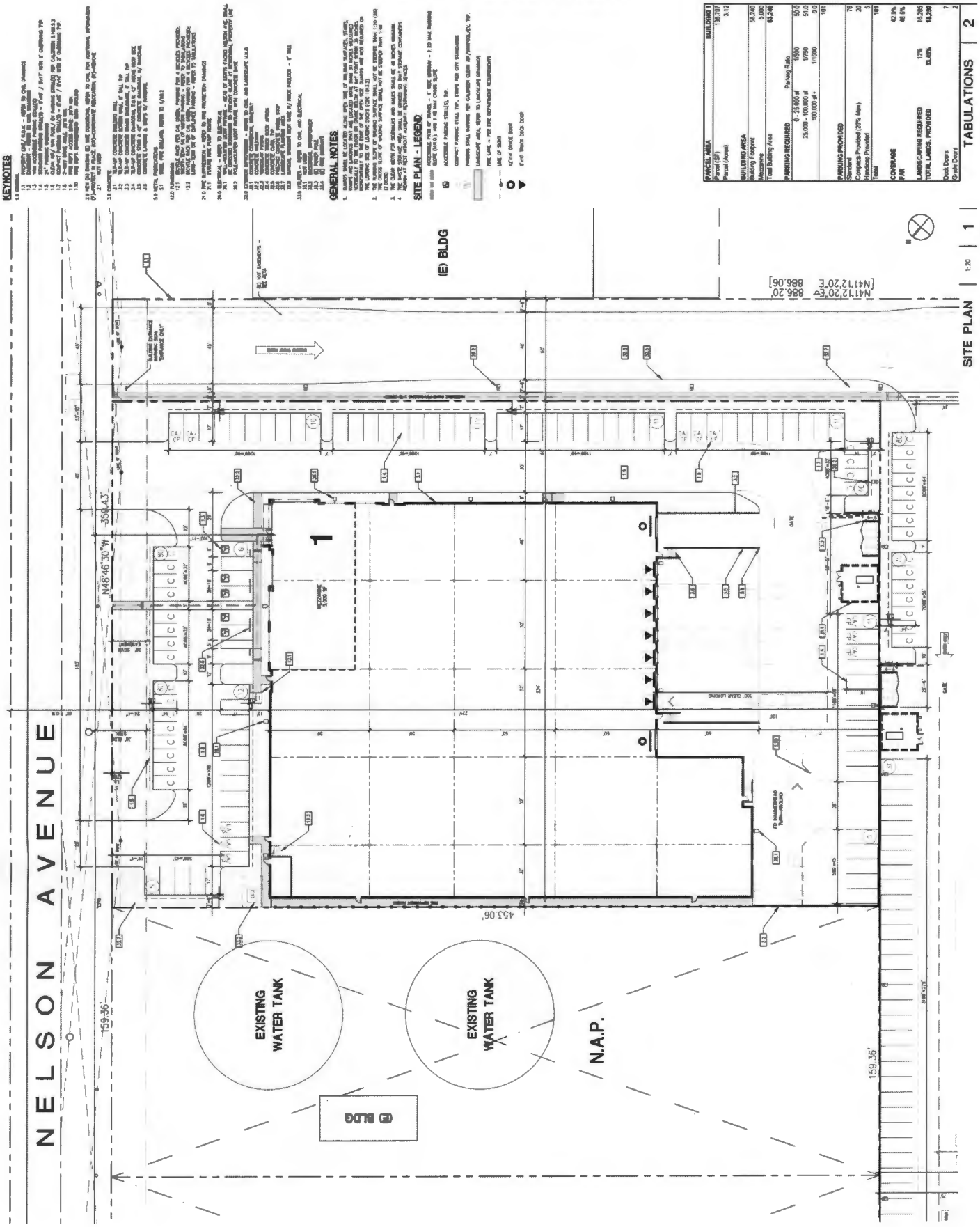
Attachment 1
DP 16-1 and LLA 80
Location Map

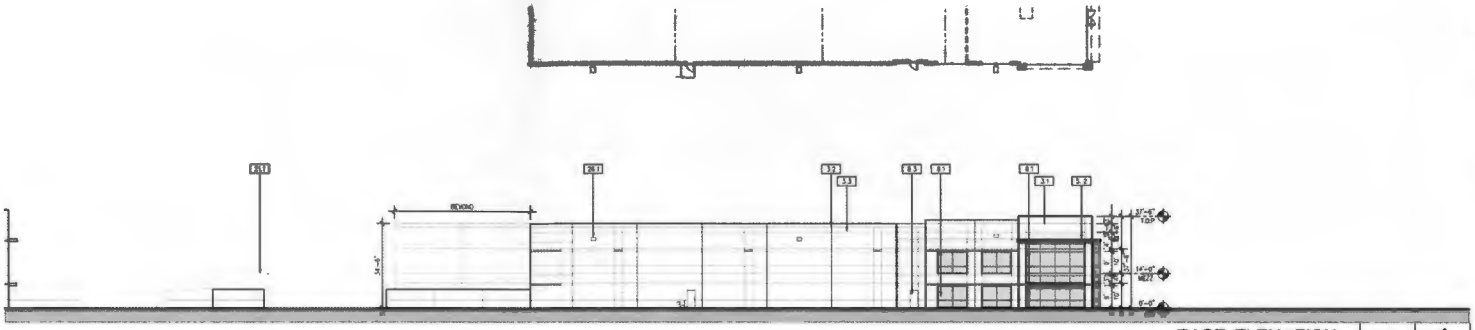
Attachment 2
Overall Site Plan



Attachment 3
Parcel 1 Site Plan



Attachment 4
Parcel 1 Elevations



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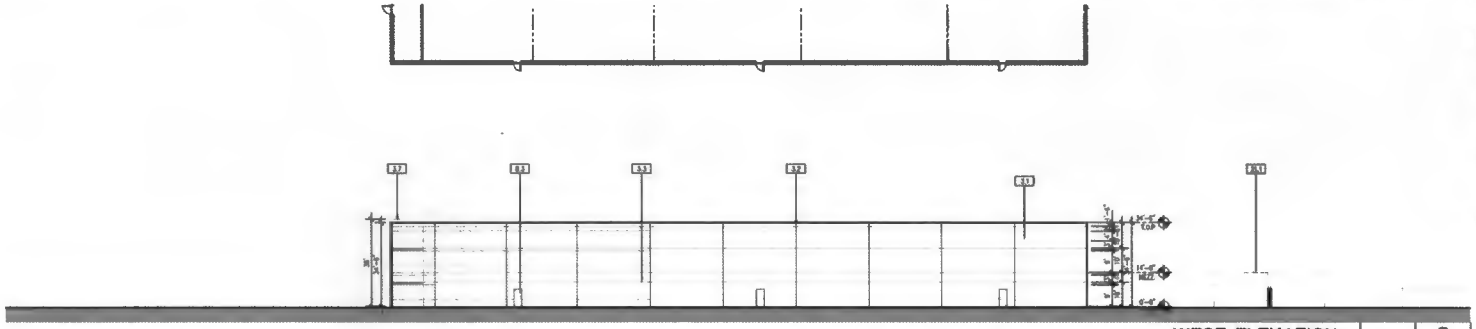
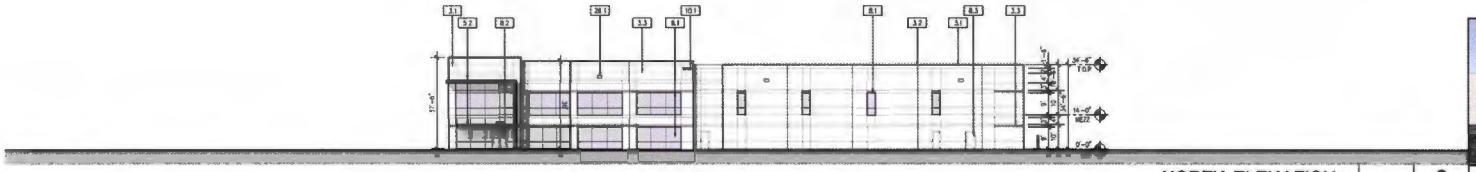
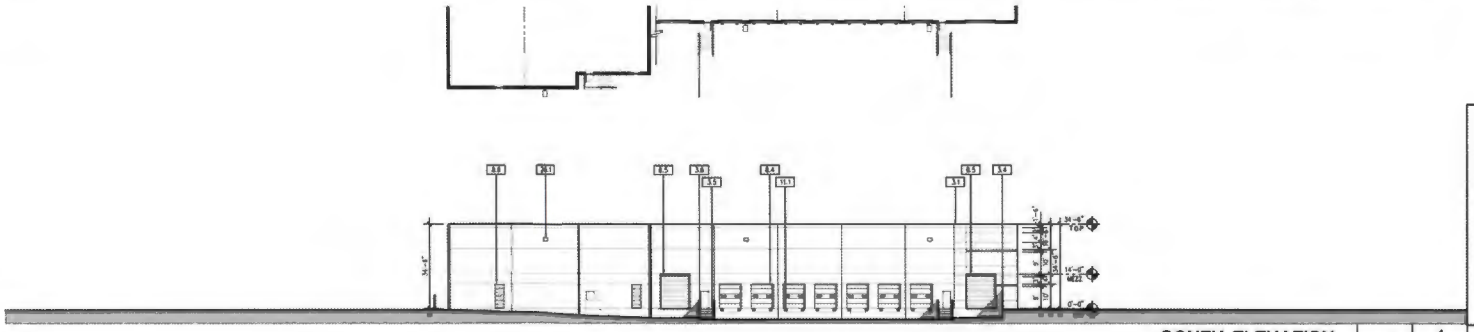


WEST ELEVATION | 1:20 | 3



NORTH ELEVATION | 1:20 | 2



SOUTH ELEVATION | 1:20 | 1

KEYNOTES

1.0 GENERAL
- 1.1 LINE OF ROOF BEYOND

3.0 CONCRETE
- 3.1 TILT-UP CONCRETE WALL PANEL (PAINTED, ALL EXTERIOR SURFACES)
- 3.2 PANEL JOINT
- 3.3 PANEL REVEAL. REVEAL COLOR TO MATCH ADJACENT FIELD COLOR.
- 3.4 TILT-UP CONCRETE SCREEN WALL (PAINTED ALL SIDES, 8' TALL TYP.
- 3.5 CONCRETE STAIR, LANDING, & METAL PIPE RAILING
- 3.6 TILT-UP CONCRETE OVERHANG, 2'0 X 42' ABOVE ENTRY ADJACENT GRADE, REFER TO STRUCTURAL DRAWINGS. PAINTED ON ALL SIDES
- 3.7 CONCRETE PARAPET RETURN

5.0 METALS
- 5.1 EXTERIOR METAL DOWNSPOUT FROM ROOF AND ENGINEER SCUPPER. ROOF DRAIN TO MANIFOLD TO SPLASH BASIN, PAINTED TO MATCH ADJACENT WALL
- 5.2 ALUMINUM CANOPY

8.0 OPENINGS
- 8.1 EXTRUDED ALUMINUM AND GLASS STOREFRONT, DUAL GLAZE
- 8.2 ALUMINUM AND GLASS ENTRY DOOR - REFER TO DOOR SCHEDULE
- 8.3 HOLLOW METAL MAN DOOR, PAINTED
- 8.4 9'W x 14'H OVERHEAD SECTIONAL DOCK DOOR, PAINTED
- 8.5 12'W x 14'H OVERHEAD SECTIONAL GRADE DOOR, PAINTED
- 8.6 METAL WALL LOUVRE - PAINT TO MATCH BLDG.

10.0 SPECIALTIES
- 10.1 ENERGY ABSORBER - SIZE AS REQUIRED BY CONSULTING ENGINEER BUT NOT LESS THAN 10'
- 10.2 BUILDING/ TENANT SIGNAGE (N.I.C.)

11.0 EQUIPMENT
- 11.1 DOCK BUMPERS - COORDINATE W/ MANUFACTURER & STRUCTURAL DRAWINGS

21.0 FIRE SUPPRESSION - REFER TO FIRE PROTECTION DRAWINGS
- 21.1 FUTURE FIRE PUMP HOUSE

22.0 PLUMBING
- 22.1 INTERNAL ROOF DRAIN W/ OVERFLOW DRAIN TYP. AT ENTRY AND STREETSIDE ELEVATION (NOT SHOWN)

26.0 ELECTRICAL
- 26.1 LIGHTING FIXTURE

GENERAL NOTES

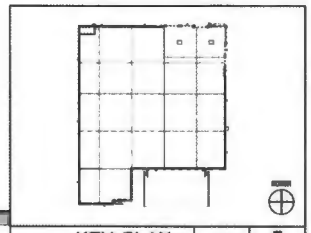
1. MECHANICAL ROOF EQUIPMENT TO BE SCREENED FROM VIEW.
2. ALL PAINT COLOR CHANGES TO OCCUR AT INSIDE CORNERS AND REVEAL LINES UNLESS NOTED OTHERWISE. REVEAL COLOR TO MATCH THE ADJACENT FIELD COLOR.
3. PROVIDE 6'-0" WIDE COLOR SAMPLE ON BUILDING, FULL HEIGHT FROM BASE TO PARAPET FOR APPROVAL BY ARCHITECT AND OWNER PRIOR TO PAINTING.
4. ALL PAINT, STAIN, SANDBLAST, ETC. FINISHES AND JOINTS/REVEALS SHOWN IN ELEVATION VIEW SHALL RETURN TO THE NEAREST INSIDE CORNER OF INTO WINDOW JAMBS.
5. ALL WALL PAINT FINISHES ARE TO BE FLAT, METAL PAINT TO BE SEMI-GLOSS UNLESS NOTED OTHERWISE.
6. BACK SIDE OF PARAPETS TO HAVE "SMOOTH FINISH AND BE PAINTED WITH ELASTOMERIC PAINT
7. T.O.P. = TOP OF PARAPET ELEVATION
8. F.F = FINISH FLOOR ELEVATION
9. MEZZ. = MEZZANINE FLOOR ELEVATION
10. STOREFRONT CONSTRUCTION, GLASS, METAL ATTACHMENTS, AND LINTELS SHALL BE DESIGNED TO RESIST 60 MPH EXPOSURE "C" WINDS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION

COLOR SCHEDULE/ MATERIALS

G1	GLAZING	MEDIUM PERFORMANCE COLOR: BLUE
M1	CANOPY	ALUMINUM FINISH: CLEAR ANODIZED
M2	MULLIONS	ALUMINUM FINISH: CLEAR ANODIZED
P1	PAINT 1	QUIDDEN "TRAILE WHITE" A7004 OR SIMILAR LIGHT GREY
P2	PAINT 2	DUNN-EDWARDS "LAKEVILLE" DE5072 OR SIMILAR BLUE ACCENT
P3	PAINT 3	QUIDDEN "CHARCOAL SLATE" A2008 OR SIMILAR DARK GREY
P4	PAINT 4	QUIDDEN "OBSIDIAN GLASS" A2014 OR SIMILAR DARK ACCENT

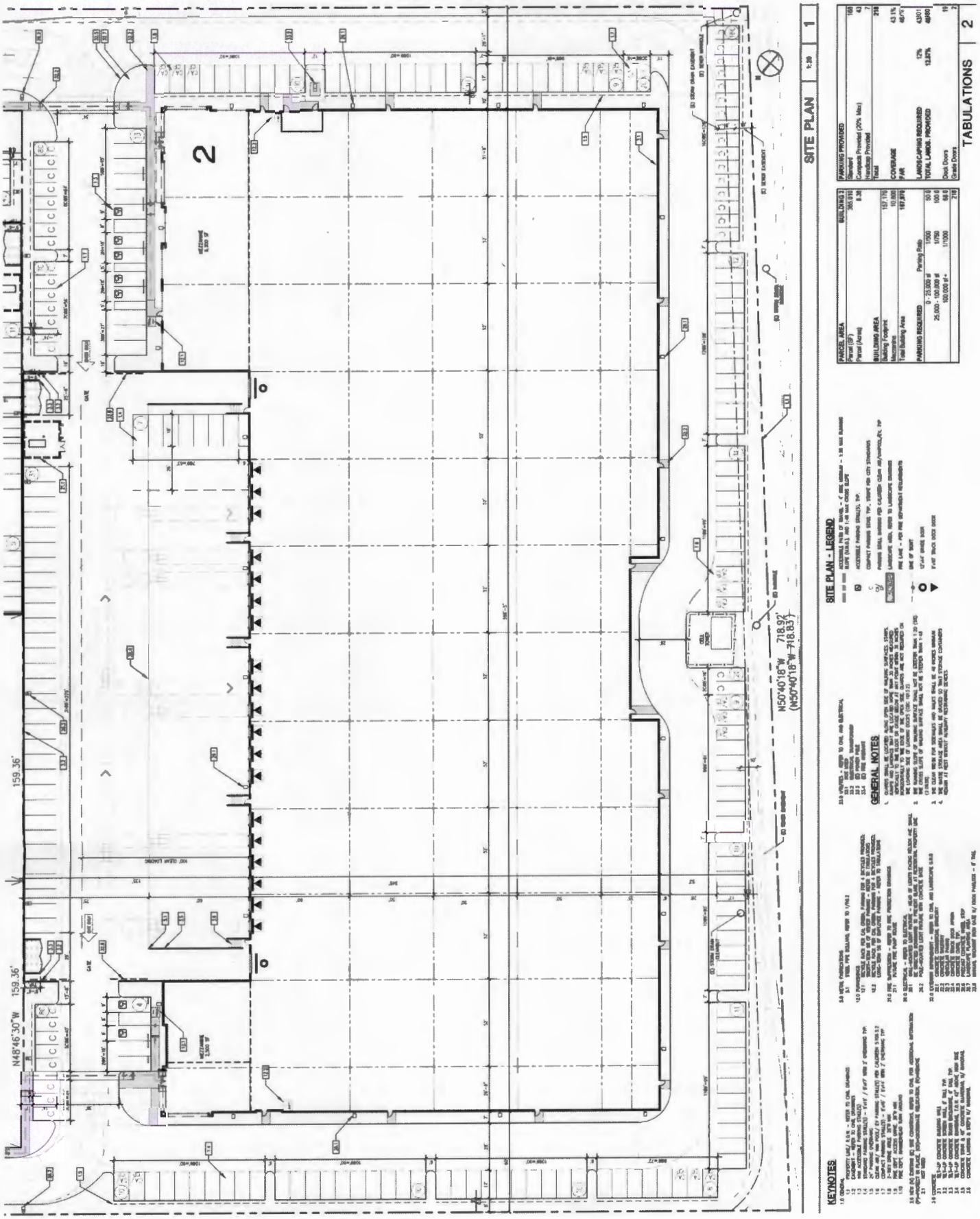
DOORS TO MATCH ADJACENT BUILDING COLOR

ENTRY PERSPECTIVE | 6

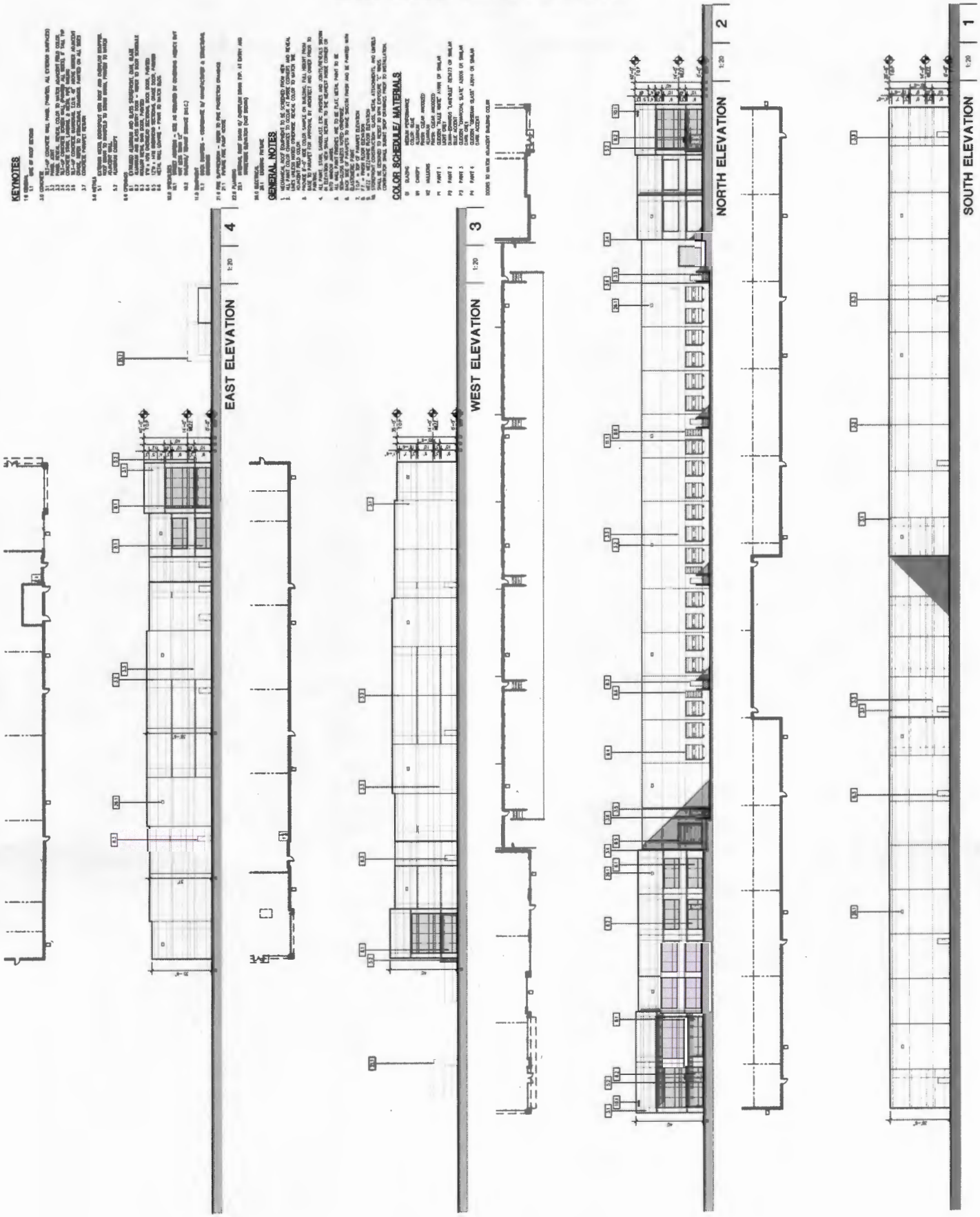


KEY PLAN | NTS | 5

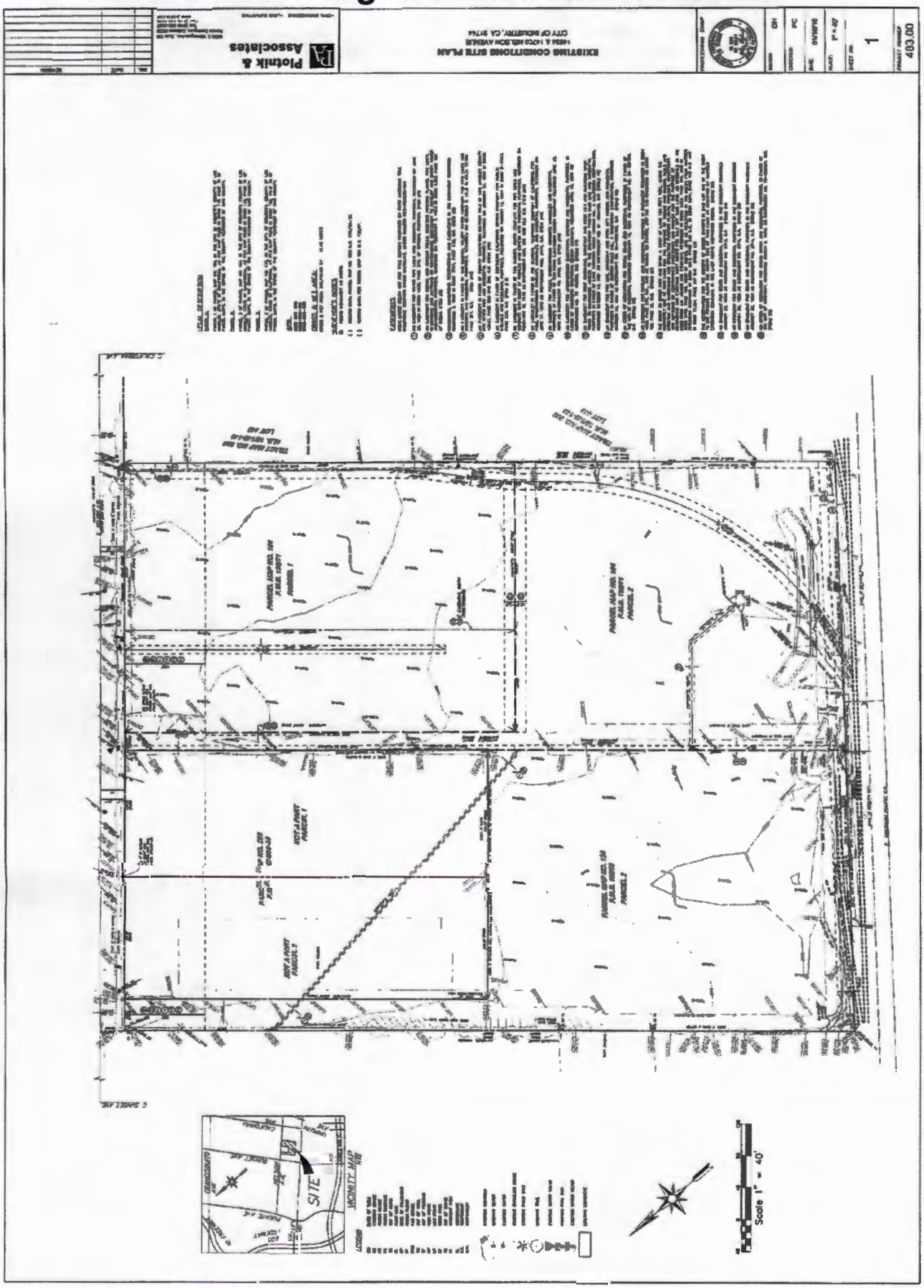
Attachment 5
Parcel 2 Site Plan



Attachment 6
Parcel 2 Elevations



Attachment 7
Existing Lot Lines with 3 Parcels



Attachment 8
Proposed Lot Lines with 2 Parcels

SHEET 1 OF 2 SHEETS

SCALE 1"=60'

LOT LINE ADJUSTMENT

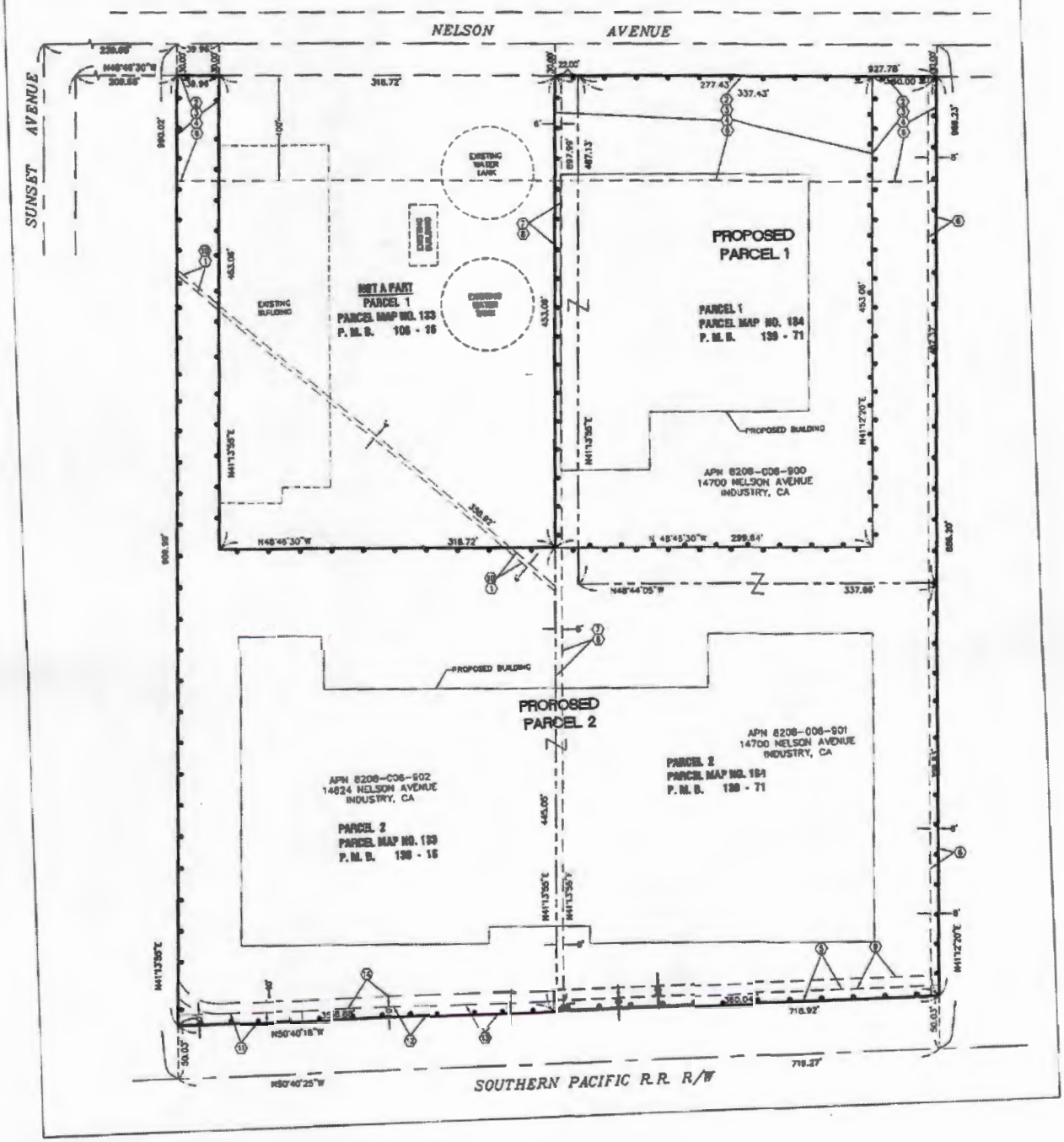
IN THE CITY OF INDUSTRY
COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

PARCELS 1 AND 2 OF PARCEL MAP NO. 184, AS PER MAP FILED IN BOOK 139, PAGE 71; AND PARCEL 2 OF PARCEL MAP NO. 133, AS PER MAP FILED IN BOOK 108, PAGE 16, BOTH OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

LEGEND:

- EASEMENT LINE
- RIGHT OF WAY LINE
- STREET CENTERLINE
- LOT LINE PRIOR TO LOT LINE ADJUSTMENT
- LOT LINE AFTER LOT LINE ADJUSTMENT
- EXISTING BUILDING LINE
- PROPOSED BUILDING LINE

SEE EASEMENT LIST ON SHEET 2



Attachment 9

Resolution No. CC 2016-73

Including:

- (Exhibit A) Notice of Intent to Adopt a Mitigated Negative Declaration
- (Exhibit B) Initial Study/ Mitigated Negative Declaration
- (Exhibit C) Mitigation Monitoring and Reporting Program

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RESOLUTION NO. PC 2016-73

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR DEVELOPMENT PLAN NO. 16-1 AND LOT LINE ADJUSTMENT 80 TO ALLOW THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS LOCATED AT 17400 NELSON AVENUE IN THE CITY OF INDUSTRY, WITHIN THE "I"-INDUSTRIAL ZONE, AND MAKING FINDINGS IN SUPPORT THEREOF

WHEREAS, on January 20, 2016, S & C Property Development Inc., ("Applicant") filed a complete application requesting the approval of Development Plan ("DP") No. 16-1 and Lot Line Adjustment ("LLA") No. 80 described herein ("Application"); and

WHEREAS, the Application applies to a 11.49 acre property at 14700 Nelson Avenue, City of Industry, California, Assessor's Parcel Numbers 8208-066-900, 901 and 902 ("Property"); and

WHEREAS, the Applicant desires to construct two industrial warehouse buildings on two parcels within the "I"-Industrial Zone (the "Project"). The building on parcel 1 will be on 3.12 acres (135,707) square feet. The building on parcel 2 will be on 8.38 aces (365,010) square feet. 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 Project is consistent with the General Plan as the construction of industrial buildings is similar to other industrial and manufacturing buildings in the same land use designation, and does not conflict with the established goals and objectives of the Land Use Element; 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 October 7, 2016, through, and including, October 26, 2016. Copies of the Initial Study/Mitigated Negative Declaration were made available to the public at the Planning Department on October 7, 2016, and the Initial Study/Mitigated Negative Declaration was distributed to interested parties and agencies. On October 7, 2016, a Notice of Intent to Adopt a Mitigated Negative Declaration (Exhibit A), 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 significant effect on the environment and identified mitigation measures that would reduce the significant effects to a less-than-significant level. The mitigation measures address Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation/Traffic, but each of those potential impacts is mitigated to less than significant with the mitigation measures identified in the proposed Mitigated Negative Declaration; and

WHEREAS, on October 27, 2016, 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 27, 2016; 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 B 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 measure 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 Lot Line adjustment is in conformance with the Subdivision Ordinance of the City of Industry (Title 16 of the Industry Municipal Code) and Section 66412 (d) of the Subdivision Map Act (California Government Code sections 66410 *et seq.*) since the parcel resulting from the Lot Line Adjustment will be in conformance with all applicable provisions of the Industry General Plan as well as the Industry Zoning Ordinance and Building Code.

SECTION 3: 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 4: 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 27, 2016, by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

Mark D. Radecki, Mayor

ATTEST:

Diane Schlichting, Chief Deputy City Clerk

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Exhibit A
Notice of Intent to Adopt a Mitigated Negative Declaration

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CITY OF INDUSTRY

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

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION DEVELOPMENT PLAN 16-1 AND LOT LINE ADJUSTMENT 80 14700 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 Application 16-1 and Lot Line Adjustment 80 is a proposal to develop two new industrial warehouse buildings on two parcels at 14700 Nelson Avenue. Parcel 1 will have a 63,240 square foot building and parcel 2 will have a 167,970 square foot building.

Location: The proposed project is located at 14700 Nelson Avenue, City of Industry, Los Angeles County (APN 8208-066-900, 901 and 902).

Environmental Determination: The proposed project has the potential for significant effects in environmental topics that include Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation/Traffic, but each of those potential impacts is mitigated to less than significant with the mitigation measures identified in the proposed Mitigated Negative Declaration.

The project site is not included on any lists of hazardous waste sites enumerated pursuant to Section 65962.5 of the California Government Code (Cortese List).

The Initial Study/Environmental Checklist that has been prepared for the project recommends that the lead agency adopt a Mitigated Negative Declaration for the project pursuant to Section 21080 (c) of the Public Resources Code.

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 October 7, 2016, and ends October 26, 2016**. Written comments on the adequacy of the document must be received by the City prior to 5:00 PM on October 26, 2016. If you would like to comment, please send written comments to:

Troy Helling, Senior Planner
15625 E. Stafford Street, Suite 100
P.O. Box 3366
City of Industry, CA 91744
thelling@cityofindustry.org
(626) 333-2211

Public Meeting: The City Council is scheduled to consider the Mitigated Negative Declaration and proposed project at a regularly scheduled meeting to be held on October 27, 2016, at 9:00 AM. The meeting will be held 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.

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Exhibit B
Initial Study/ Mitigated Negative Declaration

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CITY OF INDUSTRY

NELSON AVENUE BUSINESS PARK

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF INDUSTRY
15625 EAST STAFFORD STREET #100
CITY OF INDUSTRY, CA 91744

Prepared by:

Michael Baker
INTERNATIONAL

3760 KILROY AIRPORT WAY, SUITE 270
LONG BEACH, CA 90806

OCTOBER 2016

CITY OF INDUSTRY

NELSON AVENUE BUSINESS PARK

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:

CITY OF INDUSTRY
15625 EAST STAFFORD STREET #100
CITY OF INDUSTRY, CA 91744

Prepared by:

MICHAEL BAKER INTERNATIONAL
3760 KILROY AIRPORT WAY, SUITE 270
LONG BEACH, CA 90806

OCTOBER 2016

1.0 INTRODUCTION

1.1 Introduction and Regulatory Guidance 1.0-1
1.2 Lead Agency 1.0-1
1.3 Purpose and Document Organization 1.0-2
1.4 Evaluation of Environmental Impacts 1.0-2

2.0 PROJECT INFORMATION

3.0 PROJECT DESCRIPTION

3.1 Project Location 3.0-1
3.2 Existing and Surrounding Land Uses 3.0-1
3.3 Project Overview 3.0-9
3.4 Project Approvals 3.0-23
3.5 Relationship of Project to Other Plans 3.0-23

4.0 ENVIRONMENTAL CHECKLIST

4.1 Aesthetics 4.0-1
4.2 Agriculture and Forestry Resources. 4.0-3
4.3 Air Quality 4.0-5
4.4 Biological Resources 4.0-16
4.5 Cultural Resources 4.0-18
4.6 Geology and Soils 4.0-21
4.7 Greenhouse Gases 4.0-28
4.8 Hazards and Hazardous Materials 4.0-34
4.9 Hydrology and Water Quality 4.0-43
4.10 Land Use and Planning 4.0-47
4.11 Mineral Resources 4.0-49
4.12 Noise 4.0-50
4.13 Population and Housing 4.0-63
4.14 Public Services 4.0-65
4.15 Recreation. 4.0-67
4.16 Transportation/Traffic 4.0-68
4.17 Utilities and Service Systems 4.0-85
4.18 Mandatory Findings of Significance 4.0-89

APPENDICES

Appendix A: Air Quality
Appendix B: Geotech Norcal Engineering
Appendix C: Greenhouse Gas
Appendix D: Phase 1 REM
Appendix E: Noise
Appendix F: TIA

TABLES

Table 3.3-1 Project Building Details 3.0-9
Table 4.3-1 Maximum Short-Term Construction Emissions (Pounds per Day) 4.0-8
Table 4.3-2 Maximum Daily Disturbed Acreage 4.0-9
Table 4.3-3 Localized Significance Summary – On-Site Construction Emissions (Pounds per Day) 4.0-10
Table 4.3-4 Long-Term Operational Emissions (Pounds per Day) 4.0-10
Table 4.3-5 Maximum Operational Health Risk 4.0-13
Table 4.6-1 Allowable Safe Bearing Capacity Per Square Foot 4.0-25
Table 4.6-2 Fluid Densities 4.0-26
Table 4.7-1 Greenhouse Gases 4.0-28
Table 4.7-2 Total Project Greenhouse Gas Emissions (Annual) (Metric Tons per Year) 4.0-31
Table 4.7-3 Consistency with SCAG's Regional Transportation Plan/Sustainable Communities Strategy Goals 4.0-32
Table 4.8-1 GeoTracker Sites Within 1 mile of the Project Site 4.0-36
Table 4.12-1 Los Angeles County Exterior Noise Standards for Non-Transportation Sources 4.0-53
Table 4.12-2 County of Los Angeles Mobile Construction Equipment Noise Limits 4.0-54
Table 4.12-3 County of Los Angeles Stationary Construction Equipment Noise Limits 4.0-54
Table 4.12-4 Maximum Noise Levels Generated by Construction Equipment 4.0-55
Table 4.12-5 Construction Average (dBA) Noise Levels by Receptor Distance and Construction Phase - Unmitigated 4.0-56
Table 4.12-6 Construction Average (dBA) Noise Levels by Receptor Distance and Construction Phase – Mitigated 4.0-57
Table 4.12-7 Source Noise Levels for Complete Trucking Operations at Reference Distance of 50 Feet 4.0-58
Table 4.12-8 Summary of Modeled Traffic Noise Level Changes in the Project Vicinity 4.0-59
Table 4.12-9 Typical Construction Equipment Vibration Levels 4.0-61
Table 4.16-1 Existing 2016 Conditions Intersection Analysis Summary 4.0-71
Table 4.16-2 Trip Generation Rates 4.0-72
Table 4.16-3 Project Traffic Generation Summary 4.0-72
Table 4.16-4 Existing Plus Project Conditions Intersection Analysis Summary 4.0-74
Table 4.16-5 Opening Year 2018 with Project Conditions Intersection Analysis Summary 4.0-78
Table 4.16-6 Freeway Off-Ramp Queuing Analysis Summary 4.0-81
Table 4.16-7 Project Transit Trip Calculation 4.0-83

FIGURES

Figure 2.1 Regional Location 2.0-5
Figure 2.2 Project Location 2.0-7
Figure 2.3 Surrounding Land Use 2.0-9
Figure 3.1 Public View of Project Site 3.0-3
Figure 3.2a Project Site 3.0-5
Figure 3.2b Project Site 3.0-7
Figure 3.3 Proposed Project Renderings 3.0-1
Figure 3.4 Aerial Views 3.0-13
Figure 3.5 Landscape Plan 3.0-15
Figure 3.6 Building 1 Elevations 3.0-17
Figure 3.7 Building 2 Elevations 3.0-19
Figure 3.8 Stormwater Plan 3.0-21

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APN	Assessor's Parcel Numbers
AQMP	Air Quality Management Plan
BMP	best management practice
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	methane
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
dBA	A-weighted decibel
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EP	existing plus project
EPA	US Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GHG	greenhouse gas
HCM	Highway Capacity Manual
HVAC	heating, ventilation and air conditioning
ICU	intersection capacity utilization
ITE	Institute of Transportation Engineers
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LASD	Los Angeles County Sheriff's Department
LOS	level of service

LST	localized significance thresholds
mgd	million gallons per day
MND	mitigated negative declaration
NAAQS	national ambient air quality standards
NOx	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
O_3	ozone
PCE	passenger car equivalents
PEC	Potential Environmental Concerns
PM	particulate matter
PM_{10}	coarse particulate matter
$PM_{2.5}$	fine particulate matter
REC	Recognized Environmental Concern
ROG	reactive organic gas
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWD	Rowland Water District
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SoCAB	South Coast Air Basin
SOx	sulfur oxide
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TIA	traffic impact analysis
USGS	US Geological Survey
UST	underground storage tank
V/C	volume-to-capacity
VOC	volatile organic compound
WTP	water treatment plant

1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document contains an initial study, with supporting environmental studies, which concludes that a mitigated negative declaration (MND) is the appropriate California Environmental Quality Act (CEQA) document for the Nelson Avenue Business Park (proposed project). This MND has been prepared in accordance with Public Resources Code Section 21000 et seq. and the CEQA Guidelines, California Code of Regulations Section 15000 et seq.

An initial study is conducted by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15063, an environmental impact report (EIR) must be prepared if an initial study indicates that the proposed project under review may have a potentially significant impact on the environment that cannot be initially avoided or mitigated to a level that is less than significant. A negative declaration may be prepared if the lead agency also prepares a written statement describing the reasons why the proposed project would not have a significant effect on the environment and, therefore, why it does not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a negative declaration shall be prepared for a project subject to CEQA when either:

a) *The initial study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or*

b) *The initial study identifies potentially significant effects, but:*

   (1) *Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and*

   (2) *There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.*

If revisions are adopted in the proposed project in accordance with CEQA Guidelines Section 15070(b), including the adoption of mitigation measures included in this document, an MND can be prepared.

1.2 LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines Section 15051 provides criteria for identifying the lead agency. In accordance with CEQA Guidelines Section 15051(b) (1), "the lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." Based on the criteria above, the City of Industry is the lead agency for the proposed project.

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this Initial Study is to evaluate the potential environmental impacts of the proposed Nelson Avenue Business Park. This document is divided into the following sections:

1.0 Introduction – This section describes the purpose and organization of the document.

2.0 Project Information – This section provides general information regarding the project, including the project title, lead agency and address, contact person, brief description of the project location, General Plan land use designation and zoning district, identification of surrounding land uses, and identification of other public agencies whose review, approval, and/or permits may be required. Also in this section is a checklist of the environmental factors that are potentially affected by the project.

3.0 Project Description – This section provides a detailed description of the proposed project.

4.0 Environmental Checklist – This section describes the environmental setting and overview for each of the environmental subject areas, and evaluates a range of impacts classified as "no impact," "less than significant impact," "less than significant impact with mitigation incorporated," and "potentially significant impact" in response to the environmental checklist.

5.0 References – This section identifies documents, websites, people, and other sources consulted during the preparation of this Initial Study.

1.4 EVALUATION OF ENVIRONMENTAL IMPACTS

Section 4.0, Environmental Checklist, is the analysis portion of this Initial Study. The section provides an evaluation of the potential environmental impacts of the project. Section 4.0 includes 18 environmental issue subsections, including CEQA Mandatory Findings of Significance. The environmental issue subsections, numbered 1 through 18, consist of the following:

1. Aesthetics
2. Agriculture and Forestry Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Greenhouse Gas Emissions
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Mineral Resources
12. Noise
13. Population and Housing
14. Public Services
15. Recreation
16. Transportation/Traffic
17. Utilities and Service Systems
18. Mandatory Findings of Significance

Each environmental issue subsection is organized in the following manner:

The **Setting** summarizes the existing conditions at the regional, subregional, and local levels, as appropriate, and identifies applicable plans and technical information for the particular issue area.

The **Discussion of Impacts** provides a detailed discussion of each environmental issue checklist question. The level of significance for each topic is determined by considering the predicted magnitude of the impact. Four levels of impact significance are evaluated in this Initial Study:

No Impact: No project-related impact on the environment would occur with project development.

Less Than Significant Impact: The impact would not result in a substantial adverse change in the environment. This impact level does not require mitigation measures.

Less Than Significant Impact With Mitigation Incorporated: An impact that may have a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project" (CEQA Guidelines Section 15382). However, the incorporation of mitigation measures that are specified after analysis would reduce the project-related impact to a less than significant level.

Potentially Significant Impact: An impact that is "potentially significant" but for which mitigation measures cannot be immediately suggested or the effectiveness of potential mitigation measures cannot be determined with certainty, because more in-depth analysis of the issue and potential impact is needed. In such cases, an EIR is required.

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2.0 PROJECT INFORMATION

1. Project title:	Nelson Avenue Business Park
2. Lead agency name and address:	City of Industry 15625 East Stafford Street #100 City of Industry, CA 91744
3. Contact person and phone number:	Troy Helling, Senior Planner Planning Department (626) 333-2211
4. Project location:	The project site is located in the City of Industry in the San Gabriel Valley in Los Angeles County, California. The City of Industry (City) extends approximately 14 miles east–west across the southern San Gabriel Valley (**Figure 2.1**). The project site is on the northwest side of the city. Pomona Freeway (State Route [SR] 60) provides regional access to the project site via the Azusa Avenue interchange. The project site is located at 14624 and 14700 Nelson Avenue, consisting of three separate parcels, Assessor's Parcel Numbers (APNs) 8208-006-900, 901, 902 (**Figure 2.2**). The project site is approximately 11.5 acres, "U"-shaped land plot. It is bordered by Nelson Avenue on the north and Union Pacific Railroad on the south, Sunset Avenue on the west and California Avenue on the east.
5. Project sponsor's name and address:	S & C Property Development, Inc. 13181 Crossroads Parkway N, Suite 440 City of Industry, CA 91746 (626) 384-5000 Attn: Philip Lee
6. General Plan designation:	Employment
7. Zoning:	Industrial (I)
8. Project description:	The project would construct two concrete warehouse buildings. Building one would be constructed on a 3.12-acre parcel and would be approximately 63,240 square feet; building two would be constructed on a 8.38-acre parcel and would be approximately 167,970 square feet. The project would consolidate the three existing parcels into two lots. The project site would include the construction of 101 parking spaces on parcel one and 218 spaces on parcel two for a total of 319 parking spaces.

The maximum lot coverage, which is the portion of the building footprint that covers the lot area, would not exceed 43 percent for either parcel. For parcel one, 18,250 square feet of landscaping will be provided, while for parcel two, 47,020 square feet of landscaping will be provided. The project would increase the impermeable surface area on the project site, as the current site is not currently developed. Overall height for all of the structures would not exceed 40 feet from pad grade to the top of the roof.

9. Surrounding land uses and setting:

The project site is surrounded by industrial development to the east and west, as shown in **Figure 2.3**. Across Nelson Avenue to the northeast is the Calvary Apostolic Church, as well as single- and multi-family residential uses directly across Nelson Avenue. The Union Pacific rail line runs adjacent to the site to the southwest, with Valley Boulevard on the other side of the rail line. The land to the north, across East Temple Avenue, is zoned as institutional, and occupied by a public school, Temple Elementary School.

10. 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 Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☐ Greenhouse Gases	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☒ Transportation/Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

11. Determination: (To be completed by the lead agency)

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

10/4/16
Date

Troy Helling
Printed Name

City of Industry
Lead Agency

Senior Planner
Title

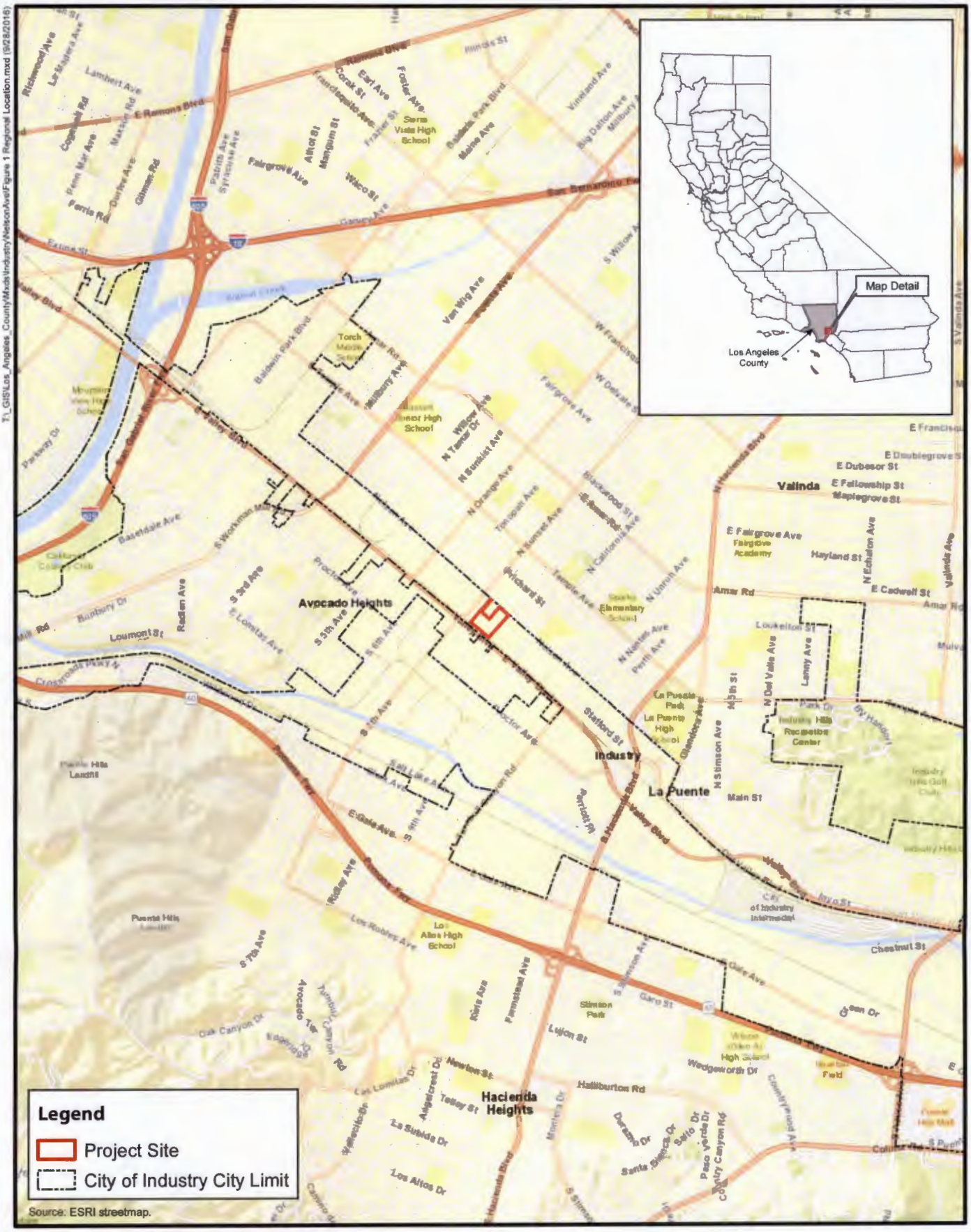

FIGURE 2.1

Regional Location

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T:_GIS\Los_Angeles_County\Mods\Industry\NelsonAve\Figure 1 Regional Location.mxd (9/28/2016)

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FEET

FIGURE 2.2
Project Location

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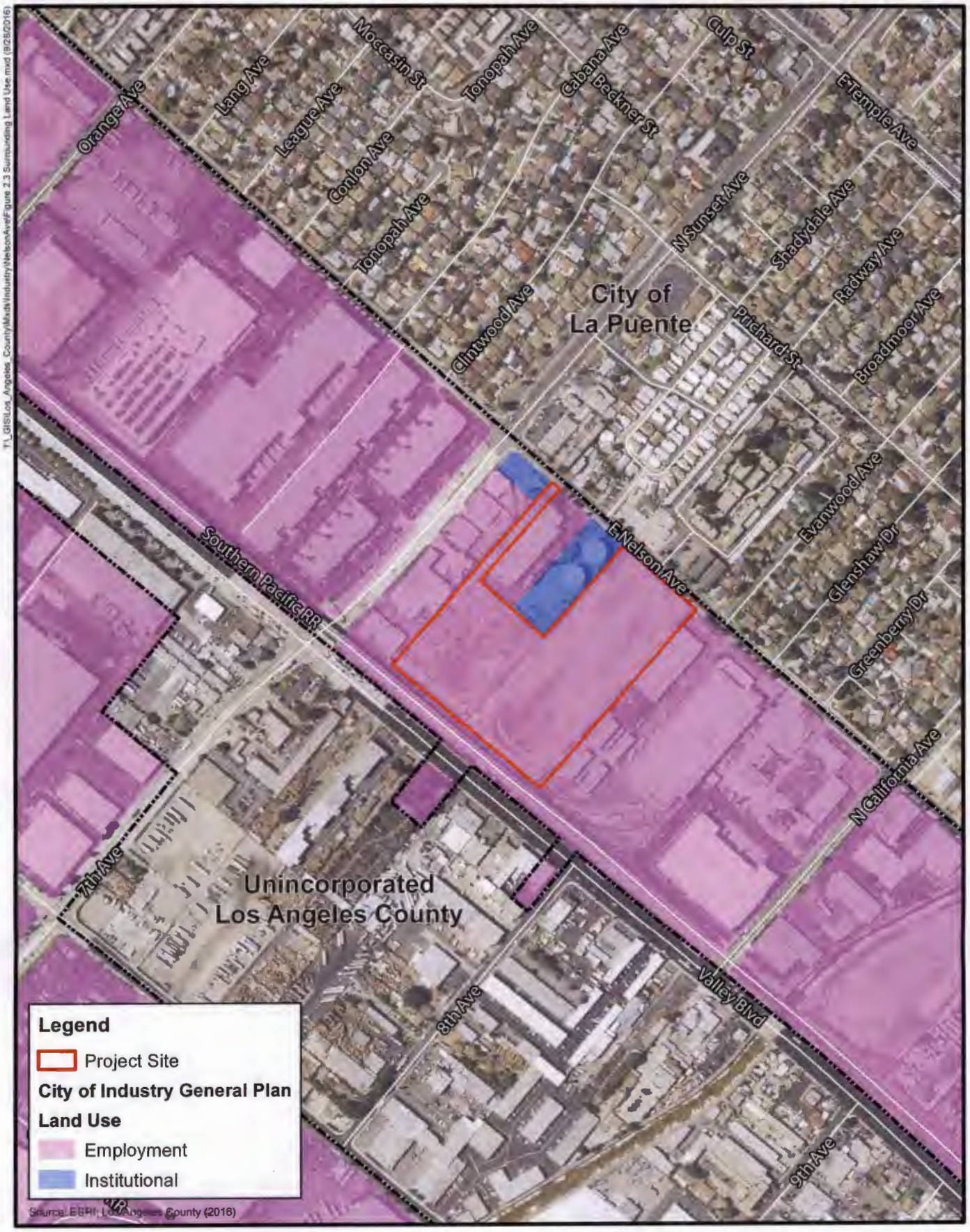

FIGURE 2.3
Surrounding Land Use

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3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed project is located along the south side of Nelson Avenue between Sunset and California Avenues at 14624 and 14700 Nelson Avenue, in the City of Industry, Los Angeles County, California (**Figure 2.2**). The project site measures 11.49 acres, and comprises three vacant parcels. The APNs are as follows: 8208-006-900, 901, 902. The project is northeast of the Union Pacific Railroad, and southwest of the Calvary Apostolic Church.

3.2 EXISTING AND SURROUNDING LAND USES

The project site is currently undeveloped and shielded from public view by fencing and masonry walls (**Figure 3.1**). The site has been cleared of all structures, and is composed predominantly of unmaintained soil and ruderal vegetation. The site appears to have undertaken preliminary site preparation and grading for future development with the placement of sandbags along the site boundaries. Industrial uses abut the site to the east and west, residential uses are to the north across Nelson Avenue, and to the south is a Union Pacific rail line followed by Valley Boulevard.

The project site is abutted by industrial development to the east and west. Across Nelson Avenue to the northeast is the Calvary Apostolic Church, as well as single- and multi-family residential uses. The Union Pacific rail line runs adjacent to the site to the southwest, with Valley Boulevard on the other side of the rail line. Photos of the project site facing north from Valley Boulevard and northwest from the center of the project site, respectively, are presented in **Figures 3.2a** and **3.2b.**

The project site is relatively flat, with a slight drop in elevation toward the rear of the property. The site has an asphalt driveway that runs down the center of the site.

According to the City of Industry General Plan (2014), the project site is designated as Employment. The project site is zoned Industrial; the site to the west is zoned Institutional; and the remaining sites to the east and west are zoned Industrial, and developed with industrial-type land uses.

PROJECT SITE HISTORY

The project site history is based on the Phase I Environmental Site Assessment prepared by Robin Environmental Management (REM 2015). According to the report, the project site contained agricultural uses from at least 1948 to the 1960s. The lot was used as a single-family residence from the 1960s until the 1970s. From 1972 until 2012, the site was generally used as a lumber yard.

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Source: GAA Architects

FIGURE 3.1
Public View of Project Site

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Source: GAA Architects

FIGURE 3.2a
Project Site

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Source: GAA Architects

FIGURE 3.2b
Project Site

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INTERNATIONAL

3.3 PROJECT OVERVIEW

The project would construct two concrete tilt-up warehouse buildings, as shown in **Figure 3.3** and **Figure 3.4**. The project would consolidate the three existing parcels into two lots. Building one would be approximately 63,240 square feet, and constructed on a 3.12-acre parcel. Building two would be approximately 167,970 square feet, and constructed on an 8.38-acre parcel.

The project site would include the construction of 101 parking spaces on parcel one and 218 spaces on parcel two, for a grand total of 319 parking spaces. Of the spaces provided, 21 spaces on parcel one and 43 spaces on parcel two will be compact.

The maximum lot coverage, which is the portion of the building footprint that covers the lot area, would not exceed 43 percent for either parcel. For parcel one, 18,250 square feet of landscaping will be provided; 47,020 square feet of landscaping will be provided for parcel two. The landscaping plan and parking areas are shown in **Figure 3.5.** The development would increase the impermeable area at the project site, as the current site is predominantly vegetation and permeable. The overall height for the structures would be 34.5 feet and 37.5 feet for buildings one and two, respectively, from pad grade to the top of the roof, as shown in **Figure 3.6** and **Figure 3.7**.

Parcel one will contain a 9,900 cubic feet underground infiltration chamber located toward the rear of the lot. Parcel two would contain a 26,500 cubic feet underground infiltration chamber, located toward the southwest corner of the lot.

TABLE 3.3-1
PROJECT BUILDING DETAILS

Building	Site Area (acres)	Building Height (ft)	Building Area (sq ft)	Parking Stalls	Landscaped Area	Underground Infiltration Chamber (cu ft)
Building 1	3.12	34.5	63,240	101	18,250	9,900
Building 2	8.38	37.5	167,970	218	47,020	26,500
Totals	**11.5**	**72**	**231,210**	**319**	**65,270**	**36,400**

PROJECT SETBACKS

Consistent with the City of Industry Zoning Code, project setbacks have been proposed for the two lots. As such, buildings and accessory structures would be contained within the designated area. The minimum setbacks would be:

- The minimum front yard setback from parcel one would be 93 feet from the front of the building to the front property line. Parcel two is a flag lot[1], and does not have a conventional front yard setback.

[1] A flag lot is a land parcel that lies at the end of a long driveway.

- The minimum side yard setback for both lots would be 5 feet. However, all other sides of buildings one and two will have side setbacks of at least 60 feet.
- The minimum rear yard setback for each lot would be 53 feet from the rear property line to the rear wall of each building.

PROJECT SITE CIRCULATION

Both lots would receive access off of Nelson Avenue. Parcel one would have access via two driveways measuring 28 feet and 40 feet wide (**Figure 3.3**). The narrower driveway is intended to facilitate access to off-street parking, whereas the wider driveway is intended for access to the loading docks, which are located at the rear of building one.

Parcel two utilizes a double flag lot layout, with an eastern and western flag intended to provide access to Nelson Avenue. The eastern flag would provide a 45-foot-wide driveway intended for ingress access to lot two. The western flag would provide a 40-foot-wide driveway intended for egress from lot two. Vehicles would enter from the eastern flag, and navigate the lot in a U pattern, accessing the front of building two to parking and loading docks, or proceeding to the rear of building two and around the building before egressing the lot by means of the western flag driveway.

UTILITIES

The project would be connected to the existing water, sewer, electrical, and telecommunications networks. The project would be provided potable water by the San Gabriel Valley Water District.

STORMWATER

The project site drains in two directions; the northern portion of parcel one drains toward Nelson Avenue, with the remaining portions of parcel one and the entirety of parcel two draining toward the south. The project site contains an existing 10-foot-wide storm drain easement on the southerly boundary of parcel two. As shown in **Figure 3.8**, stormwater control at the project site would route stormwater into one of two underground infiltration chambers: a 9,900-cubic-feet underground infiltration chamber located toward the rear of parcel one, or a 26,500-cubic-feet underground infiltration chamber, located toward the southwest corner of parcel two.

Source: GAA Architects

FIGURE 3.3
Proposed Project Renderings

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T:_CS\Work\Industry, City of\Nelson Ave\Figures

BUILDING 1 AERIAL | NTS | 1

BUILDING 1 ENTRY PERSPECTIVE | NTS | 2

BUILDING 1 FRONT FACADE | NTS | 3

BUILDING 2 AERIAL | NTS | 4

BUILDING 2 ENTRY PERSPECTIVE | NTS | 5

NELSON AVENUE PERSPECTIVE | NTS | 6

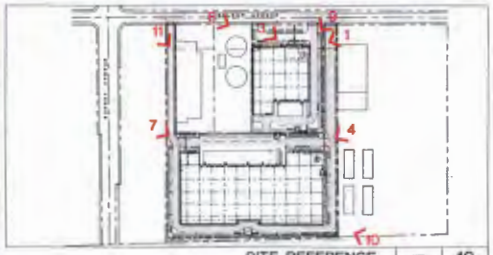
BUILDING 2 ENTRY 2 AERIAL | NTS | 7

BUILDING 2 ENTRY 2 PERSPECTIVE | NTS | 8

NELSON AVENUE AERIAL | NTS | 9

BUILDING 2 REAR AERIAL | NTS | 10

OVERALL PROJECT AERIAL | NTS | 11



SITE REFERENCE | NTS | 12

Source: GAA Architects

FIGURE 3.4
Aerial Views

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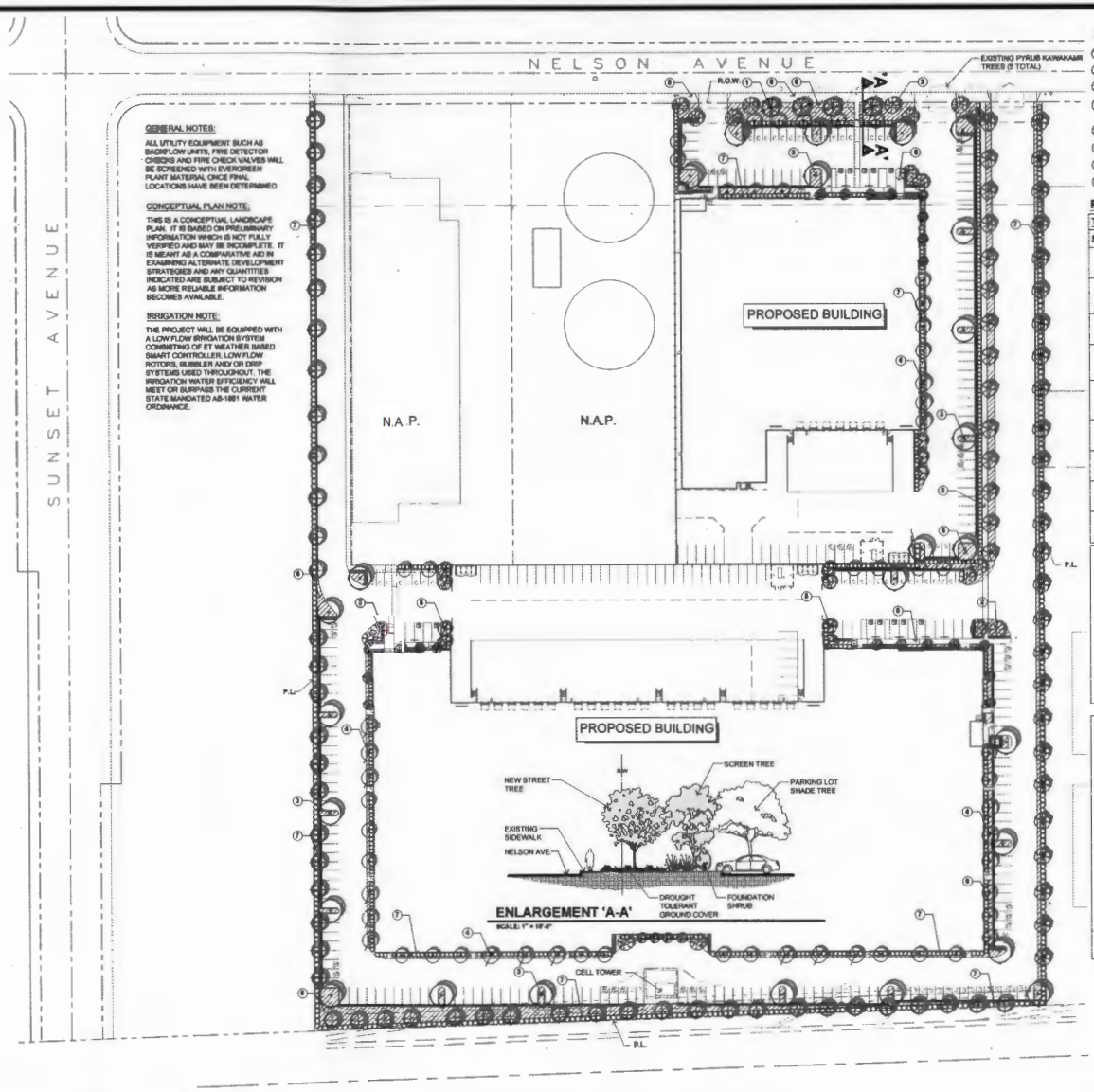

GENERAL NOTES:

ALL UTILITY EQUIPMENT SUCH AS BACKFLOW UNITS, FIRE DETECTOR CHECKS AND FIRE CHECK VALVES WILL BE SCREENED WITH EVERGREEN PLANT MATERIAL ONCE FINAL LOCATIONS HAVE BEEN DETERMINED.

CONCEPTUAL PLAN NOTE:

THIS IS A CONCEPTUAL LANDSCAPE PLAN. IT IS BASED ON PRELIMINARY INFORMATION WHICH IS NOT FULLY VERIFIED AND MAY BE INCOMPLETE. IT IS MEANT AS A COMPARATIVE AID IN EXAMINING ALTERNATE DEVELOPMENT STRATEGIES AND ANY QUANTITIES INDICATED ARE SUBJECT TO REVISION AS MORE RELIABLE INFORMATION BECOMES AVAILABLE.

IRRIGATION NOTE:

THE PROJECT WILL BE EQUIPPED WITH A LOW FLOW IRRIGATION SYSTEM CONSISTING OF ET WEATHER BASED SMART CONTROLLER, LOW FLOW ROTORS, BUBBLER AND/OR DRIP SYSTEMS USED THROUGHOUT. THE IRRIGATION WATER EFFICIENCY WILL MEET OR SURPASS THE CURRENT STATE MANDATED AB-1881 WATER ORDINANCE.

DESIGN KEY NOTES:

1. NEW STREET TREE PER LEGEND.
2. SMALL FLOWERING ACCENT TREE AT PROJECT FOCAL AREAS.
3. PROPOSED PARKING LOT SHADE TREE PER LEGEND.
4. PROPOSED VERTICAL GROWING TREE ADJACENT TO BUILDING PER PLANTING LEGEND.
5. EVERGREEN SCREEN TREE ALONG PROPERTY LINE.
6. NEW DROUGHT TOLERANT GROUND COVER.
7. TYP. EVERGREEN SHRUB HEDGE.
8. EXISTING SIDEWALK. REFER TO CIVIL PLAN.

PLANTING LEGEND

TREES

SYMBOL	TREE NAME	QTY.	WUCOLS
	STREET TREE ALONG NELSON AVENUE PYRUS KAWAKAMI, EVERGREEN PEAR TREE 36" BOX SIZE.	4	M
	BROAD CANOPY PARKING LOT TREE RHUS LANCEA, AFRICAN SUMAC 24" BOX SIZE.	25	L
	FLOWERING ACCENT TREE AT DRIVEWAY & BLDG. ENTRIES LAGERSTROEMIA I. 'WATERMELON RED', CRAPE MYRTLE 24" BOX SIZE.	18	M
	EVERGREEN VERTICAL GROWING TREE PODOCARPUS GRACILIOR, FERN PINE 15 GAL. SIZE	36	M
	VERTICAL GROWING TREE AGAINST BUILDING GEIJERA PARVIFLORA, AUSTRALIAN WILLOW 15 GAL. SIZE	18	M
	TYP. PROPERTY LINE TREE PLANTING TRISTANIA CONFERTA, BRISBANE BOX 15 GAL. SIZE	47	M
	EVERGREEN SCREEN TREE PINUS ELDARICA, AFGHAN PINE 24" BOX SIZE.	11	L
	EVERGREEN SCREEN TREE QUERCUS ILEX, HOLLY OAK 24" BOX SIZE.	40	L
	CUPRESSUS SEMPERVIRENS, ITALIAN CYPRESS 15 GAL. SIZE	25	L

SHRUB NAME	WUCOLS
DODONAEA VISCOSA 'PURPUREA', HOPSEED BUSH 5 GAL. SIZE @ 5'-0" O.C.	L
PHOTINIA FRASERI, REDTIP PHOTINIA 5 GAL. SIZE @ 4'-0" O.C.	L
RHAPHIOLEPIS 'PINK LADY', INDIAN HAWTHORNE 5 GAL. SIZE @ 4'-0" O.C.	L
ROSMARINUS 'TUSCAN BLUE', ROSEMARY SHRUB 5 GAL. SIZE @ 3'-0" O.C.	L
RHAPHIOLEPIS 'CLARA', INDIAN HAWTHORN 5 GAL. SIZE @ 3'-0" O.C.	L
LIGUSTRUM TEXANUM, TEXAS PRIVET 5 GAL. SIZE @ 3'-0" O.C.	L

GROUND COVER/SHRUB MASS NAME	WUCOLS
SENECIO MANDRALISCAEA, BLUE CHALK STICKS 1 GAL. SIZE @ 24" O.C.	L
ROSMARINUS O. 'PROSTRATUS', CREEPING ROSEMARY 1 GAL. SIZE @ 30" O.C.	L
SALVIA GREGGII, AUTUMN SAGE 1 GAL. SIZE @ 36" O.C.	L
MUHLENBERGIA RIGENS, DEER GRASS 1 GAL. SIZE @ 42" O.C.	L
LONICERA J. 'HALLIANA', HALL'S HONEYSUCKLE 1 GAL. SIZE @ 24" O.C.	L
SALVIA CLEVELANDII, CLEVELAND SAGE 5 GAL. SIZE @ 48" O.C.	L
BACCHARIS PILULARIS, COYOTE BUSH 1 GAL. SIZE @ 42" O.C.	L
APPLY A 2" LAYER OF MULCH TOP DRESSING IN ALL PLANTING AREAS	

WUCOLS PLANT FACTOR

THIS PROJECT IS LOCATED IN "WUCOLS" REGION "4-SOUTH INLAND VALLEY".

H = HIGH WATER NEEDS
M = MODERATE WATER NEEDS
L = LOW WATER NEEDS
VL= VERY LOW WATER NEEDS

Source: GAA Architects, Scott Peterson Landscape Architect, Inc.

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FIGURE 3.5
Landscape Plan

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Source: GAA Architects

FIGURE 3.6
Building 1 Elevations

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Source: GAA Architects

FIGURE 3.7
Building 2 Elevations

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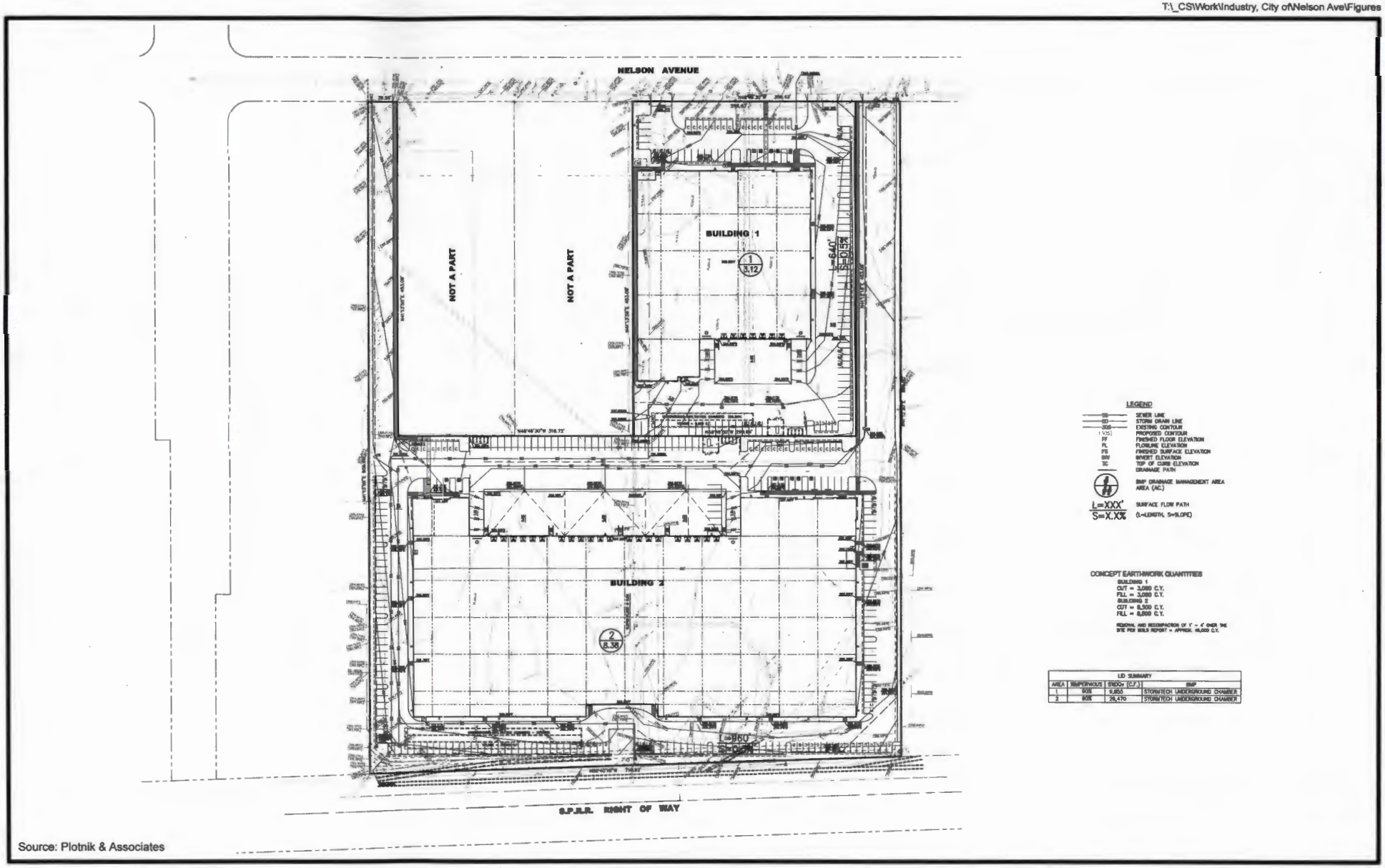

Source: Plotnik & Associates

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FIGURE 3.8
Stormwater Plan

Michael Baker
INTERNATIONAL

3.4 PROJECT APPROVALS

As the lead agency, the City of Industry has the ultimate authority for project approval or denial. The proposed project may require the following discretionary approvals by the City for actions proposed as part of the project:

- Adopt an Initial Study/Mitigated Negative Declaration
- Approve a Lot Line Merger to consolidate three lots into two
- A Development Plan for the proposed site and building improvements

3.5 RELATIONSHIP OF PROJECT TO OTHER PLANS

CITY OF INDUSTRY GENERAL PLAN

The project would be located entirely in Industry. The project has been reviewed for consistency with the 2014 City of Industry General Plan. The City's General Plan is the fundamental document governing land use development in the city. The General Plan includes numerous goals and policies pertaining to land use and design, growth management, circulation, community facilities and utilities, open space and conservation, health, safety, and noise. The proposed project would be required to abide by all applicable goals and policies included in the adopted General Plan.

CITY OF INDUSTRY DEVELOPMENT STANDARDS

The project would be developed in compliance with the City's Development Guidelines.

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4.0 Environmental Checklist

APPENDICES

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.1 AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SETTING

The project site is currently undeveloped and covered with sparse disturbed vegetation, and shows signs of site preparation activities, such as grading and vegetation removal. Two water tanks and a warehouse are located on the northwest side of the block, at the corner of Nelson Avenue and Sunset Avenue, as shown in **Figure 2.2**.

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 surrounding development. There are no scenic vistas identified in the City of Industry General Plan (2014a).

Project site views are available from the industrial warehouses on the east, south, and west sides of the project site, and from the residential district in the City of La Puente to the north. There are no scenic highways in the project vicinity (Caltrans 2016).

DISCUSSION OF IMPACTS

a) *No Impact.* The project site is situated in a highly urbanized area of the City of Industry. Adjacent properties are developed with buildings similar in appearance to the two proposed warehouse structures. Project construction would not impact scenic vistas in the city as there are none. The project would be consistent with the height and size of surrounding buildings. Therefore, the project would have no impact.

b) *No Impact.* The project site consists of a vacant, undeveloped, partially paved property in a fully urbanized area of the city and does not contain any scenic resources. The site does not contain historic buildings, sensitive tree species, or rock outcrops. Additionally, the project site is not adjacent to or near a state scenic highway. The nearest officially designated state scenic highway is Interstate 210, which is alongside the San Gabriel Mountains, over 7 miles to the north (Caltrans 2016). Therefore, the project would have no impact.

c) *Less Than Significant Impact.* The project would not degrade the existing visual character or quality of the project site and its surroundings. The project would infill an existing industrial area, and the height, mass, and design of the buildings would be similar to existing

industrial buildings along the south, east, and west sides of the project site. 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, as shown in **Figures 3.6** and **Figure 3.7**. Therefore, the impact to the visual character or quality of the site and its surroundings would be less than significant.

d) *Less Than Significant Impact*. The proposed project would introduce three new sources of light at the project site: exterior area lights, emergency exit lighting, and exterior door lighting. Nighttime lighting would be installed to accommodate safety and security. The new sources of lighting have the potential to increase nighttime light and glare in the project area. The lighting would be similar to existing lighting in the industrial/commercial areas adjacent to the site. The City of Industry ensures that the lighting of new developments is installed according to 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. 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. Therefore, project impacts associated with light and glare would be less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.2 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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 nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

According to the 2012 Important Farmland map for Los Angeles County, the project site and all adjacent properties have been designated as Urban and Built-Up Land (DOC 2014). This designation is defined as land that is occupied by structures with a density of at least 1 unit to 1.5 acres, with common examples including residential, industrial, commercial, and institutional uses.

DISCUSSION OF IMPACTS

a-e) *No Impact*. The project site is vacant and is not currently used for any type of agricultural or forestry use, nor is it zoned for agricultural or forestry use. The project site is not subject to a Williamson Act contract. The project site does not meet the definition of forestland provided in Public Resources Code Section 12220(g) due to its location in an intensely developed area, which would preclude the management of any forest resources. The project would have no impact on agricultural and forestry resources.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.3 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. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

SETTING

California is geographically divided into 15 air basins, and the City of Industry is in the South Coast Air Basin (SoCAB). This air basin contains the largest urban area in the western United States. It is a 6,600-square-mile coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of the nondesert portions of San Bernardino, Los Angeles (non–Antelope Valley portion), and Riverside Counties, and all of Orange County.

The South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP), a comprehensive plan that includes control strategies for emissions from stationary and area sources, as well as from on-road and off-road mobile sources. Every three years since 1979, the SCAQMD has prepared a new AQMP, with updates to the previous plan and a 20-year horizon.

On December 7, 2012, the 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 plan builds on the approach identified in the 2007 AQMP for attainment of federal particulate matter (PM) and ozone standards, and highlights the significant amount of reductions necessary 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 time frames allowed under the federal Clean Air Act. Through implementation of strategies and mitigation measures to reduce emissions generated during construction and operation of development projects, the 2012 AQMP demonstrates attainment of the 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 US Environmental Protection Agency (EPA) 8-hour ozone control plan with new commitments for short-term reductions in nitrogen oxides (NO_X) and volatile organic compounds (VOC). In addition, the 2012 AQMP identifies emerging issues of ultrafine particulate matter ($PM_{1.0}$) and near-roadway exposure and an analysis of energy supply and demand.

The analysis of the project's air quality impacts follows the guidance and methodologies recommended in the SCAQMD's CEQA Air Quality Handbook and the significance thresholds on the air district's website. CEQA allows the significance criteria established by the applicable air quality management or air pollution control district for assessing impacts of a project on air quality. The SCAQMD has established regional thresholds of significance. In addition to the regional thresholds, projects are subject to the ambient air quality standards, as described in the impact analysis below.

DISCUSSION OF IMPACTS

a) *No Impact.* The project site is located in the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the basin is in nonattainment: ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$). These are considered criteria pollutants because they are three of several prevalent air pollutants known to be hazardous to human health. (An area designated as nonattainment for an air pollutant is an area that does not achieve national and/or state ambient air quality standards for that pollutant.)

In order to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment, the SCAQMD has adopted the 2012 AQMP. The 2012 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2012 AQMP is a regional and multi-agency effort including the SCAQMD, the California Air Resources Board (CARB), SCAG, and the EPA. The 2012 AQMP pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP based on the years of project buildout phase.

The violations to which Consistency Criterion No. 1 refers are the California ambient air quality standards (CAAQS) and the national ambient air quality standards (NAAQS). As evaluated under Issue b) below, the project will not exceed the short-term construction standards or long-term operational standards and in so doing will not violate any air quality standards. Additionally, the analysis for long-term local air quality impacts shows that future carbon monoxide (CO) concentration levels along roadways and at intersections affected by project traffic will not exceed the 1-hour and 8-hour state CO pollutant concentration standards. Thus, a less than significant impact is expected, and the project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies and demonstrates that the applicable ambient air quality standards can be achieved within the time frames required under federal law. Growth projections from local general plans adopted by cities in the district are provided to SCAG, which develops regional growth forecasts that are used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of Industry General Plan is considered to be consistent with the AQMP. The proposed project is consistent with the land use designation and development density presented in the General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP. Thus, no impact would occur, as the project is consistent with both criteria.

b) *Less Than Significant Impact.* As discussed previously, the project site is located in the SoCAB. State and federal air quality standards are often exceeded in many parts of the basin. A discussion of the project's potential short-term construction period and long-term operational period air quality impacts is provided below.

Construction Emissions

The SCAQMD has established methods to quantify air emissions associated with construction activities, such as those generated by operation of on-site construction equipment, fugitive dust emissions related to grading and site work activities, and mobile (tailpipe) emissions from construction worker vehicles and haul/delivery truck trips. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

Dust (PM_{10}) is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emission rates vary as a function of many parameters (e.g., soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation). All development projects in Industry, including the proposed project, are subject to SCAQMD rules and regulations to reduce fugitive dust emissions and to mitigate potential air quality impacts per the City of Industry's General Plan Policy AQ 4.9 and SCAQMD Rule 403 (Fugitive Dust). Rule 403 requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

a) Portions of the construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e) Where vehicles leave the construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

f) Installation and utilization of a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.

Impacts assume compliance with applicable SCAQMD Rules. The SCAQMD Rules that are currently applicable during construction activity for this project include but are not limited to: Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186/1186.1 (Street Sweepers). Rule 1113 and Rule 403 are quantified in the emissions model.

Emissions were calculated using the California Emissions Estimator Model (CalEEMod), version 2013.2.2, a statewide land use emissions computer model designed to provide a uniform platform for use by government agencies, land use planners, and environmental professionals. This model was developed in coordination with the SCAQMD and is the most current emissions model approved for use in California by various other air districts. The estimated maximum daily construction emissions are summarized in **Table 4.3-1**.

TABLE 4.3-1
MAXIMUM SHORT-TERM CONSTRUCTION EMISSIONS (POUNDS PER DAY)

Construction Phase	Reactive Organic Gas	Nitrogen Oxide	Carbon Monoxide	Sulfur Oxide	Coarse Particulate Matter	Fine Particulate Matter
2016	5.63	57.15	38.41	0.06	8.35	5.50
2017	73.08	31.67	34.38	0.06	3.86	2.28
Maximum Daily Emissions	73.08	57.15	38.41	0.06	8.35	5.50
SCAQMD Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No

*Source: CalEEMod, version 2013.2.2. See **Appendix A**.*

As shown in **Table 4.3-1**, construction activity emissions would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutants. Thus, a less than significant impact would occur.

Construction-Related Localized Air Quality Impacts

LSTs (localized significant thresholds) were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project site

that are not expected to result in an exceedance of the NAAQS or CAAQS. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in air quality impact analyses. This analysis uses the methodology included in the SCAQMD Final Localized Significance Threshold Methodology (2008).

For this project, the appropriate source receptor area for the LST on the SCAQMD look-up tables is the South San Gabriel Valley area (SRA 11). LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter ≤ 10 microns (PM_{10}), and particulate matter ≤ 2.5 microns ($PM_{2.5}$).

The SCAQMD look-up tables are intended for projects less than or equal to 5 acres in size and provide standards for projects that are 1, 2, and 5 acres. **Table 4.3-2** is used to determine the maximum daily disturbed acreage for purposes of modeling localized emissions. While the proposed project site is approximately 11.5 acres in site, based on the data provided in **Table 4.3-2**, the proposed project could actively disturb approximately 2 acres per day during site preparation and 3.5 acres per day during the grading phase of construction. Therefore, the 2-acre standard in the look-up table will be used for the 2 acres of site preparation. For the grading standard, 3.5 acres will be extrapolated using the information provided from 1, 2, and 5 acre sites in the look-up table.

TABLE 4.3-2
MAXIMUM DAILY DISTURBED ACREAGE

Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8 hour day	Operating Hours per Day	Acres graded per day
Site Preparation	Crawler Tractors	1	0.5	7	0.5
	Graders	1	0.5	8	0.5
	Scrapers	1	1	8	1
Total acres graded per day during site preparation					**2.0**
Grading	Rubber Tired Dozers	2	0.5	8	1
	Crawler Tractors	3	0.5	7	1.5
	Graders	2	0.5	8	1
Total acres graded per day during grading					**3.5**

Source: CalEEMod, version 2013.2.2.

Certain populations of people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather are defined as "sensitive receptors." The nearest sensitive receptors are the single-family residential communities to the northeast across Nelson Avenue, approximately 18 meters (60 feet) from the project site. Notwithstanding, the SCAQMD Methodology explicitly states: "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.*" Therefore, LSTs for receptors located at 25 meters were utilized in this analysis. **Table 4.3-3** identifies the localized impacts at the nearest receptor location in the project vicinity.

TABLE 4.3-3
LOCALIZED SIGNIFICANCE SUMMARY – ON-SITE CONSTRUCTION EMISSIONS (POUNDS PER DAY)

Construction Phase		NO_x	CO	PM_{10}	$PM_{2.5}$
Site Preparation Emissions	Maximum Daily Emissions (on-site)	30.82	18.06	3.07	1.56
	SCAQMD Localized Threshold	121	1,031	7	5
	Threshold Exceeded?	**No**	**No**	**No**	**No**
Grading Emissions	Maximum Daily Emissions (on-site)	57.05	37.16	8.15	5.44
	SCAQMD Localized Threshold	152	1,422.5	10.5	7
	Threshold Exceeded?	**No**	**No**	**No**	**No**

*Source: CalEEMod, version 2013.2.2. See **Appendix A**.*

Emissions during the site preparation phase and grading phase of construction activity would not exceed the applicable thresholds for any criteria pollutant. Therefore, a less than significant impact would occur.

Operational Emissions

Operational activities associated with the proposed project will result in emissions of ROG, NO_x, CO, sulfur oxide (SO_x), PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from area source emissions, energy source emissions, and mobile source emissions.

Emissions were calculated using CalEEMod, version 2013.2.2. Due to the region's nonattainment status for ozone, PM_{10}, and $PM_{2.5}$, vehicle NOx, ROG, PM_{10}, and $PM_{2.5}$ emissions were estimated using emission factors generated with the 2014 version of the Emission Factor model (EMFAC) developed by CARB. EMFAC 2014 is a mathematical model developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California; it is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC 2014 is an update of EMFAC 2011, currently embedded in CalEEMod. The pollutant emission factor represents the 30-year weighted average emission factor to represent the vehicle fleet mix over the life of the project.

Operational-source emissions are summarized in **Table 4.3-4**. As shown, project operational-source emissions would not exceed applicable SCAQMD regional thresholds of significance. Therefore, the impact would be less than significant.

TABLE 4.3-4
LONG-TERM OPERATIONAL EMISSIONS (POUNDS PER DAY)

Emissions Source	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source Emissions	8.60	0	0.06	0	0	0
Energy Source Emissions	0	0	0	0	0	0
Mobile Emissions	4.87	40.14	77.23	0.23	10.99	3.49
Total	**13.47**	**40.14**	**77.28**	**0.23**	**10.99**	**3.49**
SCAQMD Threshold	55	55	550	150	150	55

Emissions Source	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Significant?	No	No	No	No	No	No
Winter Scenario						
Area Source Emissions	8.60	0	0.06	0	0	0
Energy Source Emissions	0	0	0	0	0	0
Mobile Emissions	5.15	41.47	86.35	0.23	10.99	3.49
Total	**13.76**	**41.47**	**86.40**	**0.23**	**10.99**	**3.49**
SCAQMD Threshold	55	55	550	150	150	55
Significant?	No	No	No	No	No	No

*Source: CalEEMod, version 2013.2.2. See **Appendix A**.*

Operations Localized Significance Analysis

According to the SCAQMD methodology, LSTs apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Health Risk Assessment (HRA) (Michael Baker International 2016b), discussed in Issue (d) below, replaces the need to do an operational LST analysis.

c) *Less Than Significant Impact.* Projects could contribute to an existing or projected air quality exceedance because the SoCAB is currently in nonattainment for O_3, PM_{10}, and $PM_{2.5}$. With regard to determining the significance of the cumulative contribution from the project, the SCAQMD recommends that any given project's potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions exceeding the SCAQMD's daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment, and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the project will not exceed the applicable SCAQMD regional thresholds for construction and operational-source emissions. As such, the project will result in a cumulatively less than significant impact.

d) *Less Than Significant Impact With Mitigation Incorporated.* The potential impact of toxic air pollutant emissions resulting from development on the project site has also been considered. Sensitive receptors to toxic air pollutants can include such uses as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered sensitive receptors. As previously described, the nearest sensitive receptors are the single-family residential communities to the northeast across Nelson Avenue, approximately 18 meters (60 feet) from the project site.

Diesel Particulate Matter

Since the project is expected to generate/attract diesel trucks, which emit diesel particulate matter (DPM), preparation of an HRA is necessary. The HRA (Michael Baker International 2016b) evaluates the health risk impacts to sensitive receptors (residents and schools) and adjacent workers associated with project development, more specifically, health risk impacts due to exposure to DPM as a result of heavy-duty diesel trucks accessing the site.

To determine whether or not a proposed project would cause a significant effect on the environment, the project impact must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the State CEQA Guidelines, the SCAQMD recommends that the following air pollution thresholds be used by lead agencies in determining whether the proposed project has significant impacts. If the lead agency finds that the proposed project has the potential to exceed the air pollution thresholds, the project should be considered significant. The thresholds for air toxic emissions are as follows.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.

- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of 1 in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10 in one million standard is a very health-protective significance threshold. This risk level implies a likelihood that up to 10 persons, out of one million equally exposed people, would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer risk that is in addition to any cancer risk borne by a person not exposed to these air toxics.

The SCAQMD has also established noncarcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or reference exposure level, which is a concentration at or below which health effects are not likely to occur. A hazard index less of than 1.0 means that adverse health effects are not expected. In this analysis, noncarcinogenic exposures of less than 1.0 are considered less than significant.

Carcinogenic Risk

Based on the dispersion model (AERMOD) outputs, the expected annual average diesel $PM_{2.5}$ emission concentrations at a sensitive receptor resulting from operation of the project (423 daily heavy truck deliveries) would be 0.01 $\mu g/m^3$ at the greatest. This level of concentration would be experienced at the residential neighborhoods directly west of the project site across Nelson Avenue, which are the closest sensitive receptors to the project site. The calculated carcinogenic risk at these locations, directly west of the site, as a result of the project is depicted in **Table 4.3-5**.

TABLE 4.3-5
MAXIMUM OPERATIONAL HEALTH RISK

Time Period	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance SCAQMD Threshold?
70-Year Exposure	4.92	10	No
30-Year Exposure	4.14	10	No
9-Year Exposure	2.98	10	No

Source: Michael Baker International 2016b.

As shown in **Table 4.3-5**, the highest concentration would result in a risk of 4.92 in one million over the 70-year exposure period, which is below the threshold of 10 in one million. The calculated risk is also below the threshold for the 30- and 9-year exposure periods. Therefore, impacts related to cancer risk from heavy trucks would be less than significant.

Even though the increased cancer risk from heavy trucks would be below the applicable threshold, the driveway entrance to the project site is designated for inbound heavy-duty truck access directly across from residential front yards and outdoor activity areas. Therefore, mitigation measure **MM AQ-1** shall be incorporated to enforce existing regulations and reduce the generation of diesel particulate matter.

Noncarcinogenic Hazards

The significance thresholds for toxic air contaminant exposure also require an evaluation of noncancer risk stated in terms of a hazard index. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The chronic and acute hazard index associated with the emissions from the project would be 0.002 and 0.05, respectively. Therefore, noncarcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

Carbon Monoxide

An analysis of CO "hot spots" is needed to determine whether the change in the level of service (LOS) of an intersection as a result of the proposed project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The analysis prepared for CO attainment in the SoCAB by the SCAQMD can assist in evaluating the potential for CO exceedances in the air basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak CO concentrations in the SoCAB are due to unusual meteorological and topographical conditions, and are not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO

modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot-spot analysis was conducted for four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The analysis in the 1992 CO Plan did not result in a violation of carbon monoxide standards (current CO standards are the same as the 1992 standards [CARB 2009]). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the level of service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be LOS E at peak morning traffic and LOS F at peak afternoon traffic.

The proposed project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of the 1992 CO hot spot analysis. Consequently, at buildout of the project, none of the intersections in the vicinity of the proposed project site would have traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the project area's meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. The SoCAB has been designated as attainment for CO since 2007, and even very busy intersections do not result in exceedances of the CO standard. Historical air quality data show that existing CO levels for the project area and the general vicinity do not exceed either state or federal ambient air quality standards. The CO concentrations in the project area are much lower than the federal and state CO standards. The proposed project would not result in any significant increase in CO concentrations at nearby intersections. Therefore, project-related traffic would not significantly affect local CO levels under future year conditions, and the CO concentrations would be below the state and federal standards. No significant impact on local CO levels would occur. Pollutant emissions from project operation, also calculated with CalEEMod, would not exceed the SCAQMD thresholds for any criteria pollutants. LSTs would not be exceeded by long-term emissions from operation of the project. Therefore, CO hot spots are not an environmental impact of concern for the proposed project. Localized air quality impacts related to CO emissions would be less than significant.

e) *Less than Significant.* The potential for the project to generate objectionable odors has been considered. Land uses generally associated with odor complaints include agricultural uses (livestock and farming), wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities.

The proposed project does not contain land uses typically associated with emissions of objectionable odors. Potential odor sources may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities, and the temporary storage of typical solid waste (refuse) associated with long-term operational uses. Standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary, short term, and intermittent in nature; would cease on completion of the respective phase of construction activity; and would not affect a substantial number of people. Therefore, odor emissions are considered less than significant. It is expected that project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed project would also be required to comply with SCAQMD Rule

402 to prevent occurrences of public nuisances. Therefore, odor impacts associated with the proposed project's construction and operations would be less than significant.

Mitigation Measures

MM AQ-1 Prior to the certificate of occupancy issuance, the project applicant shall demonstrate to the satisfaction of the City of Industry Planning Department that the following measures would be implemented during project operations.

- Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.

- All service equipment (e.g., forklifts) used within the site shall be electric or compressed natural gas-powered.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.4 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 Wildlife or US Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
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 wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☒	☐

SETTING

The project site is located in a fully urbanized portion of the City of Industry, has been previously graded, and is currently devoid of natural habitats or sensitive natural communities. The existing vegetation on-site consists of miscellaneous ground cover throughout the site. There is no visible evidence of wetlands such as pits, ponds, lagoons, or any other water bodies. Due to the disturbed nature of the site and lack of native habitats, the site does not support wildlife habitats, nor is the site used for wildlife migration. In addition, there are no existing riparian areas, wetlands, or waterways located on or adjacent to the project site. A portion of the San Gabriel River and its multiple tributaries are located in other areas of the city; however, these are located over a mile south of the project site.

The majority of the land area in the city has been developed with industrial, commercial, and business-oriented land uses

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* The project would change the existing setting of the site from grass and miscellaneous vegetation cover to pavement. However, no sensitive or special-status species reside on the project site. Therefore, project impacts would be less than significant.

b) *No Impact.* There are no riparian habitats or sensitive natural communities present in the project site. The project would have no impact.

c) *No Impact.* No wetlands or other waters of the United States are located on the site. The project would have no impact.

d) *No Impact.* There are no waters or streams present on the site. The project would have no impact on native resident or migratory fish or corridors.

e, f) *Less Than Significant Impact.* Project construction would not require the removal of trees. The project would plant 229 trees of 9 different species, along with 6 species of shrubs and 7 species of ground cover. As shown in **Figure 3.5**, vegetation would be included around building one on the north, east, and south sides; around the east, west, and south sides of building two; and around all sides of the project site. Furthermore, there are no habitat conservation plans that apply to the project site. Therefore, the project would not conflict with any ordinances protecting biological resources such as trees, or with habitat conservation plans. The project would have a less than significant impact.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.5 CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
d) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	☐	☐	☐	☒

SETTING

Archaeological Resources

Archaeological resources are the physical remains of past human activities and can be either prehistoric or historic. A small granite bowl fragment measuring 17 centimeters (cm) long and 10.5 cm wide was discovered during an archeological survey over 5 miles west of the project site. No other significant archaeological finds have been found in the city, but may be encountered with future development. Nearby documented archaeological sites in the project vicinity include the La Puente Downtown Specific Plan area, La Puente High School, and the IBC, approximately 1.7, 1.2, and 5 miles from the project site, respectively. The City of La Puente and vicinity were previously known as the Ahwiinga community by the Gabrieleño tribal group.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Although no known or significant paleontological resources have been discovered within the city's boundaries, fossil remains may occur throughout the city, although the area of their distribution is not known.

Paleontological sites are areas that show evidence of pre-human activity. Often they are simply small outcroppings visible on the surface or sites encountered during grading. While the sites are important indications, it is the geologic formations that are the most important, since they may contain important fossils. Potentially sensitive areas for the presence of paleontological resources are based on the underlying geologic formation. No known or significant paleontological resources have been discovered within the city's boundaries.

Surface deposits in the site vicinity consist of younger Quaternary alluvium, derived predominantly as fluvial deposits from San Jose Creek, which flows to the northeast. The surrounding elevated terrain has exposures of the marine late Miocene Puente Formation (also referred to as the Monterey Formation) that probably underlie the Quaternary alluvium in the project area. The

vertebrate fossil localities in the Puente Formation were found in the area between the Pomona Freeway and Colima Road and near Colima and Fullerton Road in the City of Industry, approximately 7 miles east of the project site.

Historical Resources

Historical resources are buildings, structures, objects, sites, and districts of significance in history, archaeology, architecture, and culture. The City of Industry is home to the Workman and Temple Family Homestead Museum (15415 Don Julian Road), a 6-acre site at the intersection of Don Julian Road and El Encanto Road/Parriott Place in western Industry that dates from the era when California was still part of Mexico. The museum is registered with the National Register of Historic Places (NPS 2010) and is also designated as a California Historic Landmark by the California Office of Historic Preservation. The museum is located 1.3 miles southeast of the project site. The city is also home to the John A. Rowland House (16021 E. Gale Avenue), built in 1855 for Rowland's second wife Charlotte. The house is the oldest surviving brick structure in Southern California. The Rowland House is also registered with the National Register of Historic Places (NPS 2010), and is located 2.3 miles southeast of the project site.

No built-environment historical resources were identified on the project site by the National Register of Historic Places, California Register of Historical Resources, or the City's General Plan.

Native American Consultation

The Soboba Band of Luiseño Indians and the Gabrieleño Band of Mission Indians – Kizh Nation were notified of the proposed project on July 15, 2016. No responses to the notification letters were received.

Because the proposed project did not include a General Plan amendment, no tribal consultation pursuant to Senate Bill (SB) 18 and Government Code 65352.3 was initiated. The proposed project has complied with the provisions of Assembly Bill (AB) 52, and no significant impacts have been identified after mitigation.

Public Resources Code Section 21074 defines "tribal cultural resources" as 1) listed or determined to be eligible for listing on the national, state, or local register of historic resources; or 2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. In the second instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources pursuant to Public Resources Code Section 5024.1. The project site does not contain built structures but is considered sensitive for subsurface tribal cultural resources. Therefore, appropriate monitoring would be necessary during ground-disturbing activities to ensure that the proposed project does not cause a substantial adverse change in the significance of a tribal cultural resource. With mitigation, potential impacts to tribal resources would be reduced to a less than significant level.

DISCUSSION OF IMPACTS

a–c) *Less Than Significant Impact With Mitigation Incorporated.* There are no cultural resources located on the project site. Although the site has previously been heavily disturbed, as it was previously used for agriculture, residential, and industrial uses, project construction would involve ground-disturbing activities. Such activities could result in unanticipated or accidental discovery of archeological deposits, historical resources, or human remains. This would be a potentially significant impact, and implementation of mitigation measures

MM CUL-1 and **MM CUL-2** is required. With implementation of these mitigation measures, project impacts would be less than significant.

d) *No Impact*. There are no known tribal cultural resources (as defined in Public Resources Code Section 21074) or cultural resources (as defined in Public Resources Code Section 15064.5) in the project area. The project would have no impact on tribal resources.

Mitigation Measures

MM CUL-1 **Treatment of previously unidentified archaeological deposits.** During project construction, if any archeological or paleontological resources (i.e., fossils) are found, the project applicant and/or its contractor shall cease all work within 25 feet of the discovery and notify the City of Industry Planning Department immediately. The project applicant and/or its contractor shall retain a qualified archeologist or paleontologist to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered archeological or paleontological resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures.

MM CUL-2 **Treatment of previously unidentified human remains.** During project construction, if human remains are discovered, the project applicant and/or its contractor shall cease all work within 25 feet of the find and notify the City of Industry Planning Department and the county coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.6 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.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

SETTING

The City of Industry is in the Peninsular Ranges Geomorphic Province, a series of mountain ranges separated by northwest-trending valleys, which characterizes the southwest portion of California. The city is primarily located along the eastern margin of the San Gabriel River Valley in the eastern Puente Hills, an east-to-west-trending range of hills which separates the Los Angeles Basin to the south from the San Gabriel Valley to the north. Most of the city lies in the alluvial valley formed by San Jose Creek, which separates the Puente Hills on the south from the San Jose Hills to the north. Elevation ranges from approximately 20 feet above mean sea level in the western portion of the city near the San Gabriel River to approximately 912 feet above mean sea level in the eastern portion (City of Industry 2014a).

The project site is at an elevation of approximately 382 feet above mean sea level (City of Industry 2014a). The site and surrounding areas are located in a highly urbanized area that is relatively flat and contains minimal rises or changes in elevation. No major slopes or bluffs are on or adjacent to the site. The project site is located in an area that is underlain by two types of soils. The first soil type is fill soil, which is dark brown and contains gravel and some asphalt (Norcal 2015). The second soil is unconsolidated sediments that include interbedded silts, sands, and gravel. The thickness of these unconsolidated sediments beneath the site has not been determined.

Subsurface Soils

The geotechnical investigation performed by Norcal Engineering (included in this IS/MND as **Appendix B**) consisted of 10 subsurface exploratory trenches by a backhoe and one 50-foot exploratory boring. The subsurface explorations revealed that the site is underlain by alluvial deposits consisting of light grey, sandy silt, silty sand, and clayey silt, described in the Unified Soil Classification System in **Appendix B**. Two major soil types were found: fill and natural. A fill soil is classified as a brown, clayey to sandy to clayey silt, encountered at a depth of 1 to 4 feet. The natural soil is classified as a brown, undisturbed alluvium soil, located just below the fill soil. The soils were noted to be firm to medium dense and damp to moist (**Appendix B**). Descriptions of soil type by depth is available in **Appendix B.**

Geology and Seismicity

There are no known active or potentially active faults trending toward or through the site. The proposed development lies outside any Alquist Priolo Special Studies Zone. Major active faults nearest the project site include the Whittier, Cucamonga, Chino, and Puente Hills faults (CGS 2015). More regionally, the San Andreas fault is capable of producing an earthquake that could cause significant damage at the site. Lesser faults closer to the site include the Walnut Creek and San Jose faults.

Slope Stability

The project site is located on relatively flat land. According to US Geological Survey Open-File Report 97-745, the site is not mapped as having previously identified landslides or earthflows, nor is it located in an area having debris flow source potential. Based on the Norcal Engineering field exploration, and review of documents, evidence of adverse slope stability, erosion, or drainage conditions at the site were not observed.

Liquefaction

Soil liquefaction is a phenomenon primarily associated with saturated, cohesion-less, soil layers located close to the ground surface. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

Norcal Engineering's review of the exploratory boring log at the site and the laboratory test results on selected soil samples indicate that the potential for ground surface damage at the site resulting from liquefaction is "low." This conclusion is also based on a historic groundwater level of 10 feet, shown in the Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles County – Plate 1.2.

DISCUSSION OF IMPACTS

a)

i. *Less Than Significant Impact*. According to the Norcal Engineering report, no faults are known to occur within the project site. 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. Therefore, the likelihood of a surface fault rupture occurring on this site is considered low. The project would be required to comply with the latest requirements of the 2013 California Building Code, Chapter 16, Section 1613, Earthquake Loads. As such, the project would have a less than significant impact.

ii. *Less Than Significant Impact with Mitigation*. Similar to the rest of Southern California, the project site is subject to ground shaking and potential damage in the event of seismic activity. The Norcal Engineering geotechnical report sites seismic shaking in the project area as a potentially significant impact. **MM GEO-1** includes that a fill blanket be put in place and all foundations be designed utilizing safe bearing capacities as outlined in the geotechnical report.

The seismic design of the project has been updated to the latest 2010 ASCE 7-10 standards, and the mapped seismic ground motions were provided by using the Java-based program available from the US Geological Survey (USGS). The earthquake design parameters are in accordance with the 2013 California Building Code, as shown on Page 5 of the geotechnical report, **Appendix B.**

The California Building Code 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 city'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 by reference. The proposed project would be required to adhere to the provisions of the Los Angeles County Building Code. 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, and implementation of **MM GEO-1** would reduce project impacts to a less than significant impact.

iii. *Less Than Significant Impact with Mitigation*. The project 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 structures from liquefaction that might occur during future seismic events. However, the Norcal Engineering geotechnical investigation states that liquefaction could be a potentially significant impact at the project site given the seismic activity in California. The project site is underlain by 4 feet of fill soils and could therefore be unstable. **MM GEO-1** requires that all fill soils be removed and replaced with competent native material and that a fill blanket be placed on the project site. Implementation of this mitigation measure would reduce impacts to less than significant.

iv. *Less Than Significant Impact*. 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. Based on the Baldwin Park 7.5-minute quadrangle map (CDC 1999), the

proposed project site is not in a mapped landslide hazard area and is not subject to landslide hazards. Moreover, the project site and surrounding land are flat. Therefore, the impact would be less than significant.

b) *Less Than Significant Impact*. The project site is currently undeveloped. Project construction would include land clearing, grading, excavating, and other soil-disturbing activities that would expose site soils to wind and water erosion. All discussion related to slope erosion and stability are discussed in Items 4.6(c) and 4.6(d) below. 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 flat and contains minimal rises or changes in elevation. No major slopes or bluffs are on or adjacent to the site. Since the project site is greater than 1 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, which would include best management practices (BMPs) designed to prevent erosion and siltation during project construction. The project applicant would also be required to adhere to the applicable provisions outlined in Chapter 13.16 (Stormwater and Urban Runoff Pollution Control) of the city's Municipal Code, which contains requirements to preserve water quality and prevent erosion during construction. In particular, Section 13.16.070(C) 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.

All construction activities would be subject to California Building Code Chapter 70 standards, which would ensure implementation of appropriate measures during grading activities to reduce soil erosion. After project completion, the project site would be developed with warehouse buildings, parking areas, driveways, and landscape improvements. The total project site landscaping coverage would be at 12 percent and the rest of the site covered by buildings and parking. 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 minimize project impacts. Therefore, the project would have a less than significant impact.

c, d) *Less Than Significant Impact With Mitigation Incorporated*. Hazards related to liquefaction and landslides are addressed above, and would be less than significant with the implementation of **MM GEO-1**, including the removal and replacement of all fill materials. 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.

According to the geotechnical report, expansive soils were encountered at the project site. This is a potentially significant impact. **MM GEO-1** includes expansive soil guidelines based on the types of soils encountered at the project site. Requirements include drainage design, irrigation control, planting schemes for landscaping, thickened edges on exterior slabs, and increasing the amount of steel reinforcing in concrete. Implementation of **MM GEO-1** would reduce the project impact to a less than significant level.

e) *No Impact*. The project would be served by a public sewer system. Therefore, no septic tanks or alternative wastewater disposal systems would be associated with the project. The project would have no impact.

Mitigation Measures

MM GEO-1 **Compliance with Geotechnical Recommendations:** The applicant must comply with design recommendations 7.0 through 7.11:

- **7.1 Fill Blanket Recommendations**: Due to the potential for differential settlement of foundations placed on compacted fill and the native soils, all foundations must be underlain by a uniform, compacted fill blanket at least 2 feet in thickness. This fill blanket shall extend at least 5 horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

- **7.2 Temporary Excavations**: Temporary un-surcharged excavations may not be made in existing site materials more than 4 feet high, and must be halted if cohesion-less soils are encountered.

- **7.3 Foundation Design**: All foundations should be designed using safe bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths:

TABLE 4.6-1
ALLOWABLE SAFE BEARING CAPACITY PER SQUARE FOOT

Width (ft)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

- **7.4 Settlement Analysis**: Resultant pressure curves for the consolidation tests shall be reviewed. Computations showed that foundations will experience settlements on the order of three-quarters inch and differential settlements of one-quarter inch.

- **7.5 Lateral Resistance**: The following values may be used in resisting lateral loads imposed on the structure. Requirements of the latest Building Code must be adhered to when the coefficient of friction and passive pressures are combined for approved compacted fill soils:

- Coefficient of Friction: 0.35
- Equivalent Passive Fluid Pressure: 200 lbs/cubic foot
- Maximum Passive Pressure: 2,000 lbs/cubic foot

- **7.6 Retaining Wall Design Parameters**: The active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. The following values are acceptable for select granular backfill material placed behind the walls at various ground slopes above the walls. An equivalent fluid pressure of 45 pounds per cubic foot may be used for the restrained wall condition with a level grade behind the wall.

TABLE 4.6-2
FLUID DENSITIES

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb/cubic foot)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The subsurface drainage system shall consist of a 4-inch diameter perforated PVC pipe encased with gravel and wrapped with filter fabric.

- **7.7 Slab Design**: All concrete slabs shall be at least 6 inches in the proposed warehouse area and 4 inches in hardscape and office areas, all reinforced using bars at 16-inch spacing in each direction and positioned in the center of the slab. A vapor retarder (10-mil minimum thickness) should be utilized in areas which are sensitive to the infiltration of moisture.

- **7.8 Pavement Section Design**: All concrete slabs to be used for pavement shall be a minimum of 6 inches in thickness and placed on approved subgrade soils. All pavement areas shall have positive drainage toward an approved outlet from the site. Any approved base material shall consist of a Class II aggregate or equivalent and shall be compacted to a minimum of 95 percent relative compaction.

- **7.9 Utility Trench and Excavation Backfill**: Trenches from installation of utility lines and other excavations shall be backfilled with on-site soils or approved imported soils compacted to a minimum of 90 percent relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

- **7.10 Corrosion Design Criteria**: Type II cement shall be used for building foundations.

- **7.11 Expansive Soil**: The *Expansive Soil Guidelines* attached to **Appendix B** shall be reviewed by the engineers, architects, owner, maintenance personnel, and other interested parties and must be considered during the design of the project and future property maintenance.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.7 GREENHOUSE GASES. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may 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?	☐	☐	☒	☐

SETTING

Greenhouse gases (GHG) are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases includes carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Table 4.7-1 provides descriptions of the primary GHGs attributed to global climate change, including a description of their physical properties and primary sources.

TABLE 4.7-1
GREENHOUSE GASES

Greenhouse Gas	Description
Carbon dioxide (CO_2)	CO2 is a colorless, odorless gas and is emitted in a number of ways, both naturally and through human activities. The largest source of CO2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. The atmospheric lifetime of CO2 is variable because it is so readily exchanged in the atmosphere. (EPA 2016a)
Methane (CH_4)	CH4 is a colorless, odorless gas that is not flammable under most circumstances. CH4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH4 is emitted from both human-related and natural sources. Methane's atmospheric lifetime is about 12 years. (EPA 2016b)
Nitrous oxide (N_2O)	N2O is a clear, colorless gas with a slightly sweet odor. N2O is produced by natural and human-related sources. Primary human-related sources are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The atmospheric lifetime of N2O is approximately 120 years. (EPA 2016c)

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 21 times more heat per molecule than CO_2, and N_2O absorbs 310 times more heat per molecule than CO_2. Often,

estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact.* There is scientific consensus that the contribution of GHG emissions into the atmosphere is resulting in the change of the global climate. The global average temperature is expected to increase relative to the 1986–2005 period by 0.3 to 4.8 degrees Celsius (°C) (0.5-8.6 degrees Fahrenheit [°F]) by the end of the twenty-first century (2081–2100), depending on future GHG emission scenarios (IPCC 2007). According to the California Natural Resources Agency, temperatures in California are projected to increase 2.7°F above 2000 averages by 2050 and, depending on emission levels, 4.1–8.6°F by 2100 (CNRA 2012). Physical conditions beyond average temperatures could be indirectly affected by the accumulation of GHG emissions. For example, changes in weather patterns resulting from increases in global average temperature are expected to result in a decreased volume of precipitation falling as snow in California and an overall reduction in snowpack in the Sierra Nevada. The Global Warming Solutions Act, also known as AB 32, is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020.

Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption and associated generation of GHG emissions occurring during the project's operation (as opposed to during its construction). During project construction, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHG emissions such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Operational activities associated with the proposed project will result in emissions of CO_2, CH_4, and N_2O from the following primary sources: area source emissions; energy source emissions; mobile source emissions; solid waste; and water supply, treatment, and distribution.

Area sources would result in GHG emissions generated from landscape maintenance equipment, which would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category includes lawn mowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain project landscaping. Energy source GHG emissions are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHG emissions directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions.

GHG emissions would also result from mobile sources associated with the project. These mobile source emissions will result from the typical daily operation of motor vehicles by delivery trucks, visitors, and employees. Project mobile source emissions are dependent on overall daily vehicle trip generation. Industrial land uses would result in the generation and disposal of solid waste. Waste is diverted from landfills through a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. GHG emissions from landfills are associated with the anaerobic breakdown of material. Indirect GHG

emissions result from the production of electricity used to convey, treat, and distribute water and wastewater; this amount of electricity depends on the volume of water as well as the sources of the water.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 California Code of Regulations Section 15064.4(a)).

A number of expert agencies throughout the state have drafted or adopted varying threshold approaches and guidelines for analyzing operational GHG emissions in CEQA documents. The different thresholds include (1) compliance with a qualified GHG reduction strategy, (2) performance-based reductions, (3) numeric "bright-line" thresholds, and (4) efficiency-based thresholds. The California Supreme Court decision in the Centers for Biological Diversity et al. v. California Department of Fish and Wildlife, the Newhall Land and Farming Company (November 30, 2015, Case No. S217763) confirmed that when an "agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method."

As noted earlier, AB 32 is a legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. Efficiency-based thresholds represent the rate of emission reductions needed to achieve a fair share of California's GHG emissions reduction target established under AB 32. In adopting AB 32, the legislature determined the necessary GHG reductions for the state to make in order to sufficiently offset its contribution to the cumulative climate change problem to reach 1990 levels. AB 32 is the only legally mandated requirement for the reduction of GHGs. As such, compliance with AB 32 is the current adopted basis upon which an agency can base its significance threshold for evaluating a project's GHG impacts. However, it is acknowledged that Executive Orders 5-03-05 and B-30-15, SB 375, and the recently signed legislation of SB 32 will ultimately result in GHG emission reduction targets for years beyond 2020.

The SCAQMD has not announced when staff is expecting to present a finalzed version of its GHG thresholds to the governing board. On September 28, 2010, the SCAQMD recommended an interim screening level numeric "bright-line" threshold of 10,000 metric tons per year of CO_2e for industrial land uses. These efficiency-based thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the SoCAB, industry groups, and environmental and professional organizations. The numeric "bright line" was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed project are significant.

Emissions resulting from implementation of the proposed project have been quantified and the quantified emissions are compared with the SCAQMD GHG threshold. The anticipated GHG emissions during project construction and operation are shown in **Table 4.7-2**.

TABLE 4.7-2
TOTAL PROJECT GREENHOUSE GAS EMISSIONS (ANNUAL) (METRIC TONS PER YEAR)

Emissions Source	Total CO_2e
Annual construction-related emissions amortized over 30 years	13
Area	0
Energy	1,160
Mobile	3,481
Waste	99
Water Usage	5
Total	**4,758**
SCAQMD Industrial Warehouse Project Threshold	10,000
Significant?	**No**

*Source: CalEEMod, version 2013.2.2. See **Appendix C**.*

As shown in **Table 4.7-2**, GHG emissions projected to result from both construction (amortized over 30 years) and operation of the proposed project would not exceed the SCAQMD GHG threshold of 10,000 metric tons of CO_2e per year. The impact is therefore considered less than significant.

b) *Less Than Significant Impact.* Although the City of Industry has not adopted a GHG reduction plan, the project would be below the SCAQMD's GHG threshold (see Issue a) above). Furthermore, as previously mentioned, AB 32 is the legal mandate requiring that statewide GHG emissions be reduced to 1990 levels by 2020. In addition, two executive orders, California Executive Order S-03-05 (2005) and California Executive Order B-30-15 (2015), highlight GHG emissions reduction targets, though such targets have not been adopted by the state and remain only a goal of the executive orders. Specifically, Executive Order S-03-05 seeks to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050 and Executive Order B-30-15 seeks to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030. Technically, a governor's executive order does not have the effect of new law but can only reinforce existing laws. For instance, as a result of the AB 32 legislation, the state's 2020 reduction target is backed by the adopted AB 32 Scoping Plan, which provides a specific regulatory framework of requirements for achieving the 2020 reduction target. The state-led GHG reduction measures, such as the Low Carbon Fuel Standard and the Renewables Portfolio Standard, are largely driven by the AB 32 Scoping Plan. Executive Orders S-03-05 and B-30-15 do not have any such framework and therefore provide no emissions reduction mechanisms that can be applied to the analysis of land use projects for the purpose of meaningful emissions estimates. As a result of Executive Orders B-30-15 and S-03-05, new legislation is proposed to establish post-2020 GHG reduction goals; however, no action on the legislation has been taken as of this writing (September 2016).

SCAG's *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted April 7, 2016, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035, and establishes an overall GHG target for the region consistent with both the target date of AB 32 (2020) and the post-2020 GHG reduction goals of Executive Orders S-03-05 and B-30-15. The 2016 RTP/SCS contains over 4,000 transportation projects, including highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six-county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently. The proposed project's consistency with the RTP/SCS goals is analyzed in detail in **Table 4.7-3**. As shown in **Table 4.7-2**, GHG emissions resulting from development-related mobile sources are a major source of emissions. Therefore, project comparison to the RTP/SCS is an appropriate indicator of whether the proposed project would inhibit the post-2020 GHG reduction goals promulgated by the state.

TABLE 4.7-3
CONSISTENCY WITH SCAG'S REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY GOALS

SCAG Goals	Compliance with Goal
GOAL 1: Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable: This is not a project-specific policy and is therefore not applicable.
GOAL 2: Maximize mobility and accessibility for all people and goods in the region.	Consistent: Improvements to the transportation network in Industry are developed and maintained to meet the needs of local and regional transportation and to ensure efficient mobility. A number of regional and local plans and programs are used to guide development and maintenance of transportation networks, including but not limited to: • Los Angeles County Congestion Management Program • Caltrans Traffic Impact Studies Guidelines • Caltrans Highway Capacity Manual • SCAG RTP/SCS
GOAL 3: Ensure travel safety and reliability for all people and goods in the region.	Consistent: All modes of transit in Industry are required to follow safety standards set by corresponding regulatory documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Industry, County of Los Angeles) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans.

SCAG Goals	Compliance with Goal
GOAL 4: Preserve and ensure a sustainable regional transportation system.	Consistent: All new roadway developments and improvements to the existing transportation network must be assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the needs for improving future traffic capacities.
GOAL 5: Maximize the productivity of our transportation system.	Consistent: The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The City's Public Works Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. The City also strives to maximize productivity of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Industry.
GOAL 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	Consistent: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. For example, development projects are required to comply with the provisions of the California Building and Energy Efficiency Standards and the Green Building Standards Code (CALGreen). The City also strives to maximize the protection of the environment and improvement of air quality by encouraging and improving the use of the region's public transportation system (e.g., bus, bicycle) for residents, visitors, and workers coming into and out of Industry.
GOAL 7: Actively encourage and create incentives for energy efficiency, where possible.	Not Applicable: This is not a project-specific policy and is therefore not applicable
GOAL 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent: See response to RTP/SCS Goal 6.
GOAL 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Consistent: The City of Industry monitors existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies (e.g., Los Angeles County Transportation Department, Caltrans, SCAG) work with the City to manage these systems. Security situations involving roadways and evacuations would be addressed in the County of Los Angeles' emergency management plans (e.g., Los Angeles County Operational Area Emergency Operations Plan) developed in accordance with the state and federal mandated emergency management regulations.

As shown in **Table 4.7-3**, the proposed project does not conflict with the stated goals of the RTP/SCS. For these reasons, the proposed project would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets outlined in the 2016 RTP/SCS. Therefore, impacts associated with the proposed project construction and operations would be less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.8 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?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒

SETTING

The information included in this section is based on the Robin Environmental Management (REM) reports prepared for the project **(Appendix D)**, as well as GeoTracker and EnviroStor database searches (SWRCB 2015; DTSC 2015).

Hazardous Materials Regulation

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. Los Angeles County requires that businesses that store hazardous materials file a Business Plan with the Los Angeles County Fire Department (LACFD), which includes a materials inventory and an emergency response plan. Any business that handles a hazardous material and/or hazardous waste equal to or greater than a total volume of 55 gallons, a total weight of 500 pounds, or 200 cubic feet of a compressed gas is a hazardous materials handler and must report Owner/Operator, Business Activities, Inventory, Site Map, and Emergency Response and Contingency Plan and Employee Training Plan information in the California Environmental Reporting System (LA County 2016).

Hazardous Materials Sites

Under Government Code Section 65962.5, both the State Water Resources Control Board (SWRCB) and the California Department of Toxic Substances Control (DTSC) are required to maintain databases of sites known to have hazardous substances present in the environment. Both agencies maintain such databases on their websites, known as GeoTracker and EnviroStor, respectively.

The project site is located in an urban, developed area; there are 66 sites identified on GeoTracker and EnviroStor within 1 mile of the project site. Most of the closed sites are completed leaking underground storage tank (UST) cases and most of the active sites are Cleanup Program Sites, as listed in **Table 4.8-1**.

Hazard Mitigation Plan

Assessments of potential hazards and county resources available for responding to hazards are in the County of Los Angeles All-Hazard Mitigation Plan adopted by the County Board of Supervisors in June 2005. The plan includes a vulnerability analysis for many types of hazards, including earthquakes, floods, fires, and man-made hazards such as 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.

TABLE 4.8-1
GEOTRACKER SITES WITHIN 1 MILE OF THE PROJECT SITE

Site Name	Global ID	Status	Address	City
Acorn Engineering	T0603700129	Open - Inactive	15125 Proctor Ave E	City of Industry
Acorn Engineering Co.	SL0001844500	Completed - Case Closed	15032 East Proctor Ave	City of Industry
Adams Campbell Company Ltd.	SL603798513	Completed - Case Closed	15343 Proctor Ave.	City of Industry
Aerosol Services Co, Inc	T0603700120	Open - Verification Monitoring - Land Use Restrictions	425 009th Ave S	City of Industry
Athens Services (Former A-1 Ornamental Iron, Inc. Facility)	SL603798533	Completed - Case Closed	15019 Salt Lake Ave.	City of Industry
Barr Lumber Co., Inc.	T0603705036	Completed - Case Closed	127 California Ave N	Industry
Benchmark Technology	SL603798515	Open - Remediation	200 Turnbull Canyon Rd.	City of Industry
Benchmark Technology Facility (Former)	SL0002040124	Open - Assessment & Interim Remedial Action	425 S. Turnbull Canyon Road	City of Industry
Bob's Masonry	T0603704331	Completed - Case Closed	225 Turnbull Canyon Rd S	Hacienda Heights
Bunzl Foodservice	T0603705068	Completed - Case Closed	145 Willow Ave	Industry
Cacique Inc.	T0603700134	Completed - Case Closed	14940 Proctor Ave E	Industry
Cacique, Inc.	SL603798540	Open - Site Assessment	14923 Proctor Ave.	City of Industry
Calmar, Inc.	SL603798525	Completed - Case Closed	333 Turnbull Canyon Rd.	City of Industry
Chemstar Lime Company	T0603703935	Completed - Case Closed	14931 Salt Lake Ave	Industry
Chevron #9-1787	T0603704663	Completed - Case Closed	603 Sunset Ave N	La Puente
Conocophillips Company #2705695	T10000001295	Completed - Case Closed	551 Sunset Ave N	La Puente
Constar Plastics, Inc.	SL603798537	Open - Site Assessment	14515 Don Julian Rd.	City of Industry
Custom Commercial Wheel Co.	SL603798526	Open - Inactive	14278 E. Valley Blvd.	City of Industry
CVS Inc	T0603782855	Completed - Case Closed	848 N. Sunset	La Puente
Diversey Corporation (Former)	SL603792706	Open - Site Assessment	15010 E. Don Julian Road	City of Industry
E W Smith Chemical Company	T0603700123	Completed - Case Closed	15020 Proctor Ave E	Industry
Edna Inc.	T0603703982	Completed - Case Closed	15006 Nelson Ave	Industry

Site Name	Global ID	Status	Address	City
Eduardo Schneider	T10000000672	Completed - Case Closed	241 California Ave. N.	Industry
Engineered Storage Systems	T0603704317	Completed - Case Closed	15034 Proctor Ave E	Industry
Engineered Storage Systems Inc.	T10000005571	Completed - Case Closed	15034 E. Proctor Avenue	City of Industry
Former Bos Glass, Inc.	SL603792625	Completed - Case Closed	15323 Proctor	City of Industry
Former Exide Battery Corp	SL603798556	Open - Inactive	415 S. Seventh St.	City of Industry
Former Forbes Industries	SL603798541	Open - Inactive	15250 Stafford St.	City of Industry
Former Packaging Corporation	SL0603776483	Completed - Case Closed - Land Use Restrictions	14505 Proctor Ave.	City of Industry
Former Techalloy Facility	T10000004390	Open - Remediation	15100 Nelson Avenue	City of Industry
Fresh Start Bakery	T0603703803	Completed - Case Closed	649 007th Ave S	Industry
Goe Engineering Co., Inc.	SL603798518	Open - Assessment & Interim Remedial Action	250 S. 9th Avenue	City of Industry
Gps Industries	SL603798549	Completed - Case Closed	13280 Amar Rd.	City of Industry
Hacienda La Puente School Dist	T10000000187	Open - Site Assessment	350 Hacienda Blvd N	La Puente
Haddick's Towing Inc	T0603703894	Completed - Case Closed	15120 Valley Blvd E	Industry
Hansen Foods Inc	T0603700130	Completed - Case Closed	14380 Nelson Ave	Industry
Hexcel - Mci Site,Former	SL603792633	Completed - Case Closed	140 Orange Ave, North	City of Industry
Hysol Electronics	T0603700125	Completed - Case Closed	15051 Don Julian Rd E	Industry
Jensen Kelly Corporation	T0603738344	Completed - Case Closed	15268 E Proctor Avenue	Industry
La Co Sheriff Station	T0603702632	Completed - Case Closed	150 Hudson Ave N	Industry
La Puente Auto Electric	T0603764924	Completed - Case Closed	908 N Sunset Ave	La Puente
Lane Stanton Vanace	T0603705248	Completed - Case Closed	14710 Nelson Ave	Industry
Lane Stanton Vance Lumber Company	T0603711765	Completed - Case Closed	14710 Nelson Ave S	City of Industry
Macklanburg-Duncan	T0603700207	Completed - Case Closed	15257 Proctor Ave	Industry
Maclin Company	SL603798527	Completed - Case Closed	420 S. Sixth Ave.	City of Industry
Mercury Hardwood	T0603704229	Completed - Case Closed	14166 Nelson Ave E	La Puente

Site Name	Global ID	Status	Address	City
Mission Motor Lines	T0603704416	Completed - Case Closed	150 009th Ave S	La Puente
Oakite Products, Inc.	SL603798528	Completed - Case Closed	544 S. Sixth Ave.	City of Industry
Physicians Formula Cosmetic	SL603798534	Open - Assessment & Interim Remedial Action	230 S. 9th Avenue	City of Industry
Plant B24	WDR100000824	Historical - Wdr	14650 Nelson	City of Industry
Puente Ready Mix	T0603703867	Completed - Case Closed	209 California Ave N	Industry
Rankin Family Trust	T0603704053	Completed - Case Closed	15150 Nelson Ave	Industry
Rodco Company	T0603704378	Completed - Case Closed	14911 Don Julian Rd E	Industry
Sunset Fireplace Fixtures, Inc	SL603798529	Completed - Case Closed	14940 E. Don Julian Rd.	City of Industry
Sunset Fuel Stop (Former)	T0603705536	Completed - Case Closed	322 Sunset Ave N	La Puente
Target Service Station (Former)	T0603765571	Open - Eligible For Closure	861 N Sunset Ave	La Puente
Techalloy Company Inc	T0603702917	Completed - Case Closed	15100 Nelson Ave E	Industry
Texaco Service Station	T0603702836	Completed - Case Closed	14562 Valley Blvd E	La Puente
Texaco Station (Former)	T0603737651	Completed - Case Closed	14562 Valley Blvd.	La Puente
Trio Metal Stamping Inc	SL603798535	Completed - Case Closed	15318 E. Proctor Ave.	City of Industry
Universal Paint Corp	T0603700127	Open - Inactive	111 Hudson Ave	Industry
Unocal #5786	T0603703022	Completed - Case Closed	551 Sunset Ave	La Puente
Western American Forest	T0603704063	Completed - Case Closed	200 Willow Ave N	Industry
Western Gear Corporation (Former)	T0603700128	Completed - Case Closed	14724 Proctor Ave E	Industry
Wilsey Foods, Inc.	T0603703849	Completed - Case Closed	14970 Don Julian Rd E	Industry
Wilshire Disposal	T0603705252	Completed - Case Closed	15045 Salt Lake Ave	Industry

Source: SWRCB 2015; DTSC 2015

Phase I Report

A Phase I Environmental Site Assessment report was prepared for the project site in 2015 by REM (**Appendix D**). The report describes the project site's history and makes findings regarding Recognized Environmental Concerns (RECs) and Potential Environmental Concerns (PECs). The environmental concerns are potential issues that would be taken into consideration during project construction and operation, and would be mitigated as necessary.

The following RECs were identified in the Phase I report:

- Based on a review of aerial photographs, the subject property was historically used for agricultural purposes in the 1940s and 1950s. There is potential that agricultural chemicals, such as pesticides, herbicides, and fertilizers, were used on-site, and that the project site has been impacted by the use of such agricultural chemicals. According to REM's investigation, pesticide concentrations detected in soil samples pose no significant risk.

The Phase I report identified the following other environmental considerations:

- Based on the conducted government records search, there are no open Leaking Underground Storage Tank/Spills sites or other sites identified as exhibiting potentially environmental concerns within the vicinity (< 0.25 mile) of the subject site. However, the subject site is situated near the City of Industry area of the San Gabriel Groundwater Basin which has been classified by US EPA as National Priority List Cleanup site.

- Custom Mills Inc., Portor Hardwood Lumber Co., Scott-Caudill Lumber Co. (all former subject site occupants; see above) were under the investigation by the Regional Water Quality Control Board (RWQCB) of Los Angeles WTP with respective files No. 102.0189, 102.0198, and 102.0231. However, the status of the said subject site files are "historical" (not "active"), indicating the RWQCB-Los Angeles WIP has completed investigation on these formerly on-site business and decided activities of these businesses would not significantly contribute to the identified regional groundwater contamination (mainly by tetrachloroethylene and trichloroethylene). This assessment identified that the 1990 UST removal case for the 14624 Nelson Avenue address remains with "open" status due to the responsible party not responding to the County of Los Angeles Department of Public Works's December 31, 1991, letter requiring additional clarification/signature/statement for the UST closure report. Even though more than 20 years have lapsed since the letter issuance date, the Department of Public Works may require additional subsurface investigations around the former ste area (REM 2015).

DISCUSSION OF IMPACTS

a, b) *Less Than Significant Impact with Mitigation Incorporated*. These two significance thresholds focus on the exposure of people to hazards either existing or created by the project; therefore, they are discussed together. The project would construct two warehouses on vacant land.

Construction

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 US EPA, DTSC, California Occupational Safety & Health Administration (Cal-OSHA), Caltrans, and 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. 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. Therefore, project impacts due to construction activities would be less than significant.

Previous Contamination

Based on available records, in December 1990, one 6,000-gallon gasoline UST located to the west of the project site for the 14624 Nelson Avenue address and its associated piping/dispenser were removed from the site by H.B Cover, Inc. Post-UST removal soil sampling and analysis was conducted under the supervision of the Los Angeles County Department of Public Works inspector by Connor Environmental Management, Inc.; it did not reveal significant evidence of soil contamination.

In 2012, the DTSC site hazardous waste disposal records summary showed that 2 tons of asbestos-containing waste (apparently derived from demolition of previously existing on-site structures) was disposed of from the site. There is no longer a threat of asbestos-containing wastes on the project site because no structures are currently located on the site.

REM's site inspection did not reveal any evidence of on-site or off-site spills, leakages, or staining significant enough to pose immediate environmental concern onto the subject property. No significantly stained catch basins, drip pads, or sumps were observed. There were no major spills around surface drains, pipes, gutters, spouts, or tubes, if any, at the time of site investigation (REM 2015). However, there could be unknown contamination uncovered during construction at the site from prior UST removal. This could be a potentially significant impact. If soil contamination is detected, steps would be taken to clean the soil as determined by appropriate regulatory agencies and as outlined in **MM HAZ-1** below. With implementation of mitigation measure **MM HAZ-1,** this impact would be less than significant.

Project Operation

Although the tenants and activities of the new industrial warehouse 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 (discussed above) are required to file a Business Plan with the LACFD, 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. Implementation of existing regulations for the 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 (LA County 2016).

The use, storage, and disposal of hazardous materials by the project would comply with existing regulations of several agencies, as described above. Project construction and operational workers would be trained on the proper use, storage, and disposal of hazardous materials. With these regulations in place, impacts would be less than significant.

c) *Less Than Significant Impact*. The project site is not located within 0.25 mile of a public school. Two schools are located within approximately 0.5 mile of the project site: Nelson Elementary School is 0.4 mile to the east and Temple Elementary School is 0.5 mile to the northeast. As discussed above, all hazardous materials would be handled in compliance with city, county, state, and federal regulation. Therefore, the project would have a less than significant impact on schools due to the release of hazardous materials.

d) *Less Than Significant Impact*. The project site is not included on the list of hazardous waste sites (Cortese List) compiled by the DTSC pursuant to Government Code Section 65962.5. The Phase I report (**Appendix D**) shows that in 2012, the City of Industry disposed of 2 tons of asbestos-containing wastes with no spills or violations. Further, the Phase I report by REM found that there are no open Leaking Underground Storage Tank spill sites within 0.25 miles of the project site. As such and with application of federal, state, and local regulations, the project would have a less than significant impact.

e,f) *No Impact*. The project site is more than 2 miles from any public or private airport. The nearest public airport is El Monte Airport, over 6 miles northwest of the site (Airnav 2016). The project would have no impact.

g) *Less Than Significant Impact*. 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 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 in City and LACFD regulations necessary to accommodate local emergency services (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. 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 the impact would be less than significant.

h) *No Impact*. The project site is located in an area identified as having little or no fire threat (Cal Fire 2007). The project site is located in an urbanized area and would have no impact due to wildfires.

Mitigation Measures

MM HAZ-1 If hazardous materials are encountered during construction or accidentally released as a result of construction activities, the following procedures shall be implemented:

- The contractor shall stop all work within 100 feet of any discovered contamination or release.
- A certified hazardous materials manager shall determine the scope and immediacy of the problem and recommend remediation measures.
- The certified hazardous materials manager and the contractor shall coordinate with the responsible agencies (for instance, Department of Toxic Substances Control and/or the US Environmental Protection Agency) within 10 days of the determination.
- The contractor shall commence the necessary investigation and remediation activities to resolve the situation before continuing construction work.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.9 HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
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 substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
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 that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

SETTING

The nearest drainage channel to the project site is the San Jose Creek Channel, located approximately 3 miles east of the project site and running in an east–west orientation.

The project site is located 1 mile north of the Puente Subbasin of the San Gabriel Groundwater Basin. Groundwater levels in the Puente Subbasin of the San Gabriel Groundwater Basin are managed by the Puente Basin Watermaster to avoid groundwater withdrawals exceeding recharges. The site has a shallow depth to groundwater (approximately 30 feet below ground surface).

Groundwater Resources and Quality

The project site is located above the Puente Subbasin of the San Gabriel Groundwater Basin. Groundwater levels in the Puente Subbasin of the San Gabriel Groundwater Basin are managed by the Puente Basin Watermaster to avoid groundwater withdrawals exceeding recharges. Groundwater was not encountered at the project site at a depth of 50 feet below ground surface (Norcal 2015).

Drainage

Based on testing by Norcal Engineering, the subsurface soils encountered on-site require a drainage disposal system that utilizes an infiltration rate of 1 inch per hour. All systems must meet the latest city and/or county specifications and RWQCB-Los Angeles requirements.

Flooding

Federal Emergency Management Agency (FEMA) Flood Map FIRM Panel 06013C0279F shows the project site. According to this map, the project site is located in Zone X unshaded (FEMA 2008).

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. Impacts to water quality could potentially occur during the construction and operational phases of the project.

Construction

Construction activities would include grading, excavation, and vegetation removal, which would disturb and expose soils to water erosion, potentially increasing the amount of silt and debris entering downstream waterways. In addition, refueling and parking of construction equipment and other vehicles on-site could result in oil, grease, and other related pollutant leaks and spills that could enter runoff. However, the project applicant would be required to prepare and comply with an SWPPP, which would include pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstrate compliance with all applicable local and regional erosion and sediment control standards, identify responsible parties, and include a detailed construction timeline. The SWPPP must also include BMPs to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges. The project applicant would also be required to adhere to applicable provisions outlined in Chapter 13.16 (Stormwater and Urban Runoff Pollution Control) of the City of Industry Municipal Code. For example, Section 13.16 (Stormwater and Urban Runoff Pollution Control) contains construction activity stormwater requirements to preserve water quality and prevent erosion in the city.

Examples of typical construction BMPs include using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment

to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the drainage system or receiving waters. BMPs are recognized as effective methods to prevent or minimize the potential releases of pollutants into drainages, surface water, or groundwater. Strict compliance with the stormwater pollution prevention plan, coupled with the use of appropriate BMPs, would reduce potential water quality impacts during construction activities to less than significant.

Operation

Project operation could also contribute pollutants, such as oil, grease, and debris, to stormwater drainage flowing over the parking areas and entering the city's stormwater system. The project would connect to the city's existing storm drainage and sewer facilities. Requirements for waste discharges potentially affecting stormwater from project operations are set forth in Chapter 13.16 (Stormwater and Urban Runoff Pollution Control) of the City of Industry Municipal Code. Stormwater control requirements outlined in the City's urban stormwater mitigation plan include minimizing stormwater pollutants and limiting peak post-project stormwater runoff rates to no greater than predevelopment rates where increased runoff could increase downstream erosion. Furthermore, as shown in **Figure 3.8** in the project description, the two infiltration basins would capture up to 85 percent of the first 0.25 inches of rain, reducing the potential for pollutants to enter the storm drain system.

Proper maintenance of stormwater control systems would be governed by the City's municipal code. 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 stormwater runoff. As such, the project would have a less than significant impact associated with wastewater or stormwater discharge.

b) *Less Than Significant Impact*. The Rowland Water District (RWD) projects that the service area would use 1,200 acre-feet of water per year from the Puente Subbasin of the San Gabriel Basin in 2020 (HDR 2011). The groundwater would account for about 6 percent of the projected water supply in 2020. The project's incremental additional water demand would not significantly impact groundwater supplies or levels.

The project would develop the site with 43 percent impermeable surfaces. However, the project site is not identified as a groundwater recharge area. Therefore, the construction and operation of the warehouse buildings would have little impact on local groundwater recharge. The project's 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. Therefore, the project would have a less than significant impact.

c) *Less Than Significant Impact*. At project completion, the entire site would be developed with two industrial buildings, pavement, and landscaping. There would be little opportunity for site drainage to result in substantial on-site or off-site erosion or siltation because there would be a decrease in exposed surfaces susceptible to erosion. 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 such, the project would not result in erosion that would enter a waterway near the site. This impact would be less than significant.

d) *Less Than Significant Impact*. See Issue c). The project would alter the existing drainage patterns on the project site and formalize the drainage system through the implementation of a stormwater management system. Runoff would be directed to storm drain lines along the south perimeter of building one and north, west, and south perimeter of building two, as outlined in **Figure 3.8**. The two proposed infiltration basins would capture up to 85 percent of the first 0.25 inches of rain. This would further reduce the chances of on-site or off-site flooding. Therefore, the proposed project would not result in on- or off-site flooding, and this impact would be less than significant.

e) *Less Than Significant Impact*. See Issues a) and d). Project site runoff would be collected and conveyed to the city's storm drainage system via a proposed on-site drainage system. The project would be required to comply with the development runoff requirements of the City's NPDES permit, including the management of any increases in runoff volume and flows. Therefore, the project would not increase drainage flows entering the city's drainage system and would not exceed its capacity. The project would have a less than significant impact.

f) *Less Than Significant Impact*. See Issue a).

g) *Less Than Significant Impact*. The project site is in Zone X, which FEMA describes as an "area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level." Because the project site is located in Zone X unshaded, the potential to be impacted by flooding is minimal. Therefore, the project would have a less than significant impact.

h) *No Impact*. See Issue g). The proposed project would not place any structures within a 100-year flood hazard area.

i) *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 (LA County 2014). Therefore, the project would have no impact.

j) *Less Than Significant Impact*. The project is not located within the tsunami inundation or seiche inundation areas (LA County 2014). As discussed in subsection 4.6, the project site is over 20 miles inland from the Pacific Ocean and lies at an approximate elevation of 380 feet above mean sea level; thus, impacts from tsunamis are considered negligible and no impact would occur. As stated previously, the project site is not in a mapped landslide hazard area and there are no substantial slopes on or in the immediate vicinity of the site with the potential to result in mudflow impacts. As such, the project would have less than significant impacts due to tsunami, seiche, or mudflow.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.10 LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

SETTING

The basis for land use and planning in the city is the General Plan, adopted in June 2014. The General Plan Land Use Element provides the primary guidance on issues related to land use, land use intensity, and design. Title 17 of the Industry Municipal Code establishes zoning districts in the city and specifies allowable uses and development standards for each district. The existing zoning is Industrial (I), and the surrounding zoning designation is Industrial with the exception of a small plot of Institutional-zoned land adjacent on the site's northwest side. Industrial zoning allows for certain mixtures of commercial and industrial uses of property that are compatible with surrounding industrial uses.

According to the City's General Plan Land Use Map, the existing land use designation for the site is "Employment." Employment land use permits a variety of uses such as banks, car washes, warehouses, cleaners, coffee shops, off-street parking, delicatessen/fast food restaurants, employment agencies, hospitals, gas stations, offices, printing/publishing, research laboratories, and retail stores.

DISCUSSION OF IMPACTS

a) *No Impact*. The project site is in an existing industrial, developed area of the city and would be consistent with the City's zoning code and General Plan land use designation. Urban development such as established commercial and industrial businesses, including similar warehouse buildings, surround the site. The project would be compatible with existing development. 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 community. Therefore, no impact would occur.

b) *No Impact*. The project would be consistent with the General Plan and the zoning designation. Project implementation would not change existing land uses or require a change of the existing land use designations or regul4.4ations. Because the project would not conflict with any applicable land use plan, policy, or regulation, no impact would occur.

c) *Less than Significant Impact*. See Issue f) in subsection **4.4**, Biological Resources.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.11 MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

According to the US Geological Survey Mineral Resources data, no mineral resources are located in the City of Industry. Further, there are no regulated mine facilities and no known mineral resources in the city (USGS 2015).

DISCUSSION OF IMPACTS

a, b) *No Impact*. According to California Geologic Survey, there are no lands in the city designated by the State Mining and Geology Board as being of regional or statewide significance (City of Industry 2014a). Therefore, the project would have no impact.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.12 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 of applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

The greatest noise exposure at the project site emanates from traffic traversing Nelson Avenue. The site is also impacted by train-related noise from the Union Pacific railroad tracks located south of the site. According to Figure 5.10-2, Existing Noise Contours, in the City's (2014b) General Plan Update EIR, the entirety of the site is within the 60 and 65 Community Noise Equivalent Level (CNEL) noise contours.

The project site is not in an area covered by an airport land use plan or within 2 miles of a public airport or heliport. The project is well beyond any aviation-related 60 dBA CNEL zone.

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear (A-weighted

decibels or dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted for understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10 dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source.

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

The majority of residential uses that would potentially be impacted by the proposed project are located to the northeast of the project site, in the City of La Puente. 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 City of La Puente Municipal Code. 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 identified below will be used herein as significance thresholds for noise.

Industry General Plan

The City of Industry's Safety Element of its General Plan (2014a) discusses existing noise sources and noise assessment and modeling strategies. The stated goal is "an environment where noise does not adversely affect sensitive land uses," which is supported by Safety Element Policies S6-1 through S6-3. The City has adopted the State Noise Compatibility Guidelines, depicted as Table 4 in the Safety Element, to guide development and compatible land uses. General Plan land use compatibility standards are intended to help ensure that incompatible land uses are not located near one another. For noise compatibility in particular, the acceptability of proposed future developments is primarily determined by the future noise level anticipated on a site and the type of existing or proposed land use on that site. In the project area, transportation-related noise is the

primary concern; therefore, the analysis for land use compatibility addresses traffic noise impacts resulting from the proposed project.

The project site is bounded by industrial buildings to the east and west, single-family residential units, a church, and Sunset Christian School to the northeast, and New Montessori School to the southeast. As identified in Table 4 of the City's Safety Element, the normally acceptable ambient noise environment for single-family residential ranges from 50 to 60 dBA CNEL (a 24-hour average noise measurement with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime). The normally acceptable ambient noise environment for schools ranges from 50 to 70 dBA CNEL, and for industrial land uses the normally acceptable ambient noise environment ranges from 50 to 75 dBA CNEL.

For purposes of this analysis, a substantial increase in noise levels is defined as an increase of 5.0 dB, or greater, where the noise levels, without project implementation, are within the General Plan's "normally acceptable" noise standard. Where the noise level, without project implementation, exceeds applicable noise standards, an increase of 3.0 dB, or greater, would be considered a substantial increase.

Industry Municipal Code

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 Nuisances, of the City's Municipal Code. However, the City has not adopted long-term noise and vibration criteria for prescribing maximum permissible noise levels. For CEQA analyses and corresponding mitigation recommendations, the City typically defers to the County of Los Angeles's Noise Ordinance.

Noise 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.

The County applies the noise control ordinance standards summarized in **Table 4.12-1**, to non-transportation fans, blowers, pumps, turbines, saws, engines, and other similar machinery. These standards do not gauge the compatibility of developments in the noise environment, but they do include 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 4.12-1** apply to all property in a designated noise zone unless otherwise indicated.

TABLE 4.12-1
LOS ANGELES COUNTY EXTERIOR NOISE STANDARDS FOR NON-TRANSPORTATION SOURCES

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 County Code, Section 12.08.390

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 5 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 L50 noise level shown above plus 20dB.*

Construction Noise Standards

County standards prohibit the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between the weekday hours of 7:00 PM and 7:00 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 levels from mobile equipment (non-scheduled, intermittent, short-term operations for less than 30 days) as summarized in **Table 4.12-2**.

TABLE 4.12-2
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 County Code, Section 12.08.440.

Maximum noise levels from stationary equipment (repetitively scheduled and relatively long-term operations of ten days or more) are summarized in **Table 4.12-3**.

TABLE 4.12-3
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 County Code, Section 12.08.440.

IMPACT DISCUSSION

a) *Less Than Significant Impact With Mitigation Incorporated.*

Short Term

Temporary increases in ambient noise levels as a result of the project would predominantly be associated with construction activities. Construction activities would include site preparation, grading, construction of buildings, paving, and architectural coating. Such activities would require graders, scrapers, and tractors during site preparation; graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during building construction; cement and mortar mixers, pavers, rollers, paving equipment, and tractors during paving; and air compressors during architectural coating. During these activities, exterior noise levels could affect sensitive receptors in the vicinity of the construction site. The project site is bounded by industrial buildings to the east and west, single-family residential units, a church, and Sunset Christian School to the northeast, and New Montessori School to the southeast. The nearest sensitive receptors are the single-family residential communities to the northeast across Nelson Avenue approximately 18 meters (60 feet) from the project site. Construction activities would occur throughout the project site and would not be concentrated at the point closest to the sensitive receptors.

High groundborne noise levels and other miscellaneous noise levels can be created by the operation of heavy-duty trucks, backhoes, dozers, excavators, scrapers, and other heavy-duty construction equipment. **Table 4.12-4** indicates the anticipated noise levels of construction equipment. The average noise levels presented in **Table 4.12-4** are based on the quantity, type, and acoustical use factor for each type of equipment that is anticipated to be used.

TABLE 4.12-4
MAXIMUM NOISE LEVELS GENERATED BY CONSTRUCTION EQUIPMENT

Type of Equipment	Acoustical Use Factor[1] (percent)	Maximum Noise (L_{max}) at 50 Feet (dBA)
Blasting	1	94
Crane	16	81
Dozer	40	82
Excavator	40	81
Generator	50	81
Grader	40	85
Other Equipment (greater than five horse power)	50	85
Paver	50	77
Roller	20	80
Tractor	40	84
Truck	40	75
Truck	40	80
Welder	40	73

Source: FHWA 2006

[1] Acoustical use factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Short-term noise levels related to project construction would temporarily increase noise levels in the project vicinity. Site preparation activities, which include excavation and grading, tend to generate the highest noise levels because earthmoving equipment is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, draglines, front loaders, and earthmoving and compacting equipment, which includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings.

As previously described, existing noise standards prohibit the operation of any tools or equipment used in construction that creates a noise disturbance across a residential or commercial real-property line. In the case of the proposed project construction, a noise disturbance is identified as 75 dBA generated from mobile construction equipment and 60 dBA generated from stationary construction equipment during the daytime hours of 7:00 AM to 8:00 PM on weekdays and Saturdays. During the nighttime hours of 8:00 PM to 7:00 AM on weekdays and during all hours of weekends and holidays, a noise disturbance is identified as 60 dBA generated from mobile construction equipment and 50 dBA generated from stationary construction equipment. The anticipated short-term construction noise levels generated during grading, paving, building, and coating activities are presented in **Table 4.12-5**.

TABLE 4.12-5
CONSTRUCTION AVERAGE (DBA) NOISE LEVELS BY RECEPTOR DISTANCE AND CONSTRUCTION PHASE - UNMITIGATED

Description	Estimated Exterior Construction Noise Level (Leq)	Daytime Construction Noise Standard	Nighttime Construction Noise Standard	Exceeds Daytime Standards?	Exceeds Nighttime Standards?
Site Preparation (mobile equipment)	81.7	75	60	**Yes**	**Yes**
Grading (mobile equipment)	82.8	75	60	**Yes**	**Yes**
Building Construction (mobile equipment)	81.3	75	60	**Yes**	**Yes**
Building Construction (stationary equipment)	76.0	60	50	**Yes**	**Yes**
Paving (mobile equipment)	80.7	75	60	**Yes**	**Yes**
Paving (stationary equipment)	73.2	60	50	**Yes**	**Yes**
Painting (stationary equipment)	72.1	60	50	**Yes**	**Yes**

*Source: FHWA 2006 (see **Appendix E**).*

Notes: Construction equipment used during each phase derived from project applicant.

As shown, noise construction standards would be exceeded during all construction phases, resulting in the need for mitigation to reduce construction-related noise impacts to a less than significant level. Noise source control is the most effective method of controlling construction noise. Source controls, which limit noise, are the easiest to oversee on a construction project. Mitigation at the source reduces the problem everywhere, not just along one single path or for one receiver. Noise path controls are the second method in controlling noise. Barriers or enclosures can substantially reduce the nuisance effect in some cases. Path control measures include moving equipment farther away from the receiver; enclosing especially noisy activities or stationary equipment; erecting noise enclosures, barriers, or curtains; and using landscaping as a shield and dissipater. Noise barriers or enclosures can provide a sound reduction of 8 dBA (FHWA 2006). To be effective, a noise enclosure/barrier must be free of degrading holes or gaps.

Because City construction-related noise standards would be surpassed, the below mitigation measures are required to reduce this impact to a less than significant level.

The anticipated short-term construction noise levels generated during demolition, grading, paving, building, and coating activities with the imposition of these mitigation measures are presented in **Table 4.12-6**.

TABLE 4.12-6
CONSTRUCTION AVERAGE (DBA) NOISE LEVELS BY RECEPTOR DISTANCE AND CONSTRUCTION PHASE – MITIGATED

Description	Estimated Exterior Construction Noise Level (Leq)	Daytime Construction Noise Standard	Nighttime Construction Noise Standard	Exceeds Daytime Standards?	Exceeds Nighttime Standards?
Site Preparation (mobile equipment)	73.7	75	60	No	Yes
Grading (mobile equipment)	74.8	75	60	No	Yes
Building Construction (mobile equipment)	73.3	75	60	No	Yes
Building Construction (stationary equipment)	57.6	60	50	No	Yes
Paving (mobile equipment)	72.7	75	60	No	Yes
Paving (stationary equipment)	54.8	60	50	No	Yes
Painting (stationary equipment)	53.6	60	50	No	Yes

*Source: FHWA 2006 (see **Appendix E**).*

Notes: Construction equipment used during each phase derived from project applicant.

As shown, mitigation measures **MM NOI-1** and **MM NOI-2** would reduce construction-generated noise to levels below the City noise standards. Therefore, construction noise would be less than significant with mitigation incorporated.

Long Term

On-Site Operational Noise

On-site noise 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. The proposed project would result in noise from on-site activities such as heating, ventilation, and air conditioning (HVAC) units and other mechanical equipment, slow-moving trucks, pedestrian activity, and parking activities.

As previously described, Section 12.08.390 of the Los Angeles County Municipal Code states that if the existing ambient noise levels exceed exterior noise standards, then the ambient noise level becomes the noise threshold for a proposed project. According to the City General Plan Environmental Impact Report (2014b), the project area generally experiences ambient noise levels of approximately 78.5 dBA. This ambient noise level experienced in the project area under existing conditions exceeds exterior noise standards. Therefore, this noise level (78.5 dBA) represents the noise threshold for the proposed project's on-site operational noise generation. This value is subtracted by 5 dB (73.5 dBA) for the nighttime (10:00 PM to 7:00 AM) threshold.

Project Mechanical Equipment

Typically, mechanical equipment noise is 55 dBA at 50 feet from the source. This level of stationary source noise is acceptable per the noise standards influencing the project. Furthermore, project HVAC units would be included on the roof of the structure, likely located toward the center of the structure and behind a parapet, making the nearest

homes to the HVAC units greater than 50 feet away. On-site HVAC units and associated equipment attached to project structures 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.

Loading Bay Operations

On-site truck operations would be considered a stationary noise source subject to the County's noise regulation limitations. The end user of the proposed project is currently unknown. Operations could potentially be conducted 24 hours a day or solely during daytime business hours (here assumed to be 7:00 AM to 6:00 PM). Both scenarios will be evaluated in this analysis.

Noise measurements at 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 as shown in **Table 4.12-7**.

TABLE 4.12-7
SOURCE NOISE LEVELS FOR COMPLETE TRUCKING OPERATIONS AT REFERENCE DISTANCE OF 50 FEET

L_{eq}[1]	L_{50}	L_{25}	$L_{8.3}$	$L_{1.6}$	$L_0 = L_{max}$
73 dBA	70 dBA	73 dBA	76 dBA	80 dBA	83 dBA

Source: City of Industry 2016

Notes: Source noise levels for trucking operations include truck approach, maneuvering, backing, warning beeps, trailer coupling/de-coupling, idling, air brake discharge, and pull away.

For purposes of this impact assessment, the proposed project is projected to accept up to 423 trucks per day combined and would experience a peak of 39 truck trips during the peak hour of traffic (Michael Baker International 2016a). By state law, diesel trucks are prohibited from idling for more than 5 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 3 to 5 minutes. Thus, the combination of maneuvering and parking and idling near or in the project's loading bays would take a maximum of 10 minutes per truck trip.

For the purposes of this analysis, distances to receptors were measured from the center of the project site to represent the approximate location of the loading bay operations. The nearest noise-sensitive receptors (single-family residences) are approximately 550 feet from the center of the project site. These residences would experience approximately 10 dB of sound reduction due to distance attenuation (considering an attenuation rate of 3 dB per doubling distance as described above) and approximately 8 dB of attenuation due to intervening buildings (FHWA 2006). Accounting for the sound reductions, noise attenuation will be approximately 18 dBA. Therefore, the noise levels experienced at the nearest sensitive receptors from on-site loading bay activities would be 55 dBA (73 dBA–18 dBA).

As previously described, Section 12.08.390 of the Los Angeles County Municipal Code states that if the existing ambient noise levels exceed exterior noise standards, then the ambient noise level becomes the noise threshold for a proposed project. According to the City General Plan Environmental Impact Report (2014b), the project area generally experiences ambient noise levels of approximately 78.5 dBA. This value is subtracted by 5 dB (73.5 dBA) for the nighttime (10:00 PM to 7:00 AM) threshold. Therefore, noise generated by loading bay activities would be less than significant.

Off-Site Operational Noise (Traffic)

Development of the proposed project would cause increases in traffic along local roadways.

The project site is bounded by industrial buildings to the east and west, single-family residential units, a church, and Sunset Christian School to the northeast, and New Montessori School to the southeast. As identified in the City Safety Element, the normally acceptable ambient noise environment for single-family residential ranges from 50 to 60 dBA CNEL. The normally acceptable ambient noise environment for schools ranges from 50 to 70 dBA CNEL, and for industrial land uses the normally acceptable ambient noise environment ranges from 50 to 75 dBA CNEL. For purposes of this analysis, noise level impacts are defined as an increase of 5.0 dB, or greater, where the noise levels, without project implementation, are within the General Plan's "normally acceptable" noise standard. Where the noise level, without project implementation, exceeds applicable noise standards, an increase of 3.0 dB, or greater, would be considered a substantial increase. Traffic noise levels throughout the area surrounding the project site were modeled based on the traffic volumes identified by Michael Baker International (2016a) to determine the noise level contours along project area roadways (see **Appendix E**). **Table 4.12-8** compares the calculated roadway noise levels under existing traffic levels and the development potential allowed under the proposed project.

TABLE 4.12-8
SUMMARY OF MODELED TRAFFIC NOISE LEVEL CHANGES IN THE PROJECT VICINITY

Roadway Segment	CNEL at 100 Feet from Centerline of Roadway		Increase	Threshold	Impact	Affected Land Use
	Without Project	With Project				
Sunset Avenue / 7th Avenue						
North of Temple Avenue	69.4	69.7	0.3	3.0	**No**	Residential
Temple Avenue to Nelson Avenue	71.4	71.7	0.3	5.0	**No**	Residential/School
Nelson Avenue to Valley Boulevard	71.5	71.8	0.3	5.0	**No**	Industrial
Valley Boulevard to Proctor Avenue	68.4	68.9	0.5	5.0	**No**	Industrial
South of Proctor Avenue	65.0	65.6	0.6	5.0	**No**	Industrial
Nelson Avenue						
West of Sunset Avenue	58.4	58.6	0.2	5.0	**No**	Residential
Sunset Avenue to Driveway #1	61.9	63.1	1.2	3.0	**No**	Residential
Driveway #1 to Driveway #2	62.2	63.2	1.0	3.0	**No**	Residential
Driveway #2 to Driveway #3	61.9	62.7	0.8	3.0	**No**	Residential

Roadway Segment	CNEL at 100 Feet from Centerline of Roadway		Increase	Threshold	Impact	Affected Land Use
	Without Project	With Project				
Driveway #3 to Driveway #4	61.8	62.5	0.7	3.0	**No**	Residential
Driveway #4 to California Avenue	66.4	66.8	0.4	3.0	**No**	Residential/School
East of California Avenue	67.7	67.9	0.2	3.0	**No**	Residential/School
Valley Boulevard						
West of Orange Avenue	67.5	67.9	0.4	5.0	**No**	Industrial
Orange Avenue to Sunset Avenue	70.9	71.2	0.3	5.0	**No**	Industrial
Sunset Avenue to California Avenue	71.0	71.3	0.3	5.0	**No**	Industrial
East of California Avenue	69.0	69.1	0.1	5.0	**No**	Industrial
California Avenue						
North of Nelson Avenue	63.1	63.2	0.1	3.0	**No**	Residential/School
Nelson Avenue to Valley Boulevard	48.0	48.0	0.0	3.0	**No**	Residential/School

Notes: CNEL = Community Noise Equivalent Level; dB = A-weighted decibels

*Sources: Traffic Impact Analysis, see **Appendix F**; FHWA roadway noise prediction model (FHWA-RD-77-108), see **Appendix E**.*

As shown in **Table 4.12-8**, predicted increases in traffic noise levels associated with the project would be less than significant.

As demonstrated, short-term, construction-generated noise would be reduced to levels under significance standards with the implementation of mitigation measures **MM NOI-1** and **MM NOI-2.** Long-term operational noise would be within the applicable noise standards. For these reasons, impacts would be **less than significant**.

b) *Less than Significant*. Project construction would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. This impact discussion utilizes Caltrans's (2002) recommended standard of 0.2 inches per second (in/sec) peak particle velocity with respect to the prevention of structural damage for normal buildings. **Table 4.12-9** displays vibration levels for typical construction equipment.

TABLE 4.12-9
TYPICAL CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Equipment	Peak Particle Velocity at 25 Feet (inches/second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Rock Breaker	0.059
Jackhammer	0.035
Small Bulldozer/Tractors	0.003

Source: FTA 2006; Caltrans 2004

The nearest structure to the project site is adjacent to the construction site boundary. However, it is acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest structure. Based on the vibration levels presented in **Table 4.12-9**, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.089 in/sec peak particle velocity at 25 feet. Therefore, the use of virtually any type of construction equipment would most likely not result in a groundborne vibration velocity level above 0.2 in/sec and predicted vibration levels at the nearest off-site structures would not exceed recommended criteria. Additionally, this would be a temporary impact and would cease completely when construction ends. Once operational, the project would not be a source of groundborne vibration. Impacts would be less than significant.

c) *Less Than Significant Impact*. See Issue a). Long-term noise generated by project management equipment, loading bay activities and off-site operational traffic noise (see **Table 4.12-8**) would be less than significant.

d) *Less Than Significant Impact With Mitigation Incorporated*. See Issue a).

e) *No Impact*. The project site is not in an area covered by an airport land use plan or within 2 miles of a public airport or public-use airport. 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 no impacts are anticipated.

f) *No Impact*. The project is not within the vicinity of a private airstrip. Therefore, people would not be exposed to excessive noise levels. No impacts are anticipated.

Mitigation Measures

MM NOI-1 In order to reduce construction noise, a temporary noise barrier or enclosure shall be used to break the line of sight between the construction equipment and the nearest residences, whether they are existing or future residences. The temporary noise barrier shall have a sound transmission class of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. To achieve this, the barrier may consist of steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch-thick fiberglass blanket, a half-inch-thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. In addition, to avoid

objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with American Society for Testing and Materials Test Method C423.

MM NOI-2 The project improvement and building plans will include the following requirements for construction activities:

1) Construction shall be restricted to the hours of 7:00 AM to 7:00 PM Monday through Saturday and prohibited at any time on Sunday or a federal holiday.

2) Stationary, noise-generating equipment (e.g., generators and compressors) shall be located at least 200 feet from the nearest residential property.

3) If stationary, noise-generating equipment must be located closer than 200 feet from existing residential properties for extended periods of time, then such equipment shall have temporary acoustical enclosures, blanketing, or barriers to reduce the noise emissions.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.13 POPULATION AND HOUSING. Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SETTING

According to the Department of Finance, the City of Industry's population is 441 (DOF 2016). All residents live in an urban environment. The City of Industry Housing Element, adopted in 2013, states that there are 69 households total in the city.

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. The project involves the development of two new warehouse 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. For Los Angeles County, estimates developed by SCAG are approximately one employee for 1,500 square feet of warehouse space (Natelson Company 2001). Using these values, the project warehouse space of 215,410 square feet will provide an estimated 145 jobs for the developed project.

SCAG estimates that employment in the city will increase from 84,070 in 2008 to 88,404 in 2035, or 4,334 additional jobs (SCAG 2012). 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. The project would not result in substantial population growth and this impact would be less than significant.

b) *No Impact*. The project site is currently undeveloped. Therefore, the project would not displace any housing.

c) *No Impact*. Project implementation would not displace people, nor would it require the construction of replacement housing. No impact would occur.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.14 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 following public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

SETTING

Fire Protection

The City of Industry contracts with the 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 Stations 26, 43, 87, 91, 118, and 145). The nearest fire station to the project site is Fire Station 26 at 15336 Elliott Avenue in the City of La Puente, about 1.5 miles northeast of the site.

Police Protection

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 1 mile 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.

Schools

The project site is in the Hacienda La Puente Unified School District. Demand for public services such as schools is generally based on population.

Parks

The project does not involve park development or displacement. Demand for parks is determined by the population of the parks' service areas.

Other Public Facilities

The proposed project would not directly or indirectly lead to an increase in population in the project area.

DISCUSSION OF IMPACTS

Fire

Less than Significant Impact. 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 to ensure that the necessary fire prevention and emergency response features are incorporated into development projects. Therefore, 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 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 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.

Police

Less than Significant Impact. 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 the impact would be less than significant.

Schools

No impact. The 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.

Parks

No Impact. 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.

Other Public Facilities

No Impact. 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.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.15 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SETTING

The Wildwood Mobile Home Private Open Space and Former Woodland Duck Farm Open Space are the only two open space resources in the city. The Homestead Museum is designated as the only recreational facility, occupying 6 acres in the city's center and featuring three historic homes (City of Industry 2014a). It is located 1.5 miles from the project site.

DISCUSSION OF IMPACTS

a, b) *No Impact*. The demand for parks is determined by changes in housing and population. The project would not involve the development of any housing and would not directly or indirectly induce population growth. Therefore, the project would not increase demand on parks and recreational resources. The proposed project would not develop recreational facilities and would not require the development of such facilities. Therefore, the project would have no impact.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.16 TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

SETTING

This section is based on the transportation impact analysis (TIA) prepared by Michael Baker International in August 2016. The TIA was also reviewed by a transportation specialist for accuracy and compliance with applicable regulations. This study and the peer review are provided as **Appendix F**.

Primary access to the project site is available from Nelson Avenue. Nelson Avenue is a two-lane, undivided roadway trending in an east–west direction. The speed limit along Nelson Avenue is 35 miles per hour. On-street parking is generally not permitted on Nelson Avenue except in front of a few residential buildings.

Post-construction access to the proposed project site includes four new vehicular access points consisting of two stop-controlled full access driveways on Nelson Avenue for each building. Each building has its own separate parking lot. Building one has 101 parking spaces and building two has 218 parking spaces for a total of 319 parking spaces.

Analysis Methodology

The hours identified as the weekday "peak" hours were generally between 7:00 AM to 9:00 AM and between 4:00 PM to 6:00 PM. The TIA evaluated traffic conditions at 17 existing intersections and 4 future intersections for a total of 21 intersections. The following intersections were selected based on the project location:

1) Sunset Avenue at Temple Avenue (signalized)
2) Sunset Avenue at Nelson Avenue (signalized)
3) Sunset Avenue/7th Avenue at Valley Boulevard (signalized)
4) 7th Avenue at Don Julian Road (signalized)
5) 7th Avenue at Proctor Avenue (signalized)
6) 7th Avenue at Clark Avenue (signalized)
7) 7th Avenue at SR 60 westbound on-ramp/Gale Avenue (signalized)
8) 7th Avenue southbound at SR 60 eastbound off-ramp (unsignalized)
9) 7th Avenue at SR 60 eastbound ramps (unsignalized)
10) SR 60 westbound off-ramp at Gale Avenue (signalized)
11) California Avenue at Nelson Avenue (signalized)
12) California Avenue at Valley Boulevard (signalized)
13) Puente Avenue/Workman Hill Road at Valley Boulevard (signalized)
14) California Avenue at Valley Boulevard (signalized)
15) Vineland Avenue/2nd Avenue at Valley Boulevard (signalized)
16) Temple Avenue/I-605 Northbound Ramps at Valley Boulevard (signalized)
17) I-605 southbound ramps at Valley Boulevard (unsignalized)
18) Driveway 1 at Nelson Avenue (unsignalized, future)
19) Driveway 2 at Nelson Avenue (unsignalized, future)
20) Driveway 3 at Nelson Avenue (unsignalized, future)
21) Driveway 4 at Nelson Avenue (unsignalized, future)

The TIA used the following four scenarios to determine the project's impacts on the study intersections:

Scenario 1: Existing 2016 Conditions – This traffic volume is based on existing peak-hour traffic counts taken in May 2011 and peak hour intersection movement counts collected in June and July 2016 using passenger care equivalent (PCE) and seasonal adjustment factors.

Scenario 2: Existing Plus Project (EP) Conditions – This traffic volume is based on existing traffic volumes plus trips from the project. Trips forecasted to be generated by the proposed project were calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012) and the City of Fontana Truck Trip Generation Study, August 2003.

Scenario 3: Opening Year 2018 Without Project (2018nP) Conditions – This traffic volume presents the future traffic forecast including the background ambient growth with other cumulative developments on the existing conditions. The growth in background traffic was calculated using an annual growth rate of 1 percent. Traffic from other developments was based on the development status information provided by the City of Industry and adjacent jurisdictions.

Scenario 4: Opening Year 2018 With Project (2018wP) Conditions – This traffic volume presents the future traffic forecast with the addition of trips generated by the proposed project on the existing conditions. Traffic forecasts for this scenario are developed by adding future project-related traffic to the background ambient growth volumes and with other cumulative development volumes.

The TIA used intersection capacity utilization (ICU) analysis methodology to determine the operating level of service of signalized intersections and Highway Capacity Manual (HCM) analysis methodology to determine the operating LOS for unsignalized intersections. More detail in regard to LOS methodology and calculation is shown in **Appendix F**.

Significant Impact Criteria

The significance of the potential impacts of the project was evaluated using the City's LOS standards and impact criteria. The following thresholds of significance were used to determine if project-related traffic would cause an impact at the study area intersections.

Non-Congestion Management Plan (CMP) Signalized Intersections – The ICU value under "with project" conditions is 0.901 or greater (LOS E or F) and the ICU increase attributable to the project is 0.020 or greater.

CMP Signalized Intersections – The ICU volume-to-capacity utilization value (V/C) under "with project" conditions is 1.001 or greater (LOS F) and the ICU or V/C increase attributable to the project is 0.020 or greater.

Non-CMP Unsignalized Intersections – The intersection operates at LOS E or F.

CMP Unsignalized Intersections – The intersection operates at LOS F.

Existing Conditions

Existing 2016 traffic volume is based on existing peak-hour traffic counts taken in May 2011 and peak hour intersection movement counts collected in June and July 2016 using PCE and seasonal adjustment factors. **Table 4.16-1** summarizes the intersection analysis results for existing AM and PM peak hour conditions.

TABLE 4.16-1
EXISTING 2016 CONDITIONS INTERSECTION ANALYSIS SUMMARY

Intersection			Existing 2016 Conditions			
			AM		PM	
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS
1	Sunset Ave /Temple Ave	TS	0.940	E	1.007	F
2	Sunset Ave /Nelson Ave	TS	0.945	E	0.909	E
3	Sunset Ave - 7th Ave /Valley Blvd	TS	0.845	D	1.030	F
4	7th Ave /Proctor Ave	TS	0.623	B	0.655	B
5	7th Ave /Don Julian Rd	TS	0.697	B	0.794	C
6	7th Ave /Clark Ave	TS	0.666	B	0.670	B
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.846	D	0.761	C
	HCM Analysis	TS	29.8	C	20.6	C
8	7th Ave / SR60 EB Off-Ramp HCM Analysis	CSS	12.2	B	43.4	E
9	7th Ave / SR60 EB Ramps HCM Analysis	UNC	11.5	B	8.3	A
10	SR60 WB Off-Ramp / Gale Ave	TS	0.493	A	0.529	A
	HCM Analysis	TS	5.7	A	8.5	A
11	California Ave / Nelson Ave	TS	0.664	B	0.851	D
12	California Ave / Valley Blvd	TS	0.622	B	0.721	C
13	Orange Ave / Valley Blvd	TS	0.898	D	0.816	D
14	Workman Mill Rd / Valley Blvd	TS	0.738	C	0.832	D
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.070	F	0.934	E
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	0.984	E	1.010	F
	HCM Analysis	TS	42.5	D	33.3	C
17	I-605 Ramps / Valley Blvd HCM Analysis	CSS	100.7	F	139.8	F

As shown above, all existing study intersections are operating at acceptable LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM and PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue southbound at SR 60 eastbound off-ramp – LOS E (PM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 northbound ramps at Valley Boulevard – LOS E (AM), LOS F (PM)
17. I-605 southbound ramps at Valley Boulevard – LOS F (AM and PM)

DISCUSSION OF IMPACTS

a) Less Than Significant Impact With Mitigation Incorporated.

Project Traffic

Trips forecasted to be generated by the proposed project were calculated using trip generation rates published in the ITE Trip Generation Manual (2012). Since the project is a warehouse that generates significant amount of truck trips, the City of Fontana Truck Trip Generation Study (2003) was used to estimate the vehicle mix for "heavy warehouse" use. The number of vehicle trips are converted to PCE trips based on the County of San Bernardino standards. The County of San Bernardino standards were used because it has published a well-defined method for estimating heavy truck traffic. Summarized trip rates are shown in **Table 4.16-2** and summarized project traffic generations are shown in **Table 4.16-3**.

TABLE 4.16-2
TRIP GENERATION RATES

Trip Rates										
Project				Daily	AM Peak			PM Peak		
No.	Land Use	Code*	Unit**		Total	In%	Out%	Total	In%	Out%
1	Warehousing	ITE 150	TSF	**3.560**	**0.300**	79.0%	21.0%	**0.320**	25.0%	75.0%
2	79.57% Passenger Cars (PCE[1] = 1.0)	79.57%	1.0	**2.833**	**0.239**	79.0%	21.0%	**0.255**	25.0%	75.0%
3	3.46% 2-Axle Trucks (PCE[1] = 1.5)	3.46%	1.5	**0.185**	**0.016**	79.0%	21.0%	**0.017**	25.0%	75.0%
4	4.64% 3-Axle Trucks (PCE[1] = 2.0)	4.64%	2.0	**0.330**	**0.028**	79.0%	21.0%	**0.030**	25.0%	75.0%
5	12.33% 4-Axle Trucks (PCE[1] = 3.0)	12.33%	3.0	**1.317**	**0.111**	79.0%	21.0%	**0.118**	25.0%	75.0%

Note

** City of Fontana 2003; ITE 2012*

*** TSF = Thousand Square Feet*

[1] PCE rate per SANBAG guidelines

TABLE 4.16-3
PROJECT TRAFFIC GENERATION SUMMARY

Traffic Generation									
Bldg. No.	Project		Daily	AM Peak			PM Peak		
	Land Use	Quantity**		Total	In	Out	Total	In	Out
1	Warehousing	63.240 TSF							
	79.57% Passenger Cars (PCE[1] = 1.0)		**179**	**15**	12	3	**16**	4	12
	3.46% 2-Axle Trucks (PCE[1] = 1.5)		**12**	**1**	1	-	**1**	-	1
	4.64% 3-Axle Trucks (PCE[1] = 2.0)		**21**	**1**	1	-	**2**	1	1
	12.33% 4-Axle Trucks (PCE[1] = 3.0)		**83**	**7**	6	1	**8**	2	6
	Subtotal Trips - Building 1	63.240 TSF	295	**24**	20	4	**27**	7	20

Traffic Generation									
Bldg. No.	Project		Daily	AM Peak			PM Peak		
	Land Use	Quantity**		Total	In	Out	Total	In	Out
2	Warehousing	167.970 TSF							
	79.57% Passenger Cars (PCE[1] = 1.0)		**476**	**40**	32	8	**43**	11	32
	3.46% 2-Axle Trucks (PCE[1] = 1.5)		**31**	**3**	2	1	**3**	1	2
	4.64% 3-Axle Trucks (PCE[1] = 2.0)		**55**	**5**	4	1	**5**	1	4
	12.33% 4-Axle Trucks (PCE[1] = 3.0)		**221**	**19**	15	4	**20**	5	15
	Subtotal Trips - Building 2	167.970 TSF	**783**	**67**	53	14	**71**	18	53
Passenger Car Trips			**655**	**55**	44	11	**59**	15	44
Truck Trips			**423**	**36**	29	7	**39**	10	29
Total Project Trips		**231.210 TSF**	**1,078**	**91**	**73**	**18**	**98**	**25**	**73**

Note

*** TSF = Thousand Square Feet*

[1] PCE rate per SANBAG guidelines

Trip distribution assumptions are based on the existing distribution of traffic in the area as determined from the latest traffic counts. As shown in **Table 4.16-3**, the project is anticipated to generate 1,078 daily PCE trips with 91 AM peak hour PCE trips and 98 PM peak hour PCE trips. These figures will be applied to the existing conditions to create estimations for the EP conditions.

Existing plus Project (EP) Traffic Conditions

This scenario evaluates the existing conditions with the addition of project traffic. **Table 4.16-4** summarizes the AM and PM peak hour intersection operations analysis results for EP conditions, based on existing and initial geometry. **Appendix F** includes the EP conditions intersection operations analysis worksheets.

TABLE 4.16-4
EXISTING PLUS PROJECT CONDITIONS INTERSECTION ANALYSIS SUMMARY

Intersection			(1) Existing 2016 Conditions				(2) Existing Plus Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
1	Sunset Ave / Temple Ave	TS	0.940	E	1.007	F	0.944	E	1.010	F	0.004	0.003	No
2	Sunset Ave / Nelson Ave	TS	0.945	E	0.909	E	0.954	E	0.956	E	0.009	0.047	Yes
	Add EB/WB Left Turn						**0.938**	***E***	**0.916**	***E***	**-0.007**	**0.007**	**No**
3	Sunset Ave - 7th Ave / Valley Blvd	TS	0.845	D	1.030	F	0.859	D	1.042	F	0.014	0.012	No
4	7th Ave / Proctor Ave	TS	0.623	B	0.655	B	0.626	B	0.659	B	0.003	0.004	No
5	7th Ave / Don Julian Rd	TS	0.697	B	0.794	C	0.700	B	0.806	D	0.003	0.012	No
6	7th Ave / Clark Ave	TS	0.666	B	0.670	B	0.669	B	0.680	B	0.003	0.010	No
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.846	D	0.761	C	0.847	D	0.766	C	0.001	0.005	No
	HCM Analysis	TS	29.8	C	20.6	C	30.2	C	20.7	C	0.4	0.1	No
8	7th Ave / SR60 EB Off-Ramp HCM Analysis	CSS	12.2	B	43.4	E	12.2	B	43.4	E	0.0	0.0	No
9	7th Ave / SR60 EB Ramps HCM Analysis	UNC	11.5	B	8.3	A	11.6	B	8.3	A	0.1	0.0	No
10	SR60 WB Off-Ramp / Gale Ave	TS	0.493	A	0.529	A	0.498	A	0.530	A	0.005	0.001	No
	HCM Analysis	TS	5.7	A	8.5	A	5.9	A	8.5	A	0.2	0.0	No
11	California Ave / Nelson Ave	TS	0.664	B	0.851	D	0.665	B	0.853	D	0.001	0.002	No
12	California Ave / Valley Blvd	TS	0.622	B	0.721	C	0.624	B	0.721	C	0.002	0.000	No
13	Orange Ave / Valley Blvd	TS	0.898	D	0.816	D	0.898	D	0.819	D	0.000	0.003	No
14	Workman Mill Rd / Valley Blvd	TS	0.738	C	0.832	D	0.739	C	0.834	D	0.001	0.002	No
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.070	F	0.934	E	1.071	F	0.936	E	0.001	0.002	No

Intersection			(1) Existing 2016 Conditions				(2) Existing Plus Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	0.984	E	1.010	F	0.984	E	1.012	F	0.000	0.002	No
	HCM Analysis	TS	42.5	D	33.3	C	42.6	D	34.7	C	0.1	1.4	No
17	I-605 Ramps / Valley Blvd HCM Analysis	CSS	100.7	F	139.8	F	100.7	F	139.8	F	0.0	0.0	No
18	Dwy 1 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	14.2	B	13.5	B	14.2	13.5	No
19	Dwy 2 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	14.0	B	13.0	B	14.0	13.0	No
20	Dwy 3 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	13.8	B	12.7	B	13.8	12.7	No
21	Dwy 4 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	12.2	B	11.7	B	12.2	11.7	No

Note

** Intersection Type: TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled*

[1] Signalized Intersections: Intersection Capacity Utilization (ICU) Analysis Method, Volume/Capacity (V/C) Ratio;

Unsignalized Intersections: Highway Capacity Manual (HCM) Analysis Method, Average Delay (seconds per vehicle).

[2] Impacts at intersections are considered to be significant when the following changes in the V/C ratios occurs between the "without project" and the "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	> 0.02

As shown in **Table 4.16-4**, all study intersections are projected to operate at LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM and PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue southbound at SR 60 eastbound off-ramp – LOS E (PM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 northbound ramps at Valley Boulevard – LOS E (AM), LOS F (PM)
17. I-605 southbound ramps at Valley Boulevard – LOS F (AM and PM)

Table 4.16-4 also shows that the project will contribute to a significant impact at intersection 2. Sunset Avenue at Nelson Avenue for EP conditions based on City's threshold criteria. As stated at the bottom of the table, impacts at intersections are considered to be significant when the following changes in the volume-to-capacity (V/C) ratios occurs between the "without project" and "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	>0.02

In comparison to the Existing 2016 Conditions data, this intersection is projected to operate at LOS E with an increase of 0.009 V/C during AM hours and an increase of 0.047 V/C during PM hours. The PM hour increase at this intersection is well beyond the 0.02 V/C threshold increase, making impacts at this intersection potentially significant. Implementation of mitigation measure **MM TRAF-1** is required to alleviate the congestion caused by project impacts. This mitigation measure will reduce projected V/C during AM hours to 0.938 and projected V/C during PM hours to 0.916, lowering the total increases from Existing 2016 Conditions to EP conditions to -0.007 V/C during AM hours and 0.007 V/C during PM hours. With this mitigation measure in place, project impacts at this intersection are reduced to less than significant.

The impacts on traffic load by the four proposed project driveways could also be potentially significant. The proposed driveways would be accessible from Nelson Avenue and may contribute to more congestion with their usage. To accommodate the four project driveways, mitigation measures **MM TRAF-2, MM TRAF-3, MM TRAF-4**, and **MM TRAF-5** are required to reduce project impacts and allow for better facilitation of the roadways. With implementation of these mitigation measures, project impacts by the proposed driveways would be less than significant.

Opening Year 2018 without Project (2018nP) Conditions

As stated earlier, this traffic volume presents the future traffic forecast including the background ambient growth with other cumulative developments on the existing conditions. This traffic volume is based on all reasonably foreseeable developments that could substantially affect the volumes at the project study intersections.

To calculate the projected traffic volumes, an annual ambient growth rate of 1 percent was applied to the adjusted 2016 intersection traffic volumes for two years to calculate the Year 2018 conditions. The 1 percent growth factor is a conservative assumption

because the Los Angeles CMP growth rate for West Covina is 8.3 percent from 2015 to 2035, projecting 0.4 percent per year. Projected volumes for this condition are also based on the development status information provided by the City of Industry and adjacent jurisdictions in Los Angeles County, including La Puente, West Covina, and Hacienda Heights. There are 22 cumulative developments within a 3-mile radius of the project site. The general locations of the cumulative developments are shown in **Appendix F**. Trip rates published in the ITE Trip Generation Manual (2012) were used to calculate the number of trips that would be generated by the cumulative developments. These calculations showed that the cumulative developments are expected to generate approximately 11,128 daily trips with 1,081 AM peak hour trips and 1,292 PM peak hour trips. **Appendix F** shows the detailed calculations of the cumulative development trips, the trip distribution patterns for the cumulative developments, and the cumulative development AM and PM peak hour intersection traffic volumes.

These figures were applied to the existing conditions to create estimations for the Opening Year 2018 Without Project (2018nP) conditions.

Opening Year 2018 with Project (2018wP) Conditions

This traffic volume presents the future traffic forecast with the addition of trips generated by the proposed project on the existing conditions. Traffic forecasts for this scenario are developed by adding future project-related traffic to the background ambient growth volumes and with other cumulative development volumes.

Table 4.16-5 summarizes the AM and PM peak hour intersection operations analysis results for Opening Year 2018 without Project (2018nP) and Opening Year 2018 with Project (2018wP) conditions, based on existing and initial geometry. Intersection operations analysis worksheets with existing and initial geometry can be found in **Appendix F**.

TABLE 4.16-5
OPENING YEAR 2018 WITH PROJECT CONDITIONS INTERSECTION ANALYSIS SUMMARY

Intersection			(1) Opening Year 2018 Without Project Conditions				(2) Opening Year 2018 With Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
1	Sunset Ave / Temple Ave	TS	0.984	E	1.044	F	0.988	E	1.048	F	0.004	0.004	No
2	Sunset Ave / Nelson Ave	TS	0.984	E	0.973	E	0.994	E	1.018	F	0.010	0.045	Yes
	Add EB/WB Left Turn						***0.976***	***E***	***0.969***	***E***	***-0.008***	***-0.004***	No
3	Sunset Ave - 7th Ave / Valley Blvd	TS	0.885	D	1.066	F	0.898	D	1.076	F	0.013	0.010	No
4	7th Ave / Proctor Ave	TS	0.644	B	0.678	B	0.647	B	0.682	B	0.003	0.004	No
5	7th Ave / Don Julian Rd	TS	0.709	C	0.853	D	0.714	C	0.865	D	0.005	0.012	No
6	7th Ave / Clark Ave	TS	0.682	B	0.714	C	0.685	B	0.724	C	0.003	0.010	No
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.864	D	0.780	C	0.866	D	0.785	C	0.002	0.005	No
	HCM Analysis	TS	31.8	C	21.6	C	31.9	C	23.1	C	0.1	1.5	No
8	7th Ave / SR60 EB Off-Ramp HCM Analysis	CSS	12.4	B	54.0	F	12.4	B	54.0	F	0.0	0.0	No
9	7th Ave / SR60 EB Ramps HCM Analysis	UNC	11.8	B	8.4	A	11.9	B	8.5	A	0.1	0.1	No
10	SR60 WB Off-Ramp / Gale Ave	TS	0.515	A	0.541	A	0.519	A	0.543	A	0.004	0.002	No
	HCM Analysis	TS	6.1	A	8.6	A	7.1	A	8.6	A	1.0	0.0	No
11	California Ave / Nelson Ave	TS	0.761	C	0.929	E	0.762	C	0.932	E	0.001	0.003	No
12	California Ave / Valley Blvd	TS	0.679	B	0.769	C	0.681	B	0.769	C	0.002	0.000	No
13	Orange Ave / Valley Blvd	TS	0.941	E	0.875	D	0.941	E	0.878	D	0.000	0.003	No
14	Workman Mill Rd / Valley Blvd	TS	0.761	C	0.858	D	0.762	C	0.859	D	0.001	0.001	No

Intersection			(1) Opening Year 2018 Without Project Conditions				(2) Opening Year 2018 With Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.096	F	0.965	E	1.097	F	0.968	E	0.001	0.003	No
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	1.007	F	1.040	F	1.007	F	1.042	F	0.000	0.002	No
	HCM Analysis	TS	46.3	D	36.8	D	46.5	D	37.2	D	0.2	0.4	No
17	I-605 Ramps / Valley Blvd HCM Analysis	CSS	117.3	F	167.6	F	117.3	F	167.6	F	0.0	0.0	No
18	Dwy 1 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	15.3	C	14.5	B	15.3	14.5	No
19	Dwy 2 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	14.9	B	13.8	B	14.9	13.8	No
20	Dwy 3 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	14.8	B	13.5	B	14.8	13.5	No
21	Dwy 4 / Nelson Ave HCM Analysis	CSS	0.000	A	0.000	A	12.9	B	12.3	B	12.9	12.3	No

Note

** Intersection Type: TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled*

[1] Signalized Intersections: Intersection Capacity Utilization (ICU) Analysis Method, Volume/Capacity (V/C) Ratio;

Unsignalized Intersections: Highway Capacity Manual (HCM) Analysis Method, Average Delay (seconds per vehicle).

[2] Impacts at intersections are considered to be significant when the following changes in the V/C ratios occurs between the "without project" and the "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	> 0.02

As shown in **Table 4.16-5**, all study intersections are projected to operate at LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM), LOS F (PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue southbound at SR 60 eastbound off-ramp – LOS F (PM)
11. California Avenue at Nelson Avenue – LOS E (PM)
13. Orange Avenue at Valley Boulevard – LOS E (AM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 northbound ramps at Valley Boulevard – LOS F (AM and PM)
17. I-605 southbound ramps at Valley Boulevard – LOS F (AM and PM)

Table 4.16-5 also shows that the project will contribute to a significant impact at intersection 2, Sunset Avenue at Nelson Avenue for Opening Year 2018 with Project conditions, based on City's threshold criteria. As stated at the bottom of the table, impacts at intersections are considered to be significant when the following changes in the V/C ratios occurs between the "without project" and "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	>0.02

In comparison to the Opening Year 2018 Without Project conditions data, this intersection is projected to operate at LOS E with an increase of 0.010 V/C during AM hours and an increase of 0.045 V/C during PM hours. The PM hour increase at this intersection is well beyond the 0.02 V/C threshold increase, making impacts at this intersection potentially significant. Consistent with EP conditions, implementation of mitigation measure **MM TRAF-1** is required to alleviate the congestion caused by project impacts. This mitigation measure will reduce projected V/C during AM hours to 0.976 and projected V/C during PM hours to 0.969, lowering the total increases from Existing 2016 Conditions to EP conditions to -0.008 V/C during AM hours and -0.004 V/C during PM hours. With this mitigation measure in place, project impacts at this intersection are reduced to less than significant.

Consistent with EP conditions, mitigation measures **MM TRAF-2, MM TRAF-3, MM TRAF-4**, and **MM TRAF-5** are required to accommodate the four proposed project driveways. With implementation of these mitigation measures, project impacts by the driveways would be less than significant.

Freeway Off-Ramp Queuing Analysis

This section presents the off-ramp queuing analysis at the SR 60 and I-605 freeway off-ramps. The queuing analysis was conducted using the Synchro analysis software for all four traffic scenarios and is summarized in **Table 4.16-6**.

TABLE 4.16-6
FREEWAY OFF-RAMP QUEUING ANALYSIS SUMMARY

Intersection		Available Storage Length	Adequate Storage Length?	Maximum Queue Length	95th Percentile Queue Length[1] (feet)							
					Existing 2016		Existing With Project		2018 Without Project		2018 With Project	
No.	Name				AM	PM	AM	PM	AM	PM	AM	PM
8	SR-60 EB Off-Ramp @ 7th Ave SB											
	EB Total	**820'**	**Yes**	**383'**	**25**	**330**	**25**	**330**	**25**	**383**	**25**	**383**
	EB Left Turn											
	EB Right Turn	820'			25	330	25	330	25	383	25	383
9	SR-60 EB Off-Ramp @ 7th Ave NB											
	WB Total	**1450'**	**Yes**	**0'**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	WB Right Turn	1450'			0	0	0	0	0	0	0	0
10	SR-60 WB Off-Ramp @ Gale Ave											
	NB Total	**1030'**	**Yes**	**70'**	**43**	**67**	**46**	**68**	**53**	**69**	**56**	**70**
	NB Left Turn	740'			43	67	46	68	53	69	56	70
	NB Left-Right	290'										
16	I-605 NB Off-Ramp @ Valley Blvd											
	NB Total	**1730'**	**Yes**	**1164'**	**1125**	**788**	**1129**	**896**	**1160**	**917**	**1164**	**955**
	NB Left-Thru	1280'			803	642	803	717	807	735	807	763
	NB Right Turn	450'			322	146	326	179	353	182	357	192
17	I-605 SB Off-Ramp @ Valley Blvd											
	NB Total	**1455'**	**Yes**	**43'**	**38**	**33**	**38**	**33**	**43**	**38**	**43**	**38**
	NB Left Turn	75'			38	33	38	33	43	38	43	38
	NB Right Turn	1380'			0	0	0	0	0	0	0	0

Note

** Queue length rounded to a minimum of 25 feet for a vehicle length of 25 feet per vehicle*

As shown in **Table 4.16-6**, there are adequate storage lengths for the freeway off-ramp facilities for both existing and future traffic conditions. Thus, the proposed project is expected to have minimal effect on the off-ramp queuing lengths.

Project construction and implication could potentially cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. However, with mitigation measures **MM TRAF-1** through **MM TRAF-5** in place, the addition of project traffic would be reduced to a less than significant impact. Project traffic would not result in unacceptable operations at the study intersections under either the EP conditions or the Opening Year 2018 with Project (2018wP) conditions. Therefore, project impacts related to increases in traffic would be less than significant.

b) Less Than Significant Impact.

Congestion Management Program (CMP) Intersection and Freeway Analysis

The 2010 CMP published by Los Angeles County Metropolitan Transportation Authority says that proposed projects which meet the following criteria must be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).

- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

No CMP intersection monitoring location in the project study area has been identified. The proposed project is also not forecasted to add 50 or more trips to a CMP arterial monitoring intersection during either the AM or PM weekday peak hours. Therefore, no CMP traffic impact analysis is required for the proposed project.

The following CMP freeway monitoring locations in the project study area have been identified:

- SR 60 Freeway

- I-605 Freeway

The proposed project is not forecasted to add 150 or more trips to a mainline freeway monitoring location during either the AM or PM weekday peak hours. Therefore, no CMP traffic impact analysis is required for the proposed project.

Because no CMP traffic impact analysis is required for any intersections or freeways related to this project, impacts related to a level of service established by the county congestion management agency for designated roads or highways is anticipated to be less than significant.

c) *No Impact.* The project is not expected to have any effect on air traffic patterns. Therefore, no impact on air traffic is anticipated as a result of this project.

d) *Less Than Significant Impact.* The project proposes to construct two warehouse buildings with two stop-controlled full access driveways on Nelson Avenue for each building, making a total of four vehicular access points for the proposed project site. Project site circulation would not cause any safety or operational problems. The project site design would comply with City design standards, and the project would not create any significant impacts to pedestrians, bicyclists, or traffic operations. No internal site circulation or access issues were identified that would cause a traffic safety problem or any unusual traffic congestion or delay. Based on this assessment, the impacts of hazards related to design features and incompatible uses in the proposed project would be less than significant.

e) *Less Than Significant Impact.* Sufficient emergency access is determined by factors such as number of access points, roadway width, and proximity to fire stations. As stated earlier, the land use plan for the proposed project would include four access points from Nelson Avenue. These access points are divided between the two warehouse buildings, providing each building with two full-access driveways (meaning the right of access is acquired along the entire frontage of the property). Driveway widths within the project site would meet the minimum widths to accommodate all emergency vehicles. Existing emergency access to surrounding properties would not be altered or disrupted under the proposed project. Furthermore, the project would be subject to approval from the LACFD. This project would not result in inadequate emergency access; therefore, this impact would be less than significant.

f) *Less Than Significant Impact.*

Congestion Management Program (CMP) Transit Impact Analysis

The 2010 CMP published by Los Angeles County Metropolitan Transportation Authority says that the potential impacts of the proposed project on the transit service must be assessed. Project transit trip calculations were estimated using the conversion equation outlined in the CMP guidelines and is shown in **Table 4.16-7**.

TABLE 4.16-7
PROJECT TRANSIT TRIP CALCULATION

Trip Type	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Net Vehicle Trips	**1,078**	**91**	73	18	**98**	25	73
Transit Trips	**53**	**5**	4	1	**5**	1	4

As shown in **Table 4.16-7**, the project will generate 53 daily transit trips with 5 AM peak hour transit trips (4 AM inbound and 1 AM outbound) and 5 PM peak hour transit trips (1 PM inbound and 4 PM outbound). It is anticipated that the existing transit service in the project study area would be able to accommodate the project-generated transit trips. The available transit service in the project study area can be found in **Appendix F**.

With a low number of transit trips generated by the project and available transit opportunities in the study area, it is concluded that the existing public transit system would not be significantly impacted by the proposed project. It can also be expected that the proposed project will not conflict with adopted policies, plans, or programs supporting alternative transportation. This project would not interfere with any existing bus routes, would not remove or relocate any existing bus stops, and would not conflict with any transit plans or goals of the City of Industry. Furthermore, no significant deficiencies in alternative transportation facilities were identified to which the project would contribute. Thus, project impacts on alternative transportation systems would be less than significant.

Mitigation Measures

MM TRAF-1 Off-site roadway improvements at intersection 2, Sunset Avenue and Nelson Avenue, will mitigate the traffic impact to a less than significant impact by adding an eastbound left-turn lane and a westbound left-turn lane.

MM TRAF-2 On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 18, driveway 1 at Nelson Avenue.

MM TRAF-3 On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 19, driveway 2 at Nelson Avenue.

MM TRAF-4 On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 20, driveway 3 at Nelson Avenue.

MM TRAF-5 On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 21, driveway 4 at Nelson Avenue.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.17 UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

SETTING

Wastewater

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, with a treatment capacity of 100 million gallons per day (mgd), serves the City of Industry (LACSD 2014). 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.

Water

The RWD would provide water to the project. Nearly 20 percent of RWD's water supply comes from groundwater that is pumped from wells in the Puente Subbasin; the remaining 80 percent comes from imported water (HDR 2011). By 2020, the RWD's total water supply from groundwater, imported water purchases, and recycled water is projected to be 19,700 acre-feet per year (about 6.4 billion gallons), compared to a projected water demand of 18,484 acre-feet per year (HDR 2011).

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.

Drainage

The site currently drains to the southwest to an existing catch basin and 18-inch storm drain on Sunset Avenue. Stormwater runoff in the city is discharged through a combination of natural and man-made drainage structures. Rainwater in the city is generally directed to storm drains located along major roadways.

Solid Waste

The EPA administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal. In 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 of 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 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 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. The Puente Hills Intermodal Facility is 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 2014).

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. The project would not require on-site wastewater treatment separate from the treatment provided by the LACSD. Relatively small volumes of wastewater from restrooms and cleaning activities would be sewered and directed to the nearest LACSD treatment plant for routine treatment prior to discharge.

The project would be required to prepare and implement an SWPPP in compliance with the General Construction Permit. The project would comply with City of Industry Municipal Code requirements governing wastewater discharges and the impact would be less than significant.

b) *Less Than Significant Impact*. The project site does not currently contain any buildings or facilities that generate wastewater or demand supplied water. The project would receive and dispose of water in a manner consistent with the surrounding developments.

Water

The project's water demand alone would be an insignificant amount of RWD total demand. RWD 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 (HDR 2011). The project applicant would be required to obtain a "will-serve" letter from RWD to ensure that sufficient water supply is available to serve the project. Given the relatively small project water demand, RWD would not be required to build new or expand existing water treatment facilities to meet the project's incremental increase in water demand, and the impact would be less than significant.

Wastewater

Wastewater effluent generated by the project would be primarily associated with the sanitary needs of the on-site facility employees (i.e., bathroom and lunchroom). With a wastewater treatment capacity of 100 mgd, the San Jose Creek Water Reclamation Plant has sufficient capacity to manage the relatively minor increase in volume from restroom and cleaning activities. 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. Therefore, the project would have a less than significant impact on wastewater facilities.

c) *Less Than Significant Impact*. See Issue 4.9(e). The project's storm drainage system would be designed to comply with Section E.12.e(ii)(d) of the NPDES General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Order No. 2013-0001-DWQ). This requires the project site design to achieve an 85 percent capture rate. The project's stormwater would flow into the city's existing storm drainage system. Proposed drainage patterns for the site are shown in **Figure 3.8.** The project would be required to comply with existing regulations; as such, the impact would be less than significant.

d) *Less Than Significant Impact*. The project applicant would be required by the City to obtain a "will-serve" letter from RWD 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. As such, impacts would be less than significant.

e) *Less Than Significant Impact.* As discussed above, the existing LACSD wastewater treatment facility has sufficient capacity to meet the relatively minor increase in volume from restroom and cleaning activities expected to be generated by the project. Impacts would be less than significant and no mitigation measures are necessary.

f) *Less Than Significant Impact.* Solid waste would be generated during both the project's construction and operational phases. 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. Once operational, the project would generate solid waste at a rate typical of warehouse.

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 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 in order to reduce waste produced during construction. Additionally, 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.

g) *Less Than Significant Impact.* 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 (CalRecycle 1997). For example, the proposed project would help the City maintain its source reduction, recycling, and waste stream diversion goals for solid waste through the provision and use of an on-site recycling bin. As such, the impact would be less than significant.

Mitigation Measures

None required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
4.18 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 rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
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.	☐	☐	☒	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION OF IMPACTS

a) *Less Than Significant Impact*. None of the potential impacts identified for the proposed project have the potential to degrade habitat or wetlands, or eliminate important examples of the major periods of history. The project impact would be less than significant.

b) *Less Than Significant Impact*. The proposed project would not result in any potentially significant impacts; therefore, the potential for project cumulative effects in combination with other planned or anticipated improvements is low. In general, individual GHG emissions do not have a large impact on climate change. However, once added with all other GHG emissions in the past and present, they combine to create a perceptible change to climate. Because of the extended amount of time that GHGs remain in the atmosphere, any amount of GHG emissions can be reasonably expected to contribute to future climate change impacts. The amount of CO_2 emissions from the proposed project, although measurable, would be minor. On a global scale, the proposed project would contribute a negligible amount to global cumulative effects to climate change. Therefore, the proposed project's contribution to GHG emissions would not be cumulatively considerable, and this would be a less than significant impact.

c) *Less Than Significant Impact*. Based on the findings of this Initial Study, the project would not have a substantial impact on human beings.

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APPENDIX A: AIR QUALITY

Criteria Air Pollutants – CalEEMod Output Files

Nelson Avenue Business Park

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	231.21	1000sqft	8.63	231,210.00	0
Parking Lot	319.00	Space	2.87	127,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2017
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 - Acreage per Project Applicant.

Construction Phase - Adjusted per Project Applicant.

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment list per Project Applicant.

Grading - Acreage per Project Applicant.

Architectural Coating - Per SCAQMD Rule 1113.

Vehicle Trips - Adjusted per Traffic Report.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Energy Use - Per Project Applicant.

Water And Wastewater - Per Project Applicant.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403. Tier 3 mitigation for grading equipment.

Mobile Land Use Mitigation -

Water Mitigation -

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tblVehicleEF	LDT2	2.9550e-003	4.0740e-003
tblVehicleEF	LDT2	2.0260e-003	2.1760e-003
tblVehicleEF	LDT2	2.7290e-003	3.7730e-003
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.60	0.50
tblVehicleEF	LDT2	0.22	0.14
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.08	0.70
tblVehicleEF	LHD1	1.59	1.35
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	3.0500e-003	2.4030e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.8750e-003	1.6570e-003

tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.42	0.36
tblVehicleEF	LHD1	0.51	0.36
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.00	0.64
tblVehicleEF	LHD1	1.53	1.30
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	4.5550e-003	3.5700e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.6940e-003	2.3200e-003
tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.40	0.35
tblVehicleEF	LHD1	0.45	0.32
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.06	0.68
tblVehicleEF	LHD1	1.60	1.36
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04

tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	3.2950e-003	2.4790e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.8700e-003	1.6210e-003
tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.46	0.39
tblVehicleEF	LHD1	0.53	0.37
tblVehicleEF	LHD2	6.2730e-003	0.00
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.76	1.12
tblVehicleEF	LHD2	1.11	0.92
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.0000e-003	1.5270e-003

tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.2260e-003	1.0550e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.31	0.23
tblVehicleEF	LHD2	0.34	0.23
tblVehicleEF	LHD2	6.2730e-003	0.00
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.65	1.06
tblVehicleEF	LHD2	1.07	0.88
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.9860e-003	2.2710e-003
tblVehicleEF	LHD2	0.06	0.05
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.7650e-003	1.4800e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.29	0.22
tblVehicleEF	LHD2	0.30	0.21
tblVehicleEF	LHD2	6.2730e-003	0.00

tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.73	1.10
tblVehicleEF	LHD2	1.12	0.93
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.1480e-003	1.5700e-003
tblVehicleEF	LHD2	0.06	0.05
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.2110e-003	1.0270e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.33	0.26
tblVehicleEF	LHD2	0.34	0.24
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.16	1.14
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	0.93	0.91
tblVehicleEF	MCY	0.44	0.41
tblVehicleEF	MCY	0.55	0.53
tblVehicleEF	MCY	2.40	2.34
tblVehicleEF	MCY	1.46	1.28
tblVehicleEF	MCY	2.10	2.06
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.01	1.00
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004
tblVehicleEF	MCY	1.48	1.46
tblVehicleEF	MCY	0.49	0.46
tblVehicleEF	MCY	0.91	0.89
tblVehicleEF	MCY	2.33	2.28
tblVehicleEF	MCY	1.35	1.18
tblVehicleEF	MCY	1.84	1.81
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	1.02	1.00
tblVehicleEF	MCY	0.57	0.52
tblVehicleEF	MCY	0.52	0.51
tblVehicleEF	MCY	2.42	2.36
tblVehicleEF	MCY	1.72	1.53
tblVehicleEF	MCY	2.16	2.11
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.30	0.20
tblVehicleEF	MDV	0.46	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.19
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.65	0.58
tblVehicleEF	MDV	0.42	0.27
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.26	0.17
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.22	0.20

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.61	0.54
tblVehicleEF	MDV	0.36	0.23
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.29	0.19
tblVehicleEF	MDV	0.47	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.23	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.76	0.67
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.38	0.96
tblVehicleEF	MH	0.85	0.69
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004

tblVehicleEF	MH	1.20	0.78
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.50	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.08	1.32
tblVehicleEF	MH	0.51	0.36
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.26	0.88
tblVehicleEF	MH	0.82	0.67
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.71	1.11
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.69	0.49
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	2.03	1.29
tblVehicleEF	MH	0.43	0.31
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.35	0.94
tblVehicleEF	MH	0.86	0.70
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003

tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.40	0.87
tblVehicleEF	MH	0.11	0.06
tblVehicleEF	MH	0.53	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.20	1.40
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.92	4.57
tblVehicleEF	MHD	2.78	1.80
tblVehicleEF	MHD	2.00	1.45
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	2.7820e-003	2.0830e-003
tblVehicleEF	MHD	0.11	0.09

tblVehicleEF	MHD	0.16	0.17
tblVehicleEF	MHD	1.7390e-003	1.4420e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	1.18	0.82
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	6.11	4.72
tblVehicleEF	MHD	2.61	1.69
tblVehicleEF	MHD	1.92	1.39
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	4.1960e-003	3.1190e-003
tblVehicleEF	MHD	0.11	0.09
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	2.5490e-003	2.0500e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	1.03	0.72
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.65	4.37

tblVehicleEF	MHD	2.73	1.76
tblVehicleEF	MHD	2.02	1.46
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	3.0270e-003	2.1680e-003
tblVehicleEF	MHD	0.13	0.10
tblVehicleEF	MHD	0.17	0.18
tblVehicleEF	MHD	1.7460e-003	1.4190e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.54	0.44
tblVehicleEF	MHD	1.22	0.85
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.55	4.37
tblVehicleEF	OBUS	3.74	2.41
tblVehicleEF	OBUS	1.38	1.06
tblVehicleEF	OBUS	0.01	9.6540e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004

tblVehicleEF	OBUS	9.6700e-003	8.8810e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.2400e-004	8.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.40	0.48
tblVehicleEF	OBUS	4.9500e-004	4.9100e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.29
tblVehicleEF	OBUS	0.61	0.47
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.73	4.51
tblVehicleEF	OBUS	3.52	2.27
tblVehicleEF	OBUS	1.32	1.02
tblVehicleEF	OBUS	8.8610e-003	8.1380e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	8.1520e-003	7.4870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	1.3330e-003	1.2280e-003
tblVehicleEF	OBUS	0.03	0.03

tblVehicleEF	OBUS	0.38	0.46
tblVehicleEF	OBUS	6.9500e-004	6.7800e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.28
tblVehicleEF	OBUS	0.54	0.41
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.30	4.18
tblVehicleEF	OBUS	3.67	2.37
tblVehicleEF	OBUS	1.39	1.07
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.7400e-004	8.6200e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.52
tblVehicleEF	OBUS	4.8700e-004	4.7500e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.34	0.31
tblVehicleEF	OBUS	0.63	0.48
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.05	5.85

tblVehicleEF	SBUS	8.37	5.90
tblVehicleEF	SBUS	2.33	1.83
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.12	0.14
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.32	1.56
tblVehicleEF	SBUS	2.29	1.56
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.31	6.04
tblVehicleEF	SBUS	7.88	5.56
tblVehicleEF	SBUS	2.21	1.74
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003

tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.06	0.04
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.11	0.14
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.13	1.43
tblVehicleEF	SBUS	2.02	1.40
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	7.69	5.59
tblVehicleEF	SBUS	8.23	5.80
tblVehicleEF	SBUS	2.37	1.86
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.05	0.03
tblVehicleEF	SBUS	0.34	0.24

tblVehicleEF	SBUS	0.13	0.16
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.73	1.86
tblVehicleEF	SBUS	2.36	1.61
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.67	9.85
tblVehicleEF	UBUS	0.88	0.77
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	4.4500e-003	3.2360e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	2.4800e-003	1.9260e-003
tblVehicleEF	UBUS	0.82	0.57
tblVehicleEF	UBUS	0.65	0.47
tblVehicleEF	UBUS	0.59	0.48
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	12.89	9.29
tblVehicleEF	UBUS	0.84	0.74
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	6.2970e-003	4.5910e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	3.4160e-003	2.6640e-003

tblVehicleEF	UBUS	0.83	0.57
tblVehicleEF	UBUS	0.60	0.43
tblVehicleEF	UBUS	0.53	0.43
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.41	9.66
tblVehicleEF	UBUS	0.89	0.78
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	5.2130e-003	3.6580e-003
tblVehicleEF	UBUS	0.10	0.07
tblVehicleEF	UBUS	2.6830e-003	1.9870e-003
tblVehicleEF	UBUS	0.81	0.57
tblVehicleEF	UBUS	0.76	0.56
tblVehicleEF	UBUS	0.60	0.49
tblVehicleTrips	ST_TR	2.59	4.66
tblVehicleTrips	SU_TR	2.59	4.66
tblVehicleTrips	WD_TR	2.59	4.66
tblWater	IndoorWaterUseRate	53,467,312.50	419,750.00
tblWater	OutdoorWaterUseRate	0.00	973,132.00

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					
2016	5.6289	57.1466	38.4066	0.0637	13.3541	3.1168	16.4709	6.7935	2.8675	9.6610	0.0000	5,853.7070	5,853.7070	1.2172	0.0000	5,879.2677
2017	73.0791	31.6696	34.3772	0.0637	2.0559	1.8089	3.8648	0.5524	1.7291	2.2815	0.0000	5,743.9757	5,743.9757	0.8054	0.0000	5,760.8889
Total	**78.7080**	**88.8162**	**72.7839**	**0.1274**	**15.4100**	**4.9257**	**20.3357**	**7.3459**	**4.5966**	**11.9425**	**0.0000**	**11,597.6828**	**11,597.6828**	**2.0226**	**0.0000**	**11,640.1567**

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					
2016	5.6289	57.1466	38.4066	0.0637	5.2322	3.1168	8.3490	2.6315	2.8675	5.4990	0.0000	5,853.7070	5,853.7070	1.2172	0.0000	5,879.2677
2017	73.0791	31.6696	34.3772	0.0637	2.0559	1.8089	3.8648	0.5524	1.7291	2.2815	0.0000	5,743.9757	5,743.9757	0.8054	0.0000	5,760.8889
Total	**78.7080**	**88.8162**	**72.7839**	**0.1274**	**7.2881**	**4.9257**	**12.2138**	**3.1838**	**4.5966**	**7.7805**	**0.0000**	**11,597.6828**	**11,597.6828**	**2.0226**	**0.0000**	**11,640.1567**

	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**	**52.71**	**0.00**	**39.94**	**56.66**	**0.00**	**34.85**	**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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.8704	40.1419	77.2259	0.2304	10.1876	0.7991	10.9867	2.7516	0.7353	3.4869		21,376.1407	21,376.1407	0.3788		21,384.0946
Total	**13.4727**	**40.1425**	**77.2831**	**0.2304**	**10.1876**	**0.7993**	**10.9869**	**2.7516**	**0.7356**	**3.4872**		**21,376.2611**	**21,376.2611**	**0.3791**	**0.0000**	**21,384.2221**

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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.8704	40.1419	77.2259	0.2304	10.1876	0.7991	10.9867	2.7516	0.7353	3.4869		21,376.1407	21,376.1407	0.3788		21,384.0946
Total	**13.4727**	**40.1425**	**77.2831**	**0.2304**	**10.1876**	**0.7993**	**10.9869**	**2.7516**	**0.7356**	**3.4872**		**21,376.2611**	**21,376.2611**	**0.3791**	**0.0000**	**21,384.2221**

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	Site Preparation	Site Preparation	11/1/2016	11/3/2016	5	3	
2	Grading	Grading	11/4/2016	11/18/2016	5	11	
3	Building Construction	Building Construction	11/21/2016	5/19/2017	5	130	
4	Paving	Paving	5/22/2017	6/5/2017	5	11	
5	Architectural Coating	Architectural Coating	6/6/2017	6/26/2017	5	15	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 352,557; Non-Residential Outdoor: 117,519 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	2	8.00	174	0.41
Grading	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.36
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					4.0653	0.0000	4.0653	0.4390	0.0000	0.4390			0.0000			0.0000
Off-Road	2.6992	30.8238	18.0600	0.0239		1.5116	1.5116		1.3907	1.3907		2,480.1000	2,480.1000	0.7481		2,495.8099
Total	**2.6992**	**30.8238**	**18.0600**	**0.0239**	**4.0653**	**1.5116**	**5.5769**	**0.4390**	**1.3907**	**1.8297**		**2,480.1000**	**2,480.1000**	**0.7481**		**2,495.8099**

3.2 Site Preparation - 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	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	0.0356	0.0448	0.5550	1.1600e-003	0.0894	8.5000e-004	0.0903	0.0237	7.8000e-004	0.0245		98.3217	98.3217	5.3500e-003		98.4341
Total	**0.0356**	**0.0448**	**0.5550**	**1.1600e-003**	**0.0894**	**8.5000e-004**	**0.0903**	**0.0237**	**7.8000e-004**	**0.0245**		**98.3217**	**98.3217**	**5.3500e-003**		**98.4341**

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					1.5550	0.0000	1.5550	0.1679	0.0000	0.1679			0.0000			0.0000
Off-Road	2.6992	30.8238	18.0600	0.0239		1.5116	1.5116		1.3907	1.3907	0.0000	2,480.1000	2,480.1000	0.7481		2,495.8099
Total	**2.6992**	**30.8238**	**18.0600**	**0.0239**	**1.5550**	**1.5116**	**3.0666**	**0.1679**	**1.3907**	**1.5586**	**0.0000**	**2,480.1000**	**2,480.1000**	**0.7481**		**2,495.8099**

3.2 Site Preparation - 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	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	0.0356	0.0448	0.5550	1.1600e-003	0.0894	8.5000e-004	0.0903	0.0237	7.8000e-004	0.0245		98.3217	98.3217	5.3500e-003		98.4341
Total	**0.0356**	**0.0448**	**0.5550**	**1.1600e-003**	**0.0894**	**8.5000e-004**	**0.0903**	**0.0237**	**7.8000e-004**	**0.0245**		**98.3217**	**98.3217**	**5.3500e-003**		**98.4341**

3.3 Grading - 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					
Fugitive Dust					13.1529	0.0000	13.1529	6.7402	0.0000	6.7402			0.0000			0.0000
Off-Road	5.4080	57.0457	37.1580	0.0384		3.1149	3.1149		2.8657	2.8657		3,995.3308	3,995.3308	1.2051		4,020.6386
Total	**5.4080**	**57.0457**	**37.1580**	**0.0384**	**13.1529**	**3.1149**	**16.2678**	**6.7402**	**2.8657**	**9.6059**		**3,995.3308**	**3,995.3308**	**1.2051**		**4,020.6386**

3.3 Grading - 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	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	0.0802	0.1009	1.2487	2.6200e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		221.2238	221.2238	0.0120		221.4767
Total	**0.0802**	**0.1009**	**1.2487**	**2.6200e-003**	**0.2012**	**1.9000e-003**	**0.2031**	**0.0534**	**1.7500e-003**	**0.0551**		**221.2238**	**221.2238**	**0.0120**		**221.4767**

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					5.0310	0.0000	5.0310	2.5781	0.0000	2.5781			0.0000			0.0000
Off-Road	5.4080	57.0457	37.1580	0.0384		3.1149	3.1149		2.8657	2.8657	0.0000	3,995.3308	3,995.3308	1.2051		4,020.6386
Total	**5.4080**	**57.0457**	**37.1580**	**0.0384**	**5.0310**	**3.1149**	**8.1459**	**2.5781**	**2.8657**	**5.4439**	**0.0000**	**3,995.3308**	**3,995.3308**	**1.2051**		**4,020.6386**

3.3 Grading - 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	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	0.0802	0.1009	1.2487	2.6200e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		221.2238	221.2238	0.0120		221.4767
Total	**0.0802**	**0.1009**	**1.2487**	**2.6200e-003**	**0.2012**	**1.9000e-003**	**0.2031**	**0.0534**	**1.7500e-003**	**0.0551**		**221.2238**	**221.2238**	**0.0120**		**221.4767**

3.4 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	4.4592	28.1432	19.7914	0.0288		1.9107	1.9107		1.8304	1.8304		2,698.5833	2,698.5833	0.6343		2,711.9028
Total	**4.4592**	**28.1432**	**19.7914**	**0.0288**		**1.9107**	**1.9107**		**1.8304**	**1.8304**		**2,698.5833**	**2,698.5833**	**0.6343**		**2,711.9028**

3.4 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	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	0.4971	5.1630	5.9984	0.0130	0.3680	0.0807	0.4487	0.1047	0.0742	0.1789		1,299.3016	1,299.3016	9.5400e-003		1,299.5019
Worker	0.6725	0.8464	10.4748	0.0220	1.6878	0.0160	1.7038	0.4476	0.0147	0.4623		1,855.8221	1,855.8221	0.1010		1,857.9437
Total	**1.1696**	**6.0095**	**16.4732**	**0.0349**	**2.0558**	**0.0967**	**2.1525**	**0.5523**	**0.0889**	**0.6412**		**3,155.1238**	**3,155.1238**	**0.1106**		**3,157.4456**

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	4.4592	28.1432	19.7914	0.0288		1.9107	1.9107		1.8304	1.8304	0.0000	2,698.5833	2,698.5833	0.6343		2,711.9028
Total	**4.4592**	**28.1432**	**19.7914**	**0.0288**		**1.9107**	**1.9107**		**1.8304**	**1.8304**	**0.0000**	**2,698.5833**	**2,698.5833**	**0.6343**		**2,711.9028**

3.4 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	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	0.4971	5.1630	5.9984	0.0130	0.3680	0.0807	0.4487	0.1047	0.0742	0.1789		1,299.3016	1,299.3016	9.5400e-003		1,299.5019
Worker	0.6725	0.8464	10.4748	0.0220	1.6878	0.0160	1.7038	0.4476	0.0147	0.4623		1,855.8221	1,855.8221	0.1010		1,857.9437
Total	**1.1696**	**6.0095**	**16.4732**	**0.0349**	**2.0558**	**0.0967**	**2.1525**	**0.5523**	**0.0889**	**0.6412**		**3,155.1238**	**3,155.1238**	**0.1106**		**3,157.4456**

3.4 Building Construction - 2017

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	4.0130	26.1973	19.2549	0.0288		1.7217	1.7217		1.6489	1.6489		2,679.0510	2,679.0510	0.6057		2,691.7713
Total	**4.0130**	**26.1973**	**19.2549**	**0.0288**		**1.7217**	**1.7217**		**1.6489**	**1.6489**		**2,679.0510**	**2,679.0510**	**0.6057**		**2,691.7713**

3.4 Building Construction - 2017

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	0.4546	4.7067	5.6318	0.0130	0.3681	0.0719	0.4400	0.1048	0.0661	0.1709		1,278.5532	1,278.5532	9.2300e-003		1,278.7470
Worker	0.6044	0.7655	9.4906	0.0220	1.6878	0.0153	1.7031	0.4476	0.0141	0.4617		1,786.3716	1,786.3716	0.0934		1,788.3323
Total	**1.0589**	**5.4723**	**15.1224**	**0.0349**	**2.0559**	**0.0872**	**2.1431**	**0.5524**	**0.0802**	**0.6326**		**3,064.9248**	**3,064.9248**	**0.1026**		**3,067.0794**

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	4.0130	26.1973	19.2549	0.0288		1.7217	1.7217		1.6489	1.6489	0.0000	2,679.0510	2,679.0510	0.6057		2,691.7713
Total	**4.0130**	**26.1973**	**19.2549**	**0.0288**		**1.7217**	**1.7217**		**1.6489**	**1.6489**	**0.0000**	**2,679.0510**	**2,679.0510**	**0.6057**		**2,691.7713**

3.4 Building Construction - 2017

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	0.4546	4.7067	5.6318	0.0130	0.3681	0.0719	0.4400	0.1048	0.0661	0.1709		1,278.5532	1,278.5532	9.2300e-003		1,278.7470
Worker	0.6044	0.7655	9.4906	0.0220	1.6878	0.0153	1.7031	0.4476	0.0141	0.4617		1,786.3716	1,786.3716	0.0934		1,788.3323
Total	**1.0589**	**5.4723**	**15.1224**	**0.0349**	**2.0559**	**0.0872**	**2.1431**	**0.5524**	**0.0802**	**0.6326**		**3,064.9248**	**3,064.9248**	**0.1026**		**3,067.0794**

3.5 Paving - 2017

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	2.2502	23.4033	17.2197	0.0259		1.3599	1.3599		1.2523	1.2523		2,621.6123	2,621.6123	0.7930		2,638.2658
Paving	0.6836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9338**	**23.4033**	**17.2197**	**0.0259**		**1.3599**	**1.3599**		**1.2523**	**1.2523**		**2,621.6123**	**2,621.6123**	**0.7930**		**2,638.2658**

3.5 Paving - 2017

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	0.0801	0.1014	1.2570	2.9100e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		236.6055	236.6055	0.0124		236.8652
Total	**0.0801**	**0.1014**	**1.2570**	**2.9100e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**236.6055**	**236.6055**	**0.0124**		**236.8652**

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	2.2502	23.4033	17.2197	0.0259		1.3599	1.3599		1.2523	1.2523	0.0000	2,621.6123	2,621.6123	0.7930		2,638.2658
Paving	0.6836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9338**	**23.4033**	**17.2197**	**0.0259**		**1.3599**	**1.3599**		**1.2523**	**1.2523**	**0.0000**	**2,621.6123**	**2,621.6123**	**0.7930**		**2,638.2658**

3.5 Paving - 2017

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	0.0801	0.1014	1.2570	2.9100e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		236.6055	236.6055	0.0124		236.8652
Total	**0.0801**	**0.1014**	**1.2570**	**2.9100e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**236.6055**	**236.6055**	**0.0124**		**236.8652**

3.6 Architectural Coating - 2017

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	72.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**72.9591**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

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	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
Total	**0.1201**	**0.1521**	**1.8856**	**4.3600e-003**	**0.3353**	**3.0400e-003**	**0.3384**	**0.0889**	**2.8000e-003**	**0.0917**		**354.9083**	**354.9083**	**0.0186**		**355.2978**

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	72.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**72.9591**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

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	0.1201	0.1521	1.8856	4.3600e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		354.9083	354.9083	0.0186		355.2978
Total	**0.1201**	**0.1521**	**1.8856**	**4.3600e-003**	**0.3353**	**3.0400e-003**	**0.3384**	**0.0889**	**2.8000e-003**	**0.0917**		**354.9083**	**354.9083**	**0.0186**		**355.2978**

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	4.8704	40.1419	77.2259	0.2304	10.1876	0.7991	10.9867	2.7516	0.7353	3.4869		21,376.1407	21,376.1407	0.3788		21,384.0946
Unmitigated	4.8704	40.1419	77.2259	0.2304	10.1876	0.7991	10.9867	2.7516	0.7353	3.4869		21,376.1407	21,376.1407	0.3788		21,384.0946

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.44	1,077.44	1077.44	4,617,597	4,617,597
Total	1,077.44	1,077.44	1,077.44	4,617,597	4,617,597

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.607600	0.000000	0.000000	0.039900	0.000000	0.000000	0.070500	0.282000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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	0.0000	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
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	0.0000	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Unmitigated	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275

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	1.4923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5200e-003	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Total	**8.6023**	**5.4000e-004**	**0.0572**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1204**	**0.1204**	**3.4000e-004**		**0.1275**

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	1.4923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5200e-003	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Total	**8.6023**	**5.4000e-004**	**0.0572**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1204**	**0.1204**	**3.4000e-004**		**0.1275**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

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

10.0 Vegetation

Nelson Avenue Business Park

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	231.21	1000sqft	8.63	231,210.00	0
Parking Lot	319.00	Space	2.87	127,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2017
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 - Acreage per Project Applicant.

Construction Phase - Adjusted per Project Applicant.

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment list per Project Applicant.

Grading - Acreage per Project Applicant.

Architectural Coating - Per SCAQMD Rule 1113.

Vehicle Trips - Adjusted per Traffic Report.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Energy Use - Per Project Applicant.

Water And Wastewater - Per Project Applicant.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403. Tier 3 mitigation for grading equipment.

Mobile Land Use Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residental_Exterior	100.00	50.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	300.00	130.00
tblConstructionPhase	NumDays	30.00	11.00
tblConstructionPhase	NumDays	20.00	11.00

tblConstructionPhase	NumDays	10.00	3.00
tblConstructionPhase	PhaseStartDate	11/19/2016	11/21/2016
tblConstructionPhase	PhaseStartDate	5/20/2017	5/22/2017
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	2.23	0.00
tblEnergyUse	NT24E	1.34	17.47
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.79	0.00
tblEnergyUse	T24NG	0.88	0.00
tblGrading	AcresOfGrading	11.00	11.50
tblGrading	AcresOfGrading	4.50	11.50
tblLandUse	LotAcreage	5.31	8.63
tblOffRoadEquipment	LoadFactor	0.38	0.36
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	OperationalYear	2014	2017

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tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
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tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	0.93	0.91
tblVehicleEF	MCY	0.44	0.41
tblVehicleEF	MCY	0.55	0.53
tblVehicleEF	MCY	2.40	2.34
tblVehicleEF	MCY	1.46	1.28
tblVehicleEF	MCY	2.10	2.06
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.01	1.00
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004
tblVehicleEF	MCY	1.48	1.46
tblVehicleEF	MCY	0.49	0.46
tblVehicleEF	MCY	0.91	0.89
tblVehicleEF	MCY	2.33	2.28
tblVehicleEF	MCY	1.35	1.18
tblVehicleEF	MCY	1.84	1.81
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	1.02	1.00
tblVehicleEF	MCY	0.57	0.52
tblVehicleEF	MCY	0.52	0.51
tblVehicleEF	MCY	2.42	2.36
tblVehicleEF	MCY	1.72	1.53
tblVehicleEF	MCY	2.16	2.11
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.30	0.20
tblVehicleEF	MDV	0.46	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.19
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.65	0.58
tblVehicleEF	MDV	0.42	0.27
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.26	0.17
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.22	0.20

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.61	0.54
tblVehicleEF	MDV	0.36	0.23
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.29	0.19
tblVehicleEF	MDV	0.47	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.23	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.76	0.67
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.38	0.96
tblVehicleEF	MH	0.85	0.69
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004

tblVehicleEF	MH	1.20	0.78
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.50	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.08	1.32
tblVehicleEF	MH	0.51	0.36
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.26	0.88
tblVehicleEF	MH	0.82	0.67
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.71	1.11
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.69	0.49
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	2.03	1.29
tblVehicleEF	MH	0.43	0.31
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.35	0.94
tblVehicleEF	MH	0.86	0.70
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003

tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.40	0.87
tblVehicleEF	MH	0.11	0.06
tblVehicleEF	MH	0.53	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.20	1.40
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.92	4.57
tblVehicleEF	MHD	2.78	1.80
tblVehicleEF	MHD	2.00	1.45
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	2.7820e-003	2.0830e-003
tblVehicleEF	MHD	0.11	0.09

tblVehicleEF	MHD	0.16	0.17
tblVehicleEF	MHD	1.7390e-003	1.4420e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	1.18	0.82
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	6.11	4.72
tblVehicleEF	MHD	2.61	1.69
tblVehicleEF	MHD	1.92	1.39
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	4.1960e-003	3.1190e-003
tblVehicleEF	MHD	0.11	0.09
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	2.5490e-003	2.0500e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	1.03	0.72
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.65	4.37

tblVehicleEF	MHD	2.73	1.76
tblVehicleEF	MHD	2.02	1.46
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	3.0270e-003	2.1680e-003
tblVehicleEF	MHD	0.13	0.10
tblVehicleEF	MHD	0.17	0.18
tblVehicleEF	MHD	1.7460e-003	1.4190e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.54	0.44
tblVehicleEF	MHD	1.22	0.85
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.55	4.37
tblVehicleEF	OBUS	3.74	2.41
tblVehicleEF	OBUS	1.38	1.06
tblVehicleEF	OBUS	0.01	9.6540e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004

tblVehicleEF	OBUS	9.6700e-003	8.8810e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.2400e-004	8.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.40	0.48
tblVehicleEF	OBUS	4.9500e-004	4.9100e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.29
tblVehicleEF	OBUS	0.61	0.47
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.73	4.51
tblVehicleEF	OBUS	3.52	2.27
tblVehicleEF	OBUS	1.32	1.02
tblVehicleEF	OBUS	8.8610e-003	8.1380e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	8.1520e-003	7.4870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	1.3330e-003	1.2280e-003
tblVehicleEF	OBUS	0.03	0.03

tblVehicleEF	OBUS	0.38	0.46
tblVehicleEF	OBUS	6.9500e-004	6.7800e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.28
tblVehicleEF	OBUS	0.54	0.41
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.30	4.18
tblVehicleEF	OBUS	3.67	2.37
tblVehicleEF	OBUS	1.39	1.07
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.7400e-004	8.6200e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.52
tblVehicleEF	OBUS	4.8700e-004	4.7500e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.34	0.31
tblVehicleEF	OBUS	0.63	0.48
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.05	5.85

tblVehicleEF	SBUS	8.37	5.90
tblVehicleEF	SBUS	2.33	1.83
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.12	0.14
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.32	1.56
tblVehicleEF	SBUS	2.29	1.56
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.31	6.04
tblVehicleEF	SBUS	7.88	5.56
tblVehicleEF	SBUS	2.21	1.74
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003

tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.06	0.04
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.11	0.14
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.13	1.43
tblVehicleEF	SBUS	2.02	1.40
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	7.69	5.59
tblVehicleEF	SBUS	8.23	5.80
tblVehicleEF	SBUS	2.37	1.86
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.05	0.03
tblVehicleEF	SBUS	0.34	0.24

tblVehicleEF	SBUS	0.13	0.16
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.73	1.86
tblVehicleEF	SBUS	2.36	1.61
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.67	9.85
tblVehicleEF	UBUS	0.88	0.77
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	4.4500e-003	3.2360e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	2.4800e-003	1.9260e-003
tblVehicleEF	UBUS	0.82	0.57
tblVehicleEF	UBUS	0.65	0.47
tblVehicleEF	UBUS	0.59	0.48
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	12.89	9.29
tblVehicleEF	UBUS	0.84	0.74
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	6.2970e-003	4.5910e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	3.4160e-003	2.6640e-003

tblVehicleEF	UBUS	0.83	0.57
tblVehicleEF	UBUS	0.60	0.43
tblVehicleEF	UBUS	0.53	0.43
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.41	9.66
tblVehicleEF	UBUS	0.89	0.78
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	5.2130e-003	3.6580e-003
tblVehicleEF	UBUS	0.10	0.07
tblVehicleEF	UBUS	2.6830e-003	1.9870e-003
tblVehicleEF	UBUS	0.81	0.57
tblVehicleEF	UBUS	0.76	0.56
tblVehicleEF	UBUS	0.60	0.49
tblVehicleTrips	ST_TR	2.59	4.66
tblVehicleTrips	SU_TR	2.59	4.66
tblVehicleTrips	WD_TR	2.59	4.66
tblWater	IndoorWaterUseRate	53,467,312.50	419,750.00
tblWater	OutdoorWaterUseRate	0.00	973,132.00

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					
2016	5.7073	57.1576	38.3305	0.0624	13.3541	3.1168	16.4709	6.7935	2.8675	9.6610	0.0000	5,738.7437	5,738.7437	1.2172	0.0000	5,764.3044
2017	73.0837	31.8685	35.0572	0.0623	2.0559	1.8096	3.8656	0.5524	1.7298	2.2822	0.0000	5,632.9332	5,632.9332	0.8054	0.0000	5,649.8464
Total	**78.7910**	**89.0262**	**73.3877**	**0.1247**	**15.4100**	**4.9265**	**20.3365**	**7.3459**	**4.5973**	**11.9432**	**0.0000**	**11,371.6769**	**11,371.6769**	**2.0226**	**0.0000**	**11,414.1508**

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					
2016	5.7073	57.1576	38.3305	0.0624	5.2322	3.1168	8.3490	2.6315	2.8675	5.4990	0.0000	5,738.7437	5,738.7437	1.2172	0.0000	5,764.3044
2017	73.0837	31.8685	35.0572	0.0623	2.0559	1.8096	3.8656	0.5524	1.7298	2.2822	0.0000	5,632.9332	5,632.9332	0.8054	0.0000	5,649.8464
Total	**78.7910**	**89.0262**	**73.3877**	**0.1247**	**7.2881**	**4.9265**	**12.2146**	**3.1838**	**4.5973**	**7.7811**	**0.0000**	**11,371.6769**	**11,371.6769**	**2.0226**	**0.0000**	**11,414.1508**

	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**	**52.71**	**0.00**	**39.94**	**56.66**	**0.00**	**34.85**	**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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	5.1542	41.4679	86.3472	0.2256	10.1876	0.8024	10.9900	2.7516	0.7384	3.4900		20,966.0959	20,966.0959	0.3811		20,974.0994
Total	**13.7564**	**41.4685**	**86.4044**	**0.2256**	**10.1876**	**0.8026**	**10.9902**	**2.7516**	**0.7386**	**3.4902**		**20,966.2163**	**20,966.2163**	**0.3815**	**0.0000**	**20,974.2268**

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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	5.1542	41.4679	86.3472	0.2256	10.1876	0.8024	10.9900	2.7516	0.7384	3.4900		20,966.0959	20,966.0959	0.3811		20,974.0994
Total	**13.7564**	**41.4685**	**86.4044**	**0.2256**	**10.1876**	**0.8026**	**10.9902**	**2.7516**	**0.7386**	**3.4902**		**20,966.2163**	**20,966.2163**	**0.3815**	**0.0000**	**20,974.2268**

	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	0.00	0.00	0.00	0.00	0.00	0.00	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	Site Preparation	Site Preparation	11/1/2016	11/3/2016	5	3	
2	Grading	Grading	11/4/2016	11/18/2016	5	11	
3	Building Construction	Building Construction	11/21/2016	5/19/2017	5	130	
4	Paving	Paving	5/22/2017	6/5/2017	5	11	
5	Architectural Coating	Architectural Coating	6/6/2017	6/26/2017	5	15	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 352,557; Non-Residential Outdoor: 117,519 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	2	8.00	174	0.41
Grading	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.36
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					4.0653	0.0000	4.0653	0.4390	0.0000	0.4390			0.0000			0.0000
Off-Road	2.6992	30.8238	18.0600	0.0239		1.5116	1.5116		1.3907	1.3907		2,480.1000	2,480.1000	0.7481		2,495.8099
Total	**2.6992**	**30.8238**	**18.0600**	**0.0239**	**4.0653**	**1.5116**	**5.5769**	**0.4390**	**1.3907**	**1.8297**		**2,480.1000**	**2,480.1000**	**0.7481**		**2,495.8099**

3.2 Site Preparation - 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	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	0.0371	0.0497	0.5211	1.1000e-003	0.0894	8.5000e-004	0.0903	0.0237	7.8000e-004	0.0245		92.8025	92.8025	5.3500e-003		92.9149
Total	**0.0371**	**0.0497**	**0.5211**	**1.1000e-003**	**0.0894**	**8.5000e-004**	**0.0903**	**0.0237**	**7.8000e-004**	**0.0245**		**92.8025**	**92.8025**	**5.3500e-003**		**92.9149**

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					1.5550	0.0000	1.5550	0.1679	0.0000	0.1679			0.0000			0.0000
Off-Road	2.6992	30.8238	18.0600	0.0239		1.5116	1.5116		1.3907	1.3907	0.0000	2,480.1000	2,480.1000	0.7481		2,495.8099
Total	**2.6992**	**30.8238**	**18.0600**	**0.0239**	**1.5550**	**1.5116**	**3.0666**	**0.1679**	**1.3907**	**1.5586**	**0.0000**	**2,480.1000**	**2,480.1000**	**0.7481**		**2,495.8099**

3.2 Site Preparation - 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	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	0.0371	0.0497	0.5211	1.1000e-003	0.0894	8.5000e-004	0.0903	0.0237	7.8000e-004	0.0245		92.8025	92.8025	5.3500e-003		92.9149
Total	**0.0371**	**0.0497**	**0.5211**	**1.1000e-003**	**0.0894**	**8.5000e-004**	**0.0903**	**0.0237**	**7.8000e-004**	**0.0245**		**92.8025**	**92.8025**	**5.3500e-003**		**92.9149**

3.3 Grading - 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					
Fugitive Dust					13.1529	0.0000	13.1529	6.7402	0.0000	6.7402			0.0000			0.0000
Off-Road	5.4080	57.0457	37.1580	0.0384		3.1149	3.1149		2.8657	2.8657		3,995.3308	3,995.3308	1.2051		4,020.6386
Total	**5.4080**	**57.0457**	**37.1580**	**0.0384**	**13.1529**	**3.1149**	**16.2678**	**6.7402**	**2.8657**	**9.6059**		**3,995.3308**	**3,995.3308**	**1.2051**		**4,020.6386**

3.3 Grading - 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	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	0.0834	0.1119	1.1725	2.4700e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		208.8056	208.8056	0.0120		209.0585
Total	**0.0834**	**0.1119**	**1.1725**	**2.4700e-003**	**0.2012**	**1.9000e-003**	**0.2031**	**0.0534**	**1.7500e-003**	**0.0551**		**208.8056**	**208.8056**	**0.0120**		**209.0585**

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					5.0310	0.0000	5.0310	2.5781	0.0000	2.5781			0.0000			0.0000
Off-Road	5.4080	57.0457	37.1580	0.0384		3.1149	3.1149		2.8657	2.8657	0.0000	3,995.3308	3,995.3308	1.2051		4,020.6386
Total	**5.4080**	**57.0457**	**37.1580**	**0.0384**	**5.0310**	**3.1149**	**8.1459**	**2.5781**	**2.8657**	**5.4439**	**0.0000**	**3,995.3308**	**3,995.3308**	**1.2051**		**4,020.6386**

3.3 Grading - 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	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	0.0834	0.1119	1.1725	2.4700e-003	0.2012	1.9000e-003	0.2031	0.0534	1.7500e-003	0.0551		208.8056	208.8056	0.0120		209.0585
Total	**0.0834**	**0.1119**	**1.1725**	**2.4700e-003**	**0.2012**	**1.9000e-003**	**0.2031**	**0.0534**	**1.7500e-003**	**0.0551**		**208.8056**	**208.8056**	**0.0120**		**209.0585**

3.4 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	4.4592	28.1432	19.7914	0.0288		1.9107	1.9107		1.8304	1.8304		2,698.5833	2,698.5833	0.6343		2,711.9028
Total	**4.4592**	**28.1432**	**19.7914**	**0.0288**		**1.9107**	**1.9107**		**1.8304**	**1.8304**		**2,698.5833**	**2,698.5833**	**0.6343**		**2,711.9028**

3.4 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	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	0.5484	5.2926	7.3032	0.0129	0.3680	0.0816	0.4495	0.1047	0.0750	0.1797		1,288.5134	1,288.5134	9.8100e-003		1,288.7195
Worker	0.6997	0.9386	9.8357	0.0207	1.6878	0.0160	1.7038	0.4476	0.0147	0.4623		1,751.6470	1,751.6470	0.1010		1,753.7685
Total	**1.2481**	**6.2312**	**17.1389**	**0.0336**	**2.0558**	**0.0975**	**2.1533**	**0.5523**	**0.0897**	**0.6420**		**3,040.1604**	**3,040.1604**	**0.1108**		**3,042.4880**

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	4.4592	28.1432	19.7914	0.0288		1.9107	1.9107		1.8304	1.8304	0.0000	2,698.5833	2,698.5833	0.6343		2,711.9028
Total	**4.4592**	**28.1432**	**19.7914**	**0.0266**		**1.9107**	**1.9107**		**1.8304**	**1.8304**	**0.0000**	**2,698.5833**	**2,698.5833**	**0.6343**		**2,711.9028**

3.4 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	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	0.5484	5.2926	7.3032	0.0129	0.3680	0.0816	0.4495	0.1047	0.0750	0.1797		1,288.5134	1,288.5134	9.8100e-003		1,288.7195
Worker	0.6997	0.9386	9.8357	0.0207	1.6878	0.0160	1.7038	0.4476	0.0147	0.4623		1,751.6470	1,751.6470	0.1010		1,753.7685
Total	**1.2481**	**6.2312**	**17.1389**	**0.0336**	**2.0558**	**0.0975**	**2.1533**	**0.5523**	**0.0897**	**0.6420**		**3,040.1604**	**3,040.1604**	**0.1108**		**3,042.4880**

3.4 Building Construction - 2017

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	4.0130	26.1973	19.2549	0.0288		1.7217	1.7217		1.6489	1.6489		2,679.0510	2,679.0510	0.6057		2,691.7713
Total	**4.0130**	**26.1973**	**19.2549**	**0.0288**		**1.7217**	**1.7217**		**1.6489**	**1.6489**		**2,679.0510**	**2,679.0510**	**0.6057**		**2,691.7713**

3.4 Building Construction - 2017

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	0.4992	4.8223	6.9270	0.0129	0.3681	0.0726	0.4407	0.1048	0.0668	0.1716		1,267.9138	1,267.9138	9.5100e-003		1,268.1134
Worker	0.6274	0.8489	8.8753	0.0207	1.6878	0.0153	1.7031	0.4476	0.0141	0.4617		1,685.9685	1,685.9685	0.0934		1,687.9293
Total	**1.1266**	**5.6712**	**15.8023**	**0.0336**	**2.0559**	**0.0879**	**2.1439**	**0.5524**	**0.0809**	**0.6333**		**2,953.8823**	**2,953.8823**	**0.1029**		**2,956.0427**

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	4.0130	26.1973	19.2549	0.0288		1.7217	1.7217		1.6489	1.6489	0.0000	2,679.0510	2,679.0510	0.6057		2,691.7713
Total	**4.0130**	**26.1973**	**19.2549**	**0.0288**		**1.7217**	**1.7217**		**1.6489**	**1.6489**	**0.0000**	**2,679.0510**	**2,679.0510**	**0.6057**		**2,691.7713**

3.4 Building Construction - 2017

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	0.4992	4.8223	6.9270	0.0129	0.3681	0.0726	0.4407	0.1048	0.0668	0.1716		1,267.9138	1,267.9138	9.5100e-003		1,268.1134
Worker	0.6274	0.8489	8.8753	0.0207	1.6878	0.0153	1.7031	0.4476	0.0141	0.4617		1,685.9685	1,685.9685	0.0934		1,687.9293
Total	**1.1266**	**5.6712**	**15.8023**	**0.0336**	**2.0559**	**0.0879**	**2.1439**	**0.5524**	**0.0809**	**0.6333**		**2,953.8823**	**2,953.8823**	**0.1029**		**2,956.0427**

3.5 Paving - 2017

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	2.2502	23.4033	17.2197	0.0259		1.3599	1.3599		1.2523	1.2523		2,621.6123	2,621.6123	0.7930		2,638.2658
Paving	0.6836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9338**	**23.4033**	**17.2197**	**0.0259**		**1.3599**	**1.3599**		**1.2523**	**1.2523**		**2,621.6123**	**2,621.6123**	**0.7930**		**2,638.2658**

3.5 Paving - 2017

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	0.0831	0.1124	1.1755	2.7400e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		223.3071	223.3071	0.0124		223.5668
Total	**0.0831**	**0.1124**	**1.1755**	**2.7400e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**223.3071**	**223.3071**	**0.0124**		**223.5668**

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	2.2502	23.4033	17.2197	0.0259		1.3599	1.3599		1.2523	1.2523	0.0000	2,621.6123	2,621.6123	0.7930		2,638.2658
Paving	0.6836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9338**	**23.4033**	**17.2197**	**0.0259**		**1.3599**	**1.3599**		**1.2523**	**1.2523**	**0.0000**	**2,621.6123**	**2,621.6123**	**0.7930**		**2,638.2658**

3.5 Paving - 2017

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	0.0831	0.1124	1.1755	2.7400e-003	0.2236	2.0300e-003	0.2256	0.0593	1.8700e-003	0.0612		223.3071	223.3071	0.0124		223.5668
Total	**0.0831**	**0.1124**	**1.1755**	**2.7400e-003**	**0.2236**	**2.0300e-003**	**0.2256**	**0.0593**	**1.8700e-003**	**0.0612**		**223.3071**	**223.3071**	**0.0124**		**223.5668**

3.6 Architectural Coating - 2017

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	72.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**72.9591**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

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	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
Total	**0.1247**	**0.1687**	**1.7633**	**4.1100e-003**	**0.3353**	**3.0400e-003**	**0.3384**	**0.0889**	**2.8000e-003**	**0.0917**		**334.9606**	**334.9606**	**0.0186**		**335.3502**

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	72.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**72.9591**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

3.6 Architectural Coating - 2017

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	0.1247	0.1687	1.7633	4.1100e-003	0.3353	3.0400e-003	0.3384	0.0889	2.8000e-003	0.0917		334.9606	334.9606	0.0186		335.3502
Total	**0.1247**	**0.1687**	**1.7633**	**4.1100e-003**	**0.3353**	**3.0400e-003**	**0.3384**	**0.0889**	**2.8000e-003**	**0.0917**		**334.9606**	**334.9606**	**0.0186**		**335.3502**

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	5.1542	41.4679	86.3472	0.2256	10.1876	0.8024	10.9900	2.7516	0.7384	3.4900		20,966.0959	20,966.0959	0.3811		20,974.0994
Unmitigated	5.1542	41.4679	86.3472	0.2256	10.1876	0.8024	10.9900	2.7516	0.7384	3.4900		20,966.0959	20,966.0959	0.3811		20,974.0994

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.44	1,077.44	1077.44	4,617,597	4,617,597
Total	1,077.44	1,077.44	1,077.44	4,617,597	4,617,597

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.607600	0.000000	0.000000	0.039900	0.000000	0.000000	0.070500	0.282000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
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	0.0000	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
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	0.0000	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Unmitigated	8.6023	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275

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	1.4923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5200e-003	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Total	**8.6023**	**5.4000e-004**	**0.0572**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1204**	**0.1204**	**3.4000e-004**		**0.1275**

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	1.4923					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.1044					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5200e-003	5.4000e-004	0.0572	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1204	0.1204	3.4000e-004		0.1275
Total	**8.6023**	**5.4000e-004**	**0.0572**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1204**	**0.1204**	**3.4000e-004**		**0.1275**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

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

10.0 Vegetation

Nelson Avenue Business Park Health Risk Assessment

1.0 INTRODUCTION

The purpose of this Health Risk Assessment is to evaluate potential health risks associated with Toxic Air Contaminants (TAC) including Diesel Particulate Matter (DPM) resulting from the implementation of the proposed Nelson Avenue Business Park Project (project) in the City of Industry, in Los Angeles County, California (**Figure 1**). This Health Risk Assessment was prepared in accordance with the requirements of the South Coast Air Quality Management District (SCAQMD) and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur from the proposed project.

1.1 PROJECT LOCATION

The proposed project is located along the south side of Nelson Avenue between Sunset and California Avenues at 14700 Nelson Avenue, in the City of Industry, Los Angeles County, California. The project site measures 11.49 acres, and comprises three vacant parcels (**Figure 2**). The Assessor's Parcels Numbers (APNs) are as follows: 8208-006-900, 901, 902. The project is northeast of the Southern Pacific Railroad, and Southwest of the Calvary Apostolic Church.

1.2 PROJECT DESCRIPTION

The proposed project consists of development of two warehouse buildings totaling approximately 231,140 square feet on an 11.49 acre site located at 14700 Nelson Avenue. Building One would be located on a 3.12 acre parcel on the northern portion of the property along Nelson Avenue. Building One would be approximately 63,240 square feet, with 58,240 square feet of warehouse space and a 5,000 foot mezzanine. Building Two would be located on an 8.38 acre parcel on the southern portion of the property adjacent the Southern Pacific Rail Road right-of-way. Building Two would be approximately 167,970 square feet, with 157,170 square feet of warehouse space, and 10,800 square feet of mezzanine. Access to the project site would be located along Nelson Avenue, with two 26-foot wide passenger car accessible driveway, and a 45 foot wide truck accessible driveway. The project would provide for 319 surface parking spaces, with 101 spaces dedicated to Building One, and 218 spaces dedicated to Building Two. The project site is currently vacant with an existing cell tower located on the southern portion of the project site. Both Building One and Building Two would be concrete tilt-up design. Currently, no tenants or uses are identified. The zoning for the site is Industrial and the General Plan designation is Employment.

Project Setbacks

Project setbacks have been proposed for the two lots. As such, buildings and accessory structures would be contained within the designated area. The minimum setbacks would be:

- The minimum front yard setback from Parcel one would be 93 feet from the front of the building to the front property line. Parcel two is a flag lot, and does not have a conventional front yard setback.

- The minimum side yard setback for both lots would be 5 feet, which is evident on the westerly side setback for Building One, however all other sides of Building One and Building Two will have side setbacks of at least 60 feet.

- The minimum rear yard setback for each lot would be 53 feet from the rear property line to the rear wall of each building.

Project Site Circulation

Both lots would receive access off of Nelson Avenue. Parcel one would have access via two driveways measuring 28 feet and 40 feet wide. The narrower driveway is intended to facilitate access to off-street parking, whereas the wider driveway is intended for access to the loading docks, which are located at the rear of Building One.

Parcel two utilizes a double flag lot layout, with an eastern and western flag intended to provide access to Nelson Avenue. The eastern flag would provide a 45 foot wide driveway intended for ingress access to lot two. The western flag would provide a 40 foot wide driveway intended for egress from lot two. Vehicles would enter from the eastern flag, and navigate the lot in a U pattern, accessing the front of Building Two to access parking and loading docks, or proceeding to the rear of Building Two and around the building before egressing the lot by means of the western flag driveway.

Figure 1 – *Regional Location*

Figure 2 – *Project Site*

2.0 EXISTING SETTING

2.1 CLIMATE AND METEOROLOGY

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The project site lies within the northwestern portion of the South Coast Air Basin (Basin). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

Climate

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin. These factors along with applicable regulations are discussed below.

The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Meteorology

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

A temperature inversion is defined as an increase in temperature with height, or to the layer within which such an increase occurs. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O_3) observed during summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with

sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

The area in which the project is located offers clear skies and sunshine, yet is still susceptible to air inversions. These inversions trap a layer of stagnant air near the ground, where it is then further loaded with pollutants. These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

2.2 TOXIC AIR CONTAMINANTS

TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous Air Pollutants (HAP) is a term used by the Federal Clean Air Act (FCAA) that includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), ten have been singled out through ambient air quality data as being the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. CARB provides emission inventories for only the larger air basins.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of the act must prepare and submit toxic emission inventory plans and reports, and periodically update those reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Sources of air toxics go beyond industry, however. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene. The following are health effects related to common Toxic Air Contaminants:

<u>Acetaldehyde</u>. Acetaldehyde is directly emitted into the atmosphere and is also formed in the atmosphere from photochemical oxidation. Acetaldehyde is generated as exhaust from mobile sources and fuel combustion from stationary internal combustion engines, boilers, and process heaters. Acetaldehyde is a carcinogen that can also cause chronic non-cancer toxicity in the respiratory system. Symptoms of chronic intoxication of acetaldehyde in humans resemble those of alcoholism. The primary short-term effect of inhalation exposure to acetaldehyde is irritation of the eyes, skin, and respiratory tract. At higher exposure levels, erythematic, coughing, and pulmonary edema, and necrosis may also occur.

<u>Benzene</u>. Approximately 84 percent of the benzene emitted in California comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. Benzene is highly carcinogenic and occurs throughout California. Benzene also has non-cancer health effects.

Brief inhalation exposure to high concentrations can cause central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness.

Neurological symptoms of inhalation exposure to benzene include drowsiness, dizziness, headaches, and unconsciousness. Ingestion of large amounts of benzene may result in vomiting, dizziness, and convulsions. Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract. Redness and blisters may result from dermal exposure to benzene. Chronic inhalation of certain levels of benzene causes blood disorders because benzene specifically affects bone marrow, which produces blood cells. Aplastic anemia, excessive bleeding, and damage to the immune system (by changes in blood levels of antibodies and loss of white blood cells) may develop. Increased incidence of leukemia (cancer of the tissues that form white blood cells) has been observed in humans occupationally exposed to benzene.

1,3-Butadiene. The majority of 1,3-butadiene emissions comes from incomplete combustion of gasoline and diesel fuels. 1,3-butadiene has been identified as a carcinogen in California. Butadiene vapors at elevated levels cause neurological effects such as blurred vision, fatigue, headache, and vertigo. Dermal exposure to 1,3-butadiene causes a sensation of cold, followed by a burning sensation, and can lead to frostbite. Chronic exposure to 1,3-butadiene via inhalation has been shown to result in an increase in cardiovascular diseases, and increase in the occurrence of leukemia, and an increased incidence of respiratory, bladder, stomach, and lymphato-hematopoietic cancers.

Carbon Tetrachloride. The primary sources of carbon tetrachloride in California include chemical manufacturing facilities and petroleum refineries. Carbon tetrachloride has been identified as a probable human carcinogen in California. Carbon tetrachloride is also a central nervous system depressant and mild eye and respiratory tract irritant. Acute inhalation and oral exposures to high levels of carbon tetrachloride can damage the liver and kidneys in humans and animals. Symptoms of acute exposure in humans include headache, weakness, lethargy, nausea, and vomiting.

Chromium, Hexavalent. Chromium planting and other metal finishing processes are the primary sources of hexavalent chromium emissions in California. California has identified hexavalent chromium as a carcinogen. Exposure to inhaled hexavalent chromium may result in lung cancer, and short-term exposure symptoms may include renal toxicity, gastrointestinal hemorrhage, and intravascular hemolysis.

Inhalation exposure of hexavalent exposure targets the respiratory tract. Exposure to very high concentrations of hexavalent chromium can include burns, effects on the respiratory tract such as perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, asthma, and nasal itching and soreness. Chronic human exposure to high levels of hexavalent chromium by inhalation or oral exposure may adversely affect the liver, kidney, and gastrointestinal and immune system.

Para-Dichlorobenzene. The primary sources of para-dichlorobenzene include consumer products such as non-aerosol insect repellents and solid air fresheners. These sources contribute 99 percent of statewide para-dichlorobenzene emissions. In California, para-dichlorobenzene has been identified as a carcinogen. Acute exposure to 1,4-dichlorobenzene via inhalation in humans results in irritation to the eyes, skin, and throat. In addition, long-term inhalation exposure may affect the liver, skin, and central nervous system.

Formaldehyde. Formaldehyde is both directly emitted into the atmosphere and formed in the atmosphere as a result of photochemical oxidation. Formaldehyde is a product of incomplete combustion, and one of the primary sources of formaldehyde is vehicular exhaust. Formaldehyde

can also be found in many consumer products as an antimicrobial agent and is used in fumigants and soil disinfectants.

Acute formaldehyde inhalation exposure can result in eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. Chronic inhalation exposure to formaldehyde has been associated with respiratory symptoms and eye, nose, and throat irritation. In California, formaldehyde has been identified as a carcinogen, and occupational studies have shown associations between exposure to formaldehyde and increased incidence of lung and nasopharyngeal cancer.

Methylene Chloride. Methylene chloride is a solvent used in paint stripping operations and as a blowing and cleaning agent in the manufacture of polyurethane foam and plastic. Paint removers account for the largest use of methylene chloride in California. Inhalation exposure to extremely high levels of methylene chloride can be fatal to humans. Acute inhalation exposure to high levels of methylene chloride can result in decreased visual, auditory, and psychomotor functions, but these effects are reversible once exposure ceases. Methylene chloride also irritates the nose and throat at high concentrations. The major effects from chronic inhalation exposure to methylene chloride are headaches, dizziness, nausea, and memory loss. Chronic exposure can also lead to bone marrow, hepatic, and renal toxicity. California considers methylene chloride to be carcinogenic.

Perchloroethylene. Perchloroethylene is used as a solvent, primarily in dry cleaning operations. Perchloroethylene is also used in degreasing operations, paints and coatings, adhesives, aerosols, specialty chemical production, printing inks, silicones, rug shampoos and laboratory solvents. Perchloroethylene vapors are irritating to the eyes and respiratory tract and chronic exposure can result in liver toxicity, kidney dysfunction, and neurological disorders. California identifies perchloroethylene as a carcinogen.

Diesel Particulate Matter. DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan (DRRP), the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Reporting System (DOORS). The PERP and DOORS programs allow owners or operators of portable engines and certain other types of equipment can register their units in order to operate their equipment throughout California without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of 1 million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute

for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

2.3 SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. **Table 1** lists the distances and locations of sensitive receptors within the project vicinity. The distances depicted in **Table 1** are based on the distance from the project site to the sensitive receptor.

Table 1
Sensitive Receptors

Type	Distance from Project Site (feet)[1]	Direction from Project Site	Location
Multi-Family Residential	60	Northeast	Along Nelson Avenue
	225	Northeast	Apartment Complex Behind Multi-Family Residential Units Fronting Nelson Avenue (La Puente Park)
Single-Family Residential	65	Northeast	Along Nelson Avenue
	190	East	Beginning of Residential Neighborhood Along Evanwood Avenue, Glenshaw Drive, and Greenberry Drive.
	760	Northwest	Beginning of Residential Neighborhood Along N. sunset Avenue
	985	North	Beginning of Residential Neighborhood North of Prichard Street
Mobile Home Park	215	North	Behind the Church Fronting Nelson Avenue (Sunset Gardens)
Elementary School	1,020	Southeast	Corner of N. California Avenue and Nelson Avenue (Nelson Elementary School)
Places of Worship	60	North	Along Nelson Avenue

Source: Google Earth 2016

3.0 REGULATORY FRAMEWORK

FEDERAL CLEAN AIR ACT

The FCAA was amended in 1990 to address a large number of air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the U.S. Environmental Protection Agency (EPA) issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health and included benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the EPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have National Ambient Air Quality Standards (NAAQS) making evaluation of their impacts more subjective.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric ozone protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the general public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

CALIFORNIA AIR RESOURCES BOARD

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at 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 (T-BACT) to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC 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, required to communicate the results to the public in the form of notices and public meetings. In

September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.my cow

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (Risk Reduction Plan) in October 2000. The Risk Reduction Plan's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline (CARB 2000). The Risk Reduction Plan includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce particulate matter (PM) and oxides of nitrogen (NO_X) emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks by reporting and there are a number of extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB Air Toxic Control Measure (ATCM) to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to diesel particulate matter and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles.[1] The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The California Clean Air Act (CCAA) provides the South Coast Air Quality Management District (SCAQMD) with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles

[1] The ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is codified in Title 13 of the California Code of Regulations, Chapter 10, Section 2485.

at an intersection, a mall, and on highways. As a State agency, CARB regulates motor vehicles and fuels for their emissions.

The Air Toxics Control Plan (March 2000, revised March 26, 2004) is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

The SCAQMD has conducted an in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California. This study, the *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV,"* shows that cancer risk has decreased more than 50 percent between MATES III (2008) and MATES IV (2015).

MATES-IV is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the South Coast Air Basin emissions. Therefore, MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV estimates the average excess cancer risk level from exposure to TACs is less than 400 in one million basin-wide. These model estimates were based on monitoring data collected at ten fixed sites within the South Coast Air Basin. None of the fixed monitoring sites are within the local area of the project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 415 in one million for Los Angeles County, which encompasses the project site. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES-IV.

4.0 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 SIGNIFICANCE CRITERIA

HEALTH RISK ANALYSIS THRESHOLDS

In order to determine whether or not a proposed project would cause a significant effect on the environment, the impact of the project must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the State CEQA Guidelines, the SCAQMD recommends that the following air pollution thresholds be used by lead agencies in determining whether the proposed project is significant. If the lead agency finds that the proposed project has the potential to exceed the air pollution thresholds, the project should be considered significant. The thresholds for air toxic emissions are as follows.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of 1 in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10 in one million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics. To put this risk in perspective, the risk of dying from accidental drowning is 1,000 in a million which is 100 times more than the SCAQMD's threshold of 10 in one million.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

4.2 METHODOLOGY

HEALTH RISK ASSESSMENT

The air dispersion modeling for the HRA was performed using the U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD from the Pomona Meteorological Station was selected as being the most representative meteorology.

Emissions sources in the model include two area sources for the loading dock area of Building One

and the loading dock area for Building Two (see **Figure 3**). Additionally, emissions sources in the model include a line source (comprised of 5 volume sources) representing the truck delivery route at the project site, and a separate line source (comprised of 6 volume sources) representing the truck delivery route on Nelson Avenue between the project site and North Sunset Avenue, which is adjacent to residential land uses. The maximum daily exhaust emissions for all diesel equipment was used to produce an emission rate in terms of grams per second per square meter. Emissions from heavy trucks were assigned a release height of three meters.

The model was run to obtain the peak 24-hour and annual average concentration in micrograms per cubic meter [$\mu g/m^3$] at nearby sensitive receptors. Receptors used included the nearby sensitive receptors depicted in **Table 1** with 50 meter (164 feet) spacing. Note that the concentration estimate developed using this methodology is considered conservative, and is not a specific prediction of the actual concentrations that would occur as a result of the project any one point in time. Actual 24-hour and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year lifetime basis, 30-year, and 9-year exposure scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA Human Health Evaluation Manual (1991) and the OEHHA Guidance Manual. Only the risk associated with operations of the proposed project was assessed as construction emissions would be negligible.

RISK AND HAZARD ASSESSMENT

Cancer Risk

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average DPM concentrations is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor (ASF), the frequency of time spent at home (for residents only), and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. It is important to note that exposure duration is based on approximately 365 days of heavy truck operation at the project site. Cancer risk must be separately calculated for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kg body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation (Dose-air) is a function of the function of the breathing rate, the exposure frequency, and the concentration of a substance in the air. For residential exposure, the breathing rates are determined for specific age groups, so Dose-air is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\text{Dose-air} = (C_{air} * \{BR/BW\} * A * EF * 10^{-6}$$

Where:

Dose-air	=	dose through inhalation (mg/kg/day)
C_{air}	=	air concentration (μg/m³) from air dispersion model
{BR/BW}	=	daily breathing rate normalized to body weight (L/kg body weight – day) (225 L\kg BW-day for 3rd Trimester, 658 L/kg BW-day for 0<2 years, 535 L/kg BW-day for 2<9 years, 452 L/kg BW-day for 2<16 years, 210 L/kg BW-day for 16<30 years, and 185 L/kg BW-day 16<70 years)
A	=	Inhalation absorption factor (unitless [1])
EF	=	exposure frequency (unitless), days/365 days (0.96 [approximately 350 days per year])
10^{-6}	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood and an ASF of 1 for ages 16 through 70 years.

Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the following FAH values: from the third trimester to age <2 years, 85 percent of time is spent at home; from age 2 through <16 years, 72 percent of time is spent at home; from age 16 years and greater, 73 percent of time is spent at home.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$Risk_{inh\text{-}res} = (Dose_{air} * CPF * ASF * ED/AT * FAH)$$

Where:

$Risk_{inh\text{-}res}$	=	residential inhalation cancer risk (potential chances per million)
$Dose_{air}$	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day^{-1})
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group (0.25 years for 3rd trimester, 2 years for 0<2, 7 years for 2<9, 14 years for 2<16, 14 years for 16<30, 54 years for 16-70)
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

$$\text{Hazard Quotient} = Ci/RELi$$

Where:

Ci	=	Concentration in the air of substance i (annual average concentration in $\mu g/m^3$)
RELi	=	Chronic noncancer Reference Exposure Level for substance i ($\mu g/m^3$)

Acute Non-Cancer Hazard

The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. The equation is as follows:

$$\text{Acute HQ} = \text{Maximum Hourly Air Concentration } (\mu g/m^3) \text{ / Acute REL } (\mu g/m^3)$$

5.0 POTENTIAL HEALTH RISK IMPACTS

5.1 LONG-TERM IMPACTS

CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate – both contribute to the risk. The gas phase is composed of many of the urban HAPs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed[2] compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the project is proposing an industrial warehouse requiring daily visits from heavy-duty diesel trucks during operations, an analysis was performed using the EPA-approved AERMOD model.

NON-CARCINOGENIC HAZARDS

The significance thresholds for TAC exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The chronic and acute hazard index associated with the emissions from the project would be 0.002 and 0.05, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

CARCINOGENIC RISK

Vehicle DPM emissions were estimated using emission factors for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) generated with the 2014 version of the EMission FACtor model (EMFAC) developed by CARB. EMFAC 2014 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2014, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day.

The most important improvement in EMFAC 2014 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment. Finally, the impacts of the recession on emissions that were quantified as part of the truck and bus rulemaking are included.

For this project, annual average $PM_{2.5}$ emission factors were generated by running EMFAC 2014 in EMFAC Mode for vehicles in the SCAQMD within Los Angeles County. The EMFAC Mode generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity. The model was run for speeds traveled on and within the vicinity of the project site. The vehicle travel speeds for each segment modeled are summarized below.

[2] This term is specifically used for gases.

- Idling – on-site loading/unloading; and
- 5 miles per hour – on-site vehicle movement including driving and maneuvering; and
- 25 miles per hour – off-site vehicle movement including driving and maneuvering.

The average $PM_{2.5}$ emission factors for heavy trucks were calculated based on the annual average emission factors for various exposure periods associated with assumptions for evaluating exposure over three different periods (i.e., 70-, 30-, and 9-year exposure scenarios).

Based on the AERMOD outputs, the expected annual average diesel $PM_{2.5}$ emission concentrations at a sensitive receptor resulting from operation of the project (423 daily heavy truck deliveries) would be 0.01 $\mu g/m^3$ at the greatest. This level of concentration would be experienced at the residential neighborhoods directly west of the project site across Nelson Avenue. These are the closest sensitive receptors to the project site. The calculated carcinogenic risk at these locations, directly west of the site, as a result of the project is depicted in **Table 2**. The calculations conservatively assume no cleaner technology with lower emissions in future years, and assume that residents will live in the same home (and thus be exposed to emissions) for the entire exposure period. As depicted in **Table 2**, the highest concentration would result in a risk of 4.92 in one million over the 70-year exposure period, which is below the threshold of 10 in one million. The calculated risk is also below the threshold for the 30- and 9-year exposure periods. Therefore, impacts related to cancer risk from heavy trucks would be less than significant.

Table 2
Maximum Operational Health Risk

Exposure Scenario	Maximum Cancer Risk (Risk per Million)[1]	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
70-Year Exposure	4.92	10	No
30-Year Exposure	4.14	10	No
9-Year Exposure	2.98	10	No

Notes:
Refer to Appendix A, *Modeling Data*.

It is noted that the maximum operational health risk depicted in **Table 2** represents the highest pollutant concentration at a sensitive receptor. This level of concentration would be experienced at residences directly west of the project site across Nelson Avenue. As shown in **Table 1** above, the nearest residence to the project site is 60 feet distant. Furthermore, a review of the project Site Plan (see **Figure 3**) shows the driveway entrance to the project site that is designated for inbound heavy duty truck access directly across from residential front yards and outdoor activity areas. Therefore, while the increased cancer risk from heavy trucks would be below the applicable significance threshold **Mitigation Measure HRA-1** is recommended in order to enforce existing regulation and reduce the generation of diesel particulate matter.

Mitigation Measures:

HRA-1 Prior to the certificate of occupancy issuance, the project Applicant shall demonstrate to the satisfaction of the City of Industry Planning Department that the following measures would be implemented during project operations.

- Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable

California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.

- All service equipment (i.e., forklifts) used within the site shall be electric or compressed natural gas-powered.

6.0 REFERENCES

6.1 LIST OF PREPARERS

MICHAEL BAKER INTERNATIONAL, INC.
3900 Kilroy Airport Way, Suite 120
Long Beach, California 90806

Julian Capata, Project Manager
Seth Myers, Manager of Air and Noise Studies
Lindsay Taylor, Air Quality Specialist

6.2 DOCUMENTS

1. California Air Pollution Control Officers Association, *Health Risk Assessment for Proposed Land Use Projects*, July 2009.

2. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

3. California Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003.

4. California Environmental Protection Agency and Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

5. D. Bruce Turner, CCM and Richard H. Schulze, P.E., QEP, *Practical Guide to Atmospheric Dispersion Modeling*, 2007.

6. Google Earth, 2016.

7. South Coast Air Quality Management District, *High Cube Warehouse Trip Rate Study for Air Quality Analysis*, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/high-cube-warehouse, accessed September 2016.

8. South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III)*. September 2008.

9. South Coast Air Quality Management District, *Modeling Guidance for AERMOD, http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance*, accessed August 2016.

10. South Coast Air Quality Management District, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). May 2015.

11. U.S. Environmental Protection Agency, *Exposure Factors Handbook: 2011 Edition*, September 2011.

6.3 WEB SITES/PROGRAMS

U.S. Environmental Protection Agency, AERMOD Dispersion Model.

Lakes Environmental, Gaussian Plume Air Dispersion Model, Version 9.1.

HEALTH RISK CALCULATIONS

Nelson Avenue Business Park Project

Emissions Calculations

On-Site Truck Movement			Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Trucks			15	0.01266	423	0.12	6.43E-01	7.44E-06

Off-Site Truck Movement			Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Trucks			25	0.009297	423	0.15	5.90E-01	6.83E-06

On-Site Vehicle Idle Emissions		Emission Factor (g/veh/day)	Idling Time (min)	Idling Time (hrs/day)	Daily Trucks	Release Height Above Ground (m)	g/day	g/sec
Idle		0.00888	15	1.04E-02	212	3	1.96E-02	2.27E-07
Total								

Sources:

CARB, EMFAC2014. Emission Factors represent the 30-year weighted average for $PM_{2.5}$

CARB, *Diesel Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

Health Risk at Highest Pollutant Concentration Location

Risk Calculations

1 Hour Avg Concentration:	0.400
24 Hour Avg Concentration:	0.100
Annual Avg Concentration:	0.010

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.15753E-06	6.30959E-06	5.13014E-06	4.33425E-06	2.0137E-06	1.77397E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	7.20462E-08	1.68556E-06	1.21892E-06	2.05963E-06	3.234000E-07	1.0989E-06

		Risk	in one million
Cancer Risk:	70-year exposure	4.92E-06	4.92
	30-year exposure	4.14E-06	4.14
	9-year exposure	2.98E-06	2.98
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	225	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	658		
	BR/BW (2 < 9 years)	535		
	BR/BW (2 < 16 years)	452		
	BR/BW (16 < 30 years)	210		
	BR/BW (16 < 70 years)	185		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.01	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 years)	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = 2.00E-03

C_i 1.00E-02 Concentration (annual average)

REL_i 5 Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = 5.26E-02

Max Hourly 1.00E-02

Acute REL (Acrolein) 0.19

Air Toxic Dispersion – AERMOD Output Files

```
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.1.0
** Lakes Environmental Software Inc.
** Date: 9/12/2016
** File: C:\Emissions Models\Industry, City of\Neslon Ave\Nelson Business
Park\Nelson Business Park.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE C:\Emissions Models\Industry, City of\Neslon Ave\Nelson Business Par
   MODELOPT CONC FLAT
   AVERTIME 1 24 ANNUAL
   POLLUTID PM_2.5
   RUNORNOT RUN
   ERRORFIL "Nelson Business Park.err"
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION IDLING1      AREA       410371.000  3766465.000          0.0
** DESCRSRC Idling 1
   LOCATION IDLING2      AREA       410294.000  3766461.000          0.0
** DESCRSRC Idling 2
   LOCATION IDLING3      AREA       410315.000  3766443.000          0.0
** DESCRSRC Idling 3
** ----------------------------------------------------------------------
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = SLINE1
** DESCRSRC On-Site Circ
** PREFIX
** Length of Side = 22.15
** Configuration = Separated 2W
** Emission Rate = 1.49E-06
** Vertical Dimension = 5.10
** SZINIT = 2.37
** Nodes = 3
** 410349.000, 3766436.000, 0.00, 2.55, 20.60
** 410411.000, 3766400.000, 0.00, 2.55, 20.60
** 410498.000, 3766499.000, 0.00, 2.55, 20.60
** ----------------------------------------------------------------------
   LOCATION L0000042     VOLUME   410358.578 3766430.439 0.0
   LOCATION L0000043     VOLUME   410396.888 3766408.194 0.0
   LOCATION L0000044     VOLUME   410429.471 3766421.019 0.0
   LOCATION L0000045     VOLUME   410458.714 3766454.295 0.0
   LOCATION L0000046     VOLUME   410487.957 3766487.572 0.0
** End of LINE VOLUME Source ID = SLINE1
** ----------------------------------------------------------------------
```

```
** Line Source Represented by Separated Volume Sources (2W)
** LINE VOLUME Source ID = SLINE2
** DESCRSRC Offsite Circ
** PREFIX
** Length of Side = 22.15
** Configuration = Separated 2W
** Emission Rate = 1.14E-06
** Vertical Dimension = 5.10
** SZINIT = 2.37
** Nodes = 2
** 410500.000, 3766504.000, 0.00, 2.55, 20.60
** 410317.000, 3766665.000, 0.00, 2.55, 20.60
** ----------------------------------------------------------------------
   LOCATION L0000030     VOLUME   410491.685 3766511.315 0.0
   LOCATION L0000031     VOLUME   410458.425 3766540.577 0.0
   LOCATION L0000032     VOLUME   410425.165 3766569.839 0.0
   LOCATION L0000033     VOLUME   410391.904 3766599.101 0.0
   LOCATION L0000034     VOLUME   410358.644 3766628.362 0.0
   LOCATION L0000035     VOLUME   410325.384 3766657.624 0.0
** End of LINE VOLUME Source ID = SLINE2
** Source Parameters **
   SRCPARAM IDLING1       7.57E-08     3.000    28.000    15.000    40.000     3.010
   SRCPARAM IDLING2       7.57E-08     3.000    28.000    15.000    40.000     3.010
   SRCPARAM IDLING3       7.57E-08     3.000    28.000    15.000    40.000     3.010
** LINE VOLUME Source ID = SLINE1
   SRCPARAM L0000042     0.000000298      2.55     20.60      2.37
   SRCPARAM L0000043     0.000000298      2.55     20.60      2.37
   SRCPARAM L0000044     0.000000298      2.55     20.60      2.37
   SRCPARAM L0000045     0.000000298      2.55     20.60      2.37
   SRCPARAM L0000046     0.000000298      2.55     20.60      2.37
** ----------------------------------------------------------------------
** LINE VOLUME Source ID = SLINE2
   SRCPARAM L0000030     0.00000019      2.55     20.60      2.37
   SRCPARAM L0000031     0.00000019      2.55     20.60      2.37
   SRCPARAM L0000032     0.00000019      2.55     20.60      2.37
   SRCPARAM L0000033     0.00000019      2.55     20.60      2.37
   SRCPARAM L0000034     0.00000019      2.55     20.60      2.37
   SRCPARAM L0000035     0.00000019      2.55     20.60      2.37
** ----------------------------------------------------------------------
   SRCGROUP ALL
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
** DESCRREC "UCART1" "Receptors generated from Uniform Cartesian Grid"
   DISCCART    410228.00   3766378.00
   DISCCART    410278.00   3766378.00
   DISCCART    410328.00   3766378.00
   DISCCART    410378.00   3766378.00
   DISCCART    410428.00   3766378.00
   DISCCART    410478.00   3766378.00
   DISCCART    410528.00   3766378.00
   DISCCART    410578.00   3766378.00
   DISCCART    410628.00   3766378.00
   DISCCART    410678.00   3766378.00
   DISCCART    410728.00   3766378.00
   DISCCART    410778.00   3766378.00
   DISCCART    410828.00   3766378.00
   DISCCART    410878.00   3766378.00
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DISCCART	410928.00	3766378.00
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DISCCART	410928.00	3766778.00
DISCCART	410228.00	3766828.00
DISCCART	410278.00	3766828.00
DISCCART	410328.00	3766828.00
DISCCART	410378.00	3766828.00
DISCCART	410428.00	3766828.00

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   DISCCART    410478.00   3766828.00
   DISCCART    410528.00   3766828.00
   DISCCART    410578.00   3766828.00
   DISCCART    410628.00   3766828.00
   DISCCART    410678.00   3766828.00
   DISCCART    410728.00   3766828.00
   DISCCART    410778.00   3766828.00
   DISCCART    410828.00   3766828.00
   DISCCART    410878.00   3766828.00
   DISCCART    410928.00   3766828.00
** DESCRREC "" ""
   DISCCART    410735.98   3766317.87
** Discrete Cartesian Plant Boundary - Primary Receptors
** Plant Boundary Name PLBN1
** DESCRREC "FENCEPRI" "Cartesian plant boundary Primary Receptors"
   DISCCART    410200.00   3766421.00
   DISCCART    410346.00   3766300.00
   DISCCART    410507.00   3766494.00
   DISCCART    410432.00   3766558.00
   DISCCART    410351.00   3766458.00
   DISCCART    410279.00   3766516.00
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\poma8.sfc
   PROFFILE ..\poma8.PFL
   SURFDATA 0 2008
   UAIRDATA 3190 2008
   SITEDATA 99999 2008
   PROFBASE 93.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST "Nelson Business Park.AD\01H1GALL.PLT" 31
   PLOTFILE 24 ALL 1ST "Nelson Business Park.AD\24H1GALL.PLT" 32
   PLOTFILE ANNUAL ALL "Nelson Business Park.AD\AN00GALL.PLT" 33
   SUMMFILE "Nelson Business Park.sum"
OU FINISHED

 ************************************
 *** SETUP Finishes Successfully ***
 ************************************

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   1
```

```
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                                             ***     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 RURAL Dispersion Only.

 **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.

 **Other Options Specified:
         TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_2.5

 **Model Calculates  2 Short Term Average(s) of:   1-HR  24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:     14 Source(s);       1 Source Group(s); and     157
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     11 VOLUME source(s)
                 and:      3 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 OPENPIT source(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 Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          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) =    93.00 ;  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:   Nelson Business Park.err

 **File for Summary of Results:   Nelson Business Park.sum

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   2
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL


                                                   *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE
   SOURCE       PART.  (GRAMS/SEC)     X         Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000042         0   0.29800E-06  410358.6 3766430.4    93.0     2.55    20.60
2.37     NO
 L0000043         0   0.29800E-06  410396.9 3766408.2    93.0     2.55    20.60
2.37     NO
 L0000044         0   0.29800E-06  410429.5 3766421.0    93.0     2.55    20.60
2.37     NO
 L0000045         0   0.29800E-06  410458.7 3766454.3    93.0     2.55    20.60
2.37     NO
 L0000046         0   0.29800E-06  410488.0 3766487.6    93.0     2.55    20.60
2.37     NO
 L0000030         0   0.19000E-06  410491.7 3766511.3    93.0     2.55    20.60
2.37     NO
 L0000031         0   0.19000E-06  410458.4 3766540.6    93.0     2.55    20.60
2.37     NO
 L0000032         0   0.19000E-06  410425.2 3766569.8    93.0     2.55    20.60
2.37     NO
 L0000033         0   0.19000E-06  410391.9 3766599.1    93.0     2.55    20.60
2.37     NO
 L0000034         0   0.19000E-06  410358.6 3766628.4    93.0     2.55    20.60
2.37     NO
 L0000035         0   0.19000E-06  410325.4 3766657.6    93.0     2.55    20.60
2.37     NO
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   3
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

*** AREA SOURCE DATA ***

```
                NUMBER EMISSION RATE  COORD (SW CORNER)  BASE     RELEASE  X-DIM
Y-DIM    ORIENT.    INIT.   URBAN  EMISSION RATE
   SOURCE        PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF AREA
OF AREA   OF AREA     SZ     SOURCE  SCALAR VARY
     ID          CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   (DEG.)  (METERS)              BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

 IDLING1          0   0.75700E-07  410371.0 3766465.0    93.0     3.00     28.00
15.00     40.00     3.01     NO
 IDLING2          0   0.75700E-07  410294.0 3766461.0    93.0     3.00     28.00
15.00     40.00     3.01     NO
 IDLING3          0   0.75700E-07  410315.0 3766443.0    93.0     3.00     28.00
15.00     40.00     3.01     NO
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   4
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

*** SOURCE IDs DEFINING SOURCE GROUPS ***

```
 SRCGROUP ID                                                  SOURCE IDs
 -----------                                                  ----------


  ALL         IDLING1      , IDLING2      , IDLING3      , L0000042     , L0000043     ,
L0000044     , L0000045     , L0000046     ,

              L0000030     , L0000031     , L0000032     , L0000033     , L0000034     ,
L0000035     ,
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   5
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

```
     ( 410228.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410278.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410328.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410378.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410428.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410478.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410528.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410578.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410628.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410678.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410728.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410778.0,
3766378.0,      93.0,      93.0,       0.0);
     ( 410828.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410878.0,
3766378.0,      93.0,      93.0,       0.0);
```

```
     ( 410928.0, 3766378.0,      93.0,      93.0,       0.0);         ( 410228.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410278.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410328.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410378.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410428.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410478.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410528.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410578.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410628.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410678.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410728.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410778.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410828.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410878.0, 3766428.0,      93.0,      93.0,       0.0);         ( 410928.0,
3766428.0,      93.0,      93.0,       0.0);
     ( 410228.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410278.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410328.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410378.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410428.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410478.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410528.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410578.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410628.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410678.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410728.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410778.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410828.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410878.0,
3766478.0,      93.0,      93.0,       0.0);
     ( 410928.0, 3766478.0,      93.0,      93.0,       0.0);         ( 410228.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410278.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410328.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410378.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410428.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410478.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410528.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410578.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410628.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410678.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410728.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410778.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410828.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410878.0, 3766528.0,      93.0,      93.0,       0.0);         ( 410928.0,
3766528.0,      93.0,      93.0,       0.0);
     ( 410228.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410278.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410328.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410378.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410428.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410478.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410528.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410578.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410628.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410678.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410728.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410778.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410828.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410878.0,
3766578.0,      93.0,      93.0,       0.0);
     ( 410928.0, 3766578.0,      93.0,      93.0,       0.0);         ( 410228.0,
3766628.0,      93.0,      93.0,       0.0);
     ( 410278.0, 3766628.0,      93.0,      93.0,       0.0);         ( 410328.0,
```

```
3766628.0,       93.0,       93.0,        0.0);
     ( 410378.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410428.0,
3766628.0,       93.0,       93.0,        0.0);
     ( 410478.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410528.0,
3766628.0,       93.0,       93.0,        0.0);
     ( 410578.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410628.0,
3766628.0,       93.0,       93.0,        0.0);
     ( 410678.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410728.0,
3766628.0,       93.0,       93.0,        0.0);
     ( 410778.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410828.0,
3766628.0,       93.0,       93.0,        0.0);
     ( 410878.0, 3766628.0,       93.0,       93.0,       0.0);          ( 410928.0,
3766628.0,       93.0,       93.0,        0.0);
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   6
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                                          *** DISCRETE CARTESIAN RECEPTORS ***
                                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                (METERS)

     ( 410228.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410278.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410328.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410378.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410428.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410478.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410528.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410578.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410628.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410678.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410728.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410778.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410828.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410878.0,
3766678.0,       93.0,       93.0,        0.0);
     ( 410928.0, 3766678.0,       93.0,       93.0,       0.0);          ( 410228.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410278.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410328.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410378.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410428.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410478.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410528.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410578.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410628.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410678.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410728.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410778.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410828.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410878.0, 3766728.0,       93.0,       93.0,       0.0);          ( 410928.0,
3766728.0,       93.0,       93.0,        0.0);
     ( 410228.0, 3766778.0,       93.0,       93.0,       0.0);          ( 410278.0,
3766778.0,       93.0,       93.0,        0.0);
     ( 410328.0, 3766778.0,       93.0,       93.0,       0.0);          ( 410378.0,
3766778.0,       93.0,       93.0,        0.0);
     ( 410428.0, 3766778.0,       93.0,       93.0,       0.0);          ( 410478.0,
3766778.0,       93.0,       93.0,        0.0);
     ( 410528.0, 3766778.0,       93.0,       93.0,       0.0);          ( 410578.0,
3766778.0,       93.0,       93.0,        0.0);
```

```
     ( 410628.0, 3766778.0,      93.0,      93.0,       0.0);         ( 410678.0,
3766778.0,      93.0,      93.0,       0.0);
     ( 410728.0, 3766778.0,      93.0,      93.0,       0.0);         ( 410778.0,
3766778.0,      93.0,      93.0,       0.0);
     ( 410828.0, 3766778.0,      93.0,      93.0,       0.0);         ( 410878.0,
3766778.0,      93.0,      93.0,       0.0);
     ( 410928.0, 3766778.0,      93.0,      93.0,       0.0);         ( 410228.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410278.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410328.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410378.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410428.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410478.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410528.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410578.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410628.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410678.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410728.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410778.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410828.0,
3766828.0,      93.0,      93.0,       0.0);
     ( 410878.0, 3766828.0,      93.0,      93.0,       0.0);         ( 410928.0,
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     ( 410346.0, 3766300.0,      93.0,      93.0,       0.0);         ( 410507.0,
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     ( 410432.0, 3766558.0,      93.0,      93.0,       0.0);         ( 410351.0,
3766458.0,      93.0,      93.0,       0.0);
     ( 410279.0, 3766516.0,      93.0,      93.0,       0.0);

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE   7
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                     * SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT
BE PERFORMED *
                       LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR
FASTAREA/FASTALL

                          SOURCE          - - RECEPTOR LOCATION - -
DISTANCE
                            ID            XR (METERS)   YR (METERS)
(METERS)
                        - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -

                          L0000042            410328.0     3766428.0
-13.61
                          L0000042            410378.0     3766428.0
-24.72
                          L0000042            410351.0     3766458.0
-15.71
                          L0000043            410378.0     3766378.0
-8.67
                          L0000043            410428.0     3766378.0
-0.94
                          L0000043            410378.0     3766428.0
-16.92
```

	L0000043	410428.0	3766428.0
-7.41			
	L0000044	410428.0	3766378.0
-1.25			
	L0000044	410428.0	3766428.0
-37.16			
	L0000045	410428.0	3766428.0
-3.86			
	L0000045	410478.0	3766428.0
-11.68			
	L0000045	410428.0	3766478.0
-5.49			
	L0000045	410478.0	3766478.0
-13.73			
	L0000046	410478.0	3766478.0
-30.48			
	L0000046	410528.0	3766478.0
-3.12			
	L0000046	410478.0	3766528.0
-2.65			
	L0000046	410507.0	3766494.0
-24.19			
	L0000030	410478.0	3766478.0
-8.27			
	L0000030	410478.0	3766528.0
-22.71			
	L0000030	410528.0	3766528.0
-4.33			
	L0000030	410507.0	3766494.0
-21.17			
	L0000031	410428.0	3766528.0
-11.37			
	L0000031	410478.0	3766528.0
-21.02			
	L0000031	410478.0	3766578.0
-2.06			
	L0000031	410432.0	3766558.0
-12.64			
	L0000032	410428.0	3766528.0
-2.36			
	L0000032	410428.0	3766578.0
-35.65			
	L0000032	410432.0	3766558.0
-30.62			
	L0000033	410378.0	3766578.0
-19.02			
	L0000033	410428.0	3766578.0
-2.48			
	L0000033	410378.0	3766628.0
-12.22			
	L0000034	410328.0	3766628.0
-13.64			
	L0000034	410378.0	3766628.0
-24.93			
	L0000035	410328.0	3766628.0
-14.55			
	L0000035	410328.0	3766678.0
-23.75			

♀ *** AERMOD - VERSION 15181 *** *** C:\Emissions Models\Industry, City of\Neslon Ave\Nelson Business Par *** 09/12/16
*** AERMET - VERSION 14134 *** *** *** 16:02:11

```
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                                                    *** 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,
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***         09/12/16
 *** AERMET - VERSION  14134 ***    ***
                       ***          16:02:11

                                        PAGE 9
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                                        *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file:   ..\poma8.sfc
                Met Version:  14134
   Profile file:   ..\poma8.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  0.47   1.00
1.00  999.00  999.   -9.0  285.9    5.5
 08 01 01   1 02 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  286.6    5.5
 08 01 01   1 03 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  285.8    5.5
 08 01 01   1 04 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   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  0.47   1.00
1.00  999.00  999.   -9.0  285.2    5.5
 08 01 01   1 06 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   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  0.47   1.00
1.00  999.00  999.   -9.0  283.9    5.5
 08 01 01   1 08 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
0.54  999.00  999.   -9.0  285.4    5.5
 08 01 01   1 09   24.3 -9.000 -9.000 -9.000   57. -999. -99999.0  0.47   1.00
0.31  999.00  999.   -9.0  287.1    5.5
 08 01 01   1 10   64.0 -9.000 -9.000 -9.000  141. -999. -99999.0  0.47   1.00
0.24  999.00  999.   -9.0  287.5    5.5
 08 01 01   1 11  112.7 -9.000 -9.000 -9.000  352. -999. -99999.0  0.47   1.00
0.21  999.00  999.   -9.0  290.9    5.5
 08 01 01   1 12  134.5 -9.000 -9.000 -9.000  579. -999. -99999.0  0.47   1.00
0.20  999.00  999.   -9.0  292.4    5.5
 08 01 01   1 13  103.4 -9.000 -9.000 -9.000  704. -999. -99999.0  0.47   1.00
0.20  999.00  999.   -9.0  292.8    5.5
 08 01 01   1 14   92.5 -9.000 -9.000 -9.000  748. -999. -99999.0  0.47   1.00
0.22  999.00  999.   -9.0  292.4    5.5
 08 01 01   1 15   44.5 -9.000 -9.000 -9.000  768. -999. -99999.0  0.47   1.00
0.25  999.00  999.   -9.0  292.4    5.5
 08 01 01   1 16    9.2 -9.000 -9.000 -9.000  772. -999. -99999.0  0.47   1.00
0.34  999.00  999.   -9.0  291.8    5.5
 08 01 01   1 17 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
0.61  999.00  999.   -9.0  291.0    5.5
 08 01 01   1 18 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  290.5    5.5
 08 01 01   1 19 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  289.6    5.5
 08 01 01   1 20 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  287.8    5.5
 08 01 01   1 21 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  286.6    5.5
 08 01 01   1 22 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  286.0    5.5
 08 01 01   1 23 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  285.8    5.5
 08 01 01   1 24 -999.0 -9.000 -9.000 -9.000 -999. -999. -99999.0  0.47   1.00
1.00  999.00  999.   -9.0  284.9    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   285.9   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)
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  10
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

```
                    *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER    5
YEARS FOR SOURCE GROUP: ALL       ***
                                   INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                 *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)         CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
         410228.00    3766378.00        0.03049                      410278.00
3766378.00         0.05441
         410328.00    3766378.00        0.06749                      410378.00
3766378.00         0.04262
         410428.00    3766378.00        0.02471                      410478.00
3766378.00         0.02017
         410528.00    3766378.00        0.01766                      410578.00
3766378.00         0.01538
         410628.00    3766378.00        0.01327                      410678.00
3766378.00         0.01143
         410728.00    3766378.00        0.00988                      410778.00
3766378.00         0.00858
         410828.00    3766378.00        0.00751                      410878.00
3766378.00         0.00662
         410928.00    3766378.00        0.00588                      410228.00
3766428.00         0.02585
         410278.00    3766428.00        0.06949                      410328.00
3766428.00         0.20070
         410378.00    3766428.00        0.13564                      410428.00
3766428.00         0.06267
         410478.00    3766428.00        0.04459                      410528.00
3766428.00         0.03180
         410578.00    3766428.00        0.02345                      410628.00
3766428.00         0.01803
         410678.00    3766428.00        0.01435                      410728.00
3766428.00         0.01173
         410778.00    3766428.00        0.00979                      410828.00
3766428.00         0.00832
         410878.00    3766428.00        0.00718                      410928.00
3766428.00         0.00626
         410228.00    3766478.00        0.01276                      410278.00
3766478.00         0.02340
         410328.00    3766478.00        0.07071                      410378.00
3766478.00         0.08634
         410428.00    3766478.00        0.08155                      410478.00
3766478.00         0.04638
         410528.00    3766478.00        0.03104                      410578.00
3766478.00         0.02247
         410628.00    3766478.00        0.01709                      410678.00
3766478.00         0.01354
         410728.00    3766478.00        0.01105                      410778.00
3766478.00         0.00924
         410828.00    3766478.00        0.00786                      410878.00
3766478.00         0.00679
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         410928.00    3766478.00        0.00593                        410228.00
3766528.00        0.00632
         410278.00    3766528.00        0.00773                        410328.00
3766528.00        0.01187
         410378.00    3766528.00        0.01853                        410428.00
3766528.00        0.02346
         410478.00    3766528.00        0.02210                        410528.00
3766528.00        0.01850
         410578.00    3766528.00        0.01504                        410628.00
3766528.00        0.01233
         410678.00    3766528.00        0.01030                        410728.00
3766528.00        0.00874
         410778.00    3766528.00        0.00753                        410828.00
3766528.00        0.00655
         410878.00    3766528.00        0.00577                        410928.00
3766528.00        0.00512
         410228.00    3766578.00        0.00375                        410278.00
3766578.00        0.00415
         410328.00    3766578.00        0.00552                        410378.00
3766578.00        0.00772
         410428.00    3766578.00        0.01021                        410478.00
3766578.00        0.01170
         410528.00    3766578.00        0.01128                        410578.00
3766578.00        0.00991
         410628.00    3766578.00        0.00859                        410678.00
3766578.00        0.00748
         410728.00    3766578.00        0.00658                        410778.00
3766578.00        0.00583
         410828.00    3766578.00        0.00520                        410878.00
3766578.00        0.00467
         410928.00    3766578.00        0.00422                        410228.00
3766628.00        0.00250
         410278.00    3766628.00        0.00276                        410328.00
3766628.00        0.00316
         410378.00    3766628.00        0.00426                        410428.00
3766628.00        0.00584
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  11
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                   *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL       ***
                                  INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                   **

       X-COORD (M)   Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
         410478.00    3766628.00        0.00664                        410528.00
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3766628.00	0.00705				
	410578.00	3766628.00	0.00684	410628.00	
3766628.00	0.00627				
	410678.00	3766628.00	0.00564	410728.00	
3766628.00	0.00507				
	410778.00	3766628.00	0.00458	410828.00	
3766628.00	0.00416				
	410878.00	3766628.00	0.00379	410928.00	
3766628.00	0.00348				
	410228.00	3766678.00	0.00179	410278.00	
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	410328.00	3766678.00	0.00224	410378.00	
3766678.00	0.00307				
	410428.00	3766678.00	0.00354	410478.00	
3766678.00	0.00404				
	410528.00	3766678.00	0.00449	410578.00	
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	410628.00	3766678.00	0.00466	410678.00	
3766678.00	0.00438				
	410728.00	3766678.00	0.00403	410778.00	
3766678.00	0.00369				
	410828.00	3766678.00	0.00339	410878.00	
3766678.00	0.00313				
	410928.00	3766678.00	0.00290	410228.00	
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	410378.00	3766728.00	0.00205	410428.00	
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	410478.00	3766728.00	0.00268	410528.00	
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3766728.00	0.00283				
	410878.00	3766728.00	0.00263	410928.00	
3766728.00	0.00246				
	410228.00	3766778.00	0.00102	410278.00	
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	410328.00	3766778.00	0.00124	410378.00	
3766778.00	0.00150				
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3766778.00	0.00193				
	410528.00	3766778.00	0.00211	410578.00	
3766778.00	0.00233				
	410628.00	3766778.00	0.00252	410678.00	
3766778.00	0.00262				
	410728.00	3766778.00	0.00262	410778.00	
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	410828.00	3766778.00	0.00240	410878.00	
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	410928.00	3766778.00	0.00211	410228.00	
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	410378.00	3766828.00	0.00115	410428.00	
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	410478.00	3766828.00	0.00147	410528.00	
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	410578.00	3766828.00	0.00172	410628.00	
3766828.00	0.00187				

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        410678.00    3766828.00        0.00201                        410728.00
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3766828.00        0.00204
        410878.00    3766828.00        0.00195                        410928.00
3766828.00        0.00185
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        410346.00    3766300.00        0.02868                        410507.00
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        410432.00    3766558.00        0.01397                        410351.00
3766458.00        0.15608
        410279.00    3766516.00        0.00953

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  12
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                            ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        410228.00   3766378.00        0.56325  (08010221)                410278.00
3766378.00        0.59225  (11043022)
        410328.00   3766378.00        0.66646  (10120119)                410378.00
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        410428.00   3766378.00        0.49622  (10010620)                410478.00
3766378.00        0.44585  (09012920)
        410528.00   3766378.00        0.39767  (11051202)                410578.00
3766378.00        0.33812  (08111022)
        410628.00   3766378.00        0.28560  (11051304)                410678.00
3766378.00        0.24329  (12050603)
        410728.00   3766378.00        0.20969  (10042323)                410778.00
3766378.00        0.18296  (08060105)
        410828.00   3766378.00        0.16133  (11051305)                410878.00
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        410928.00   3766378.00        0.12886  (08020720)                410228.00
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        410278.00   3766428.00        0.90021  (11030504)                410328.00
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        410378.00   3766428.00        0.85350  (08111022)                410428.00
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        410478.00   3766428.00        0.59192  (10050504)                410528.00
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        410578.00   3766428.00        0.37196  (09030722)                410628.00
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        410878.00   3766428.00        0.14581  (12032324)                410928.00
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        410228.00   3766478.00        0.73068  (12041702)                410278.00
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        410728.00   3766478.00        0.21784  (10022522)                410778.00
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        410828.00   3766478.00        0.16507  (11032822)                410878.00
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        410378.00   3766528.00        0.48392  (10012903)                410428.00
3766528.00        0.55307  (08040323)
        410478.00   3766528.00        0.53746  (12041306)                410528.00
3766528.00        0.44447  (09111420)
        410578.00   3766528.00        0.36121  (11060302)                410628.00
3766528.00        0.29770  (11052502)
        410678.00   3766528.00        0.24996  (10041623)                410728.00
3766528.00        0.21388  (08032705)
        410778.00   3766528.00        0.18554  (11022222)                410828.00
3766528.00        0.16304  (08120422)
        410878.00   3766528.00        0.14487  (10051201)                410928.00
3766528.00        0.12979  (12111119)
        410228.00   3766578.00        0.42348  (08040402)                410278.00
3766578.00        0.44777  (11041024)
        410328.00   3766578.00        0.43218  (09021602)                410378.00
3766578.00        0.39645  (10031304)
        410428.00   3766578.00        0.40717  (08032104)                410478.00
3766578.00        0.41260  (08040323)
        410528.00   3766578.00        0.37336  (10052323)                410578.00
3766578.00        0.32166  (10041524)
        410628.00   3766578.00        0.27515  (10112103)                410678.00
3766578.00        0.23605  (10122821)
        410728.00   3766578.00        0.20491  (11060302)                410778.00
3766578.00        0.17948  (09040324)
        410828.00   3766578.00        0.15846  (08011820)                410878.00
3766578.00        0.14168  (10041623)
        410928.00   3766578.00        0.12750  (09032421)                410228.00
3766628.00        0.33783  (12032805)
        410278.00   3766628.00        0.34645  (12101723)                410328.00
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        410378.00   3766628.00        0.33370  (09032523)                410428.00
3766628.00        0.33574  (10033123)
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11
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```
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                            ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

     X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        410478.00   3766628.00        0.33276  (09112906)               410528.00
3766628.00        0.31191  (08040323)
        410578.00   3766628.00        0.28077  (08042123)               410628.00
3766628.00        0.24714  (12041306)
        410678.00   3766628.00        0.21837  (10041524)               410728.00
3766628.00        0.19244  (11031822)
        410778.00   3766628.00        0.17093  (10041802)               410828.00
3766628.00        0.15258  (11012222)
        410878.00   3766628.00        0.13711  (11060302)               410928.00
3766628.00        0.12393  (11060503)
        410228.00   3766678.00        0.28083  (12112623)               410278.00
3766678.00        0.28808  (09122801)
        410328.00   3766678.00        0.28815  (08122201)               410378.00
3766678.00        0.28656  (11112322)
        410428.00   3766678.00        0.28463  (10032924)               410478.00
3766678.00        0.27863  (08111105)
        410528.00   3766678.00        0.26360  (10033005)               410578.00
3766678.00        0.24444  (08040323)
        410628.00   3766678.00        0.22158  (11032223)               410678.00
3766678.00        0.19952  (12050424)
        410728.00   3766678.00        0.17879  (11022723)               410778.00
3766678.00        0.16056  (10041524)
        410828.00   3766678.00        0.14517  (11031822)               410878.00
3766678.00        0.13149  (09111420)
        410928.00   3766678.00        0.11969  (10122821)               410228.00
3766728.00        0.23994  (09101124)
        410278.00   3766728.00        0.24565  (12022707)               410328.00
3766728.00        0.24771  (08122201)
        410378.00   3766728.00        0.24722  (11031823)               410428.00
3766728.00        0.24463  (12110301)
        410478.00   3766728.00        0.23807  (10033123)               410528.00
3766728.00        0.22840  (08032104)
        410578.00   3766728.00        0.21426  (10033005)               410628.00
3766728.00        0.19792  (08040323)
        410678.00   3766728.00        0.18106  (09030324)               410728.00
3766728.00        0.16512  (10020424)
        410778.00   3766728.00        0.14999  (09030304)               410828.00
3766728.00        0.13693  (11022723)
        410878.00   3766728.00        0.12458  (10041524)               410928.00
3766728.00        0.11471  (11031822)
        410228.00   3766778.00        0.20784  (11041024)               410278.00
3766778.00        0.21320  (11011006)
        410328.00   3766778.00        0.21524  (09012820)               410378.00
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3766778.00        0.21522  (12012219)
        410428.00   3766778.00        0.21278  (09032523)                410478.00
3766778.00        0.20757  (10031304)
        410528.00   3766778.00        0.19949  (10052324)                410578.00
3766778.00        0.18927  (10012903)
        410628.00   3766778.00        0.17636  (09041622)                410678.00
3766778.00        0.16449  (08040323)
        410728.00   3766778.00        0.15190  (09030324)                410778.00
3766778.00        0.13994  (08042123)
        410828.00   3766778.00        0.12884  (12050424)                410878.00
3766778.00        0.11854  (12041306)
        410928.00   3766778.00        0.10949  (11031821)                410228.00
3766828.00        0.18192  (09022224)
        410278.00   3766828.00        0.18615  (11120320)                410328.00
3766828.00        0.18878  (09012820)
        410378.00   3766828.00        0.18885  (08120424)                410428.00
3766828.00        0.18681  (10100804)
        410478.00   3766828.00        0.18272  (11020122)                410528.00
3766828.00        0.17600  (10033123)
        410578.00   3766828.00        0.16871  (10052401)                410628.00
3766828.00        0.15959  (09112906)
        410678.00   3766828.00        0.14964  (09041622)                410728.00
3766828.00        0.13953  (08040323)
        410778.00   3766828.00        0.12909  (09030324)                410828.00
3766828.00        0.12062  (11012223)
        410878.00   3766828.00        0.11202  (10052323)                410928.00
3766828.00        0.10397  (09030304)
        410735.98   3766317.87        0.19276  (12103124)                410200.00
3766421.00        0.60071  (11122906)
        410346.00   3766300.00        0.40534  (10091906)                410507.00
3766494.00        0.54041  (08011820)
        410432.00   3766558.00        0.45282  (12010802)                410351.00
3766458.00        0.75083  (09032421)
        410279.00   3766516.00        0.72532  (11020601)

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  14
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
        410228.00   3766378.00        0.18586m (11101124)                410278.00
3766378.00        0.25309  (08102824)
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        410328.00   3766378.00        0.32822  (09121724)                410378.00
3766378.00        0.18030  (09121724)
        410428.00   3766378.00        0.10814  (11101824)                410478.00
3766378.00        0.10105m (11081624)
        410528.00   3766378.00        0.09367m (12072024)                410578.00
3766378.00        0.08573m (12072024)
        410628.00   3766378.00        0.07306m (12072024)                410678.00
3766378.00        0.06366m (11072624)
        410728.00   3766378.00        0.05806  (11062124)                410778.00
3766378.00        0.05333  (11062124)
        410828.00   3766378.00        0.04870  (11062124)                410878.00
3766378.00        0.04439  (11062124)
        410928.00   3766378.00        0.04049  (11062124)                410228.00
3766428.00        0.25969  (11010124)
        410278.00   3766428.00        0.38162  (11011124)                410328.00
3766428.00        0.60999m (12012924)
        410378.00   3766428.00        0.32093  (09121724)                410428.00
3766428.00        0.23198m (12072024)
        410478.00   3766428.00        0.20659  (11062124)                410528.00
3766428.00        0.16902  (11062124)
        410578.00   3766428.00        0.13508  (11062124)                410628.00
3766428.00        0.10930  (11062124)
        410678.00   3766428.00        0.09009  (11062124)                410728.00
3766428.00        0.07558  (11062124)
        410778.00   3766428.00        0.06441  (11062124)                410828.00
3766428.00        0.05564  (11062124)
        410878.00   3766428.00        0.04864  (11062124)                410928.00
3766428.00        0.04294  (11062124)
        410228.00   3766478.00        0.16328  (11030324)                410278.00
3766478.00        0.34835  (11010324)
        410328.00   3766478.00        0.26637  (11010824)                410378.00
3766478.00        0.29655  (11010824)
        410428.00   3766478.00        0.34111  (11061324)                410478.00
3766478.00        0.18846  (11061324)
        410528.00   3766478.00        0.13687m (11062324)                410578.00
3766478.00        0.10699m (11062324)
        410628.00   3766478.00        0.08571m (11062324)                410678.00
3766478.00        0.07033m (11062324)
        410728.00   3766478.00        0.05888m (11062324)                410778.00
3766478.00        0.05013m (11062324)
        410828.00   3766478.00        0.04328m (11062324)                410878.00
3766478.00        0.03783  (10083024)
        410928.00   3766478.00        0.03358  (10083024)                410228.00
3766528.00        0.13595  (11010324)
        410278.00   3766528.00        0.13081c (09010324)                410328.00
3766528.00        0.11022  (11010824)
        410378.00   3766528.00        0.10849  (11010824)                410428.00
3766528.00        0.13855  (12110924)
        410478.00   3766528.00        0.14093  (12110924)                410528.00
3766528.00        0.11771  (11061324)
        410578.00   3766528.00        0.09220  (11061324)                410628.00
3766528.00        0.06885  (11061324)
        410678.00   3766528.00        0.05178  (11061324)                410728.00
3766528.00        0.04365  (11052124)
        410778.00   3766528.00        0.03816  (11052124)                410828.00
3766528.00        0.03353  (11062624)
        410878.00   3766528.00        0.03056m (11062324)                410928.00
3766528.00        0.02791m (11062324)
        410228.00   3766578.00        0.06877c (09010324)                410278.00
3766578.00        0.06524  (08122424)
        410328.00   3766578.00        0.06828  (12032924)                410378.00
3766578.00        0.07651  (10033124)
        410428.00   3766578.00        0.07991  (09012524)                410478.00
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3766578.00        0.09217  (09012524)
        410528.00   3766578.00        0.08692  (12110924)                410578.00
3766578.00        0.06767  (12110924)
        410628.00   3766578.00        0.06366  (11061324)                410678.00
3766578.00        0.05537  (11061324)
        410728.00   3766578.00        0.04601  (11061324)                410778.00
3766578.00        0.03846  (11062424)
        410828.00   3766578.00        0.03247  (11062424)                410878.00
3766578.00        0.02710  (11062424)
        410928.00   3766578.00        0.02308  (11052124)                410228.00
3766628.00        0.05010c (09010324)
        410278.00   3766628.00        0.04059  (08122424)                410328.00
3766628.00        0.05001  (12032924)
        410378.00   3766628.00        0.05096  (10033124)                410428.00
3766628.00        0.05214  (10033124)
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  15
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                             *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     IDLING1     , IDLING2
, IDLING3     , L0000042    , L0000043    ,
                L0000044    , L0000045    , L0000046    , L0000030    , L0000031
, L0000032    , L0000033    , L0000034    ,
                L0000035    ,

                                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                            ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                  **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        410478.00   3766628.00        0.06196  (09012524)                410528.00
3766628.00        0.06558  (09012524)
        410578.00   3766628.00        0.05871  (12110924)                410628.00
3766628.00        0.05156  (12110924)
        410678.00   3766628.00        0.04176  (11061324)                410728.00
3766628.00        0.04078  (11061324)
        410778.00   3766628.00        0.03741  (11061324)                410828.00
3766628.00        0.03308  (11061324)
        410878.00   3766628.00        0.02873  (11062424)                410928.00
3766628.00        0.02588  (11062424)
        410228.00   3766678.00        0.03609c (09010324)                410278.00
3766678.00        0.02878  (11011024)
        410328.00   3766678.00        0.03819  (12032924)                410378.00
3766678.00        0.04251m (11121424)
        410428.00   3766678.00        0.04093  (10033124)                410478.00
3766678.00        0.03531  (10052324)
        410528.00   3766678.00        0.04846  (09012524)                410578.00
3766678.00        0.04934  (09012524)
        410628.00   3766678.00        0.04214  (12110924)                410678.00
3766678.00        0.03988  (12110924)
        410728.00   3766678.00        0.03385  (12110924)                410778.00
3766678.00        0.02906  (11061324)
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        410828.00   3766678.00        0.02867  (11061324)                410878.00
3766678.00        0.02711  (11061324)
        410928.00   3766678.00        0.02494  (11061324)                410228.00
3766728.00        0.02571c (09010324)
        410278.00   3766728.00        0.02121  (11011024)                410328.00
3766728.00        0.03041  (12032924)
        410378.00   3766728.00        0.03594m (11121424)                410428.00
3766728.00        0.03052  (10033124)
        410478.00   3766728.00        0.03116  (10033124)                410528.00
3766728.00        0.02914  (09012524)
        410578.00   3766728.00        0.03876  (09012524)                410628.00
3766728.00        0.03876  (09012524)
        410678.00   3766728.00        0.03162  (12110924)                410728.00
3766728.00        0.03137  (12110924)
        410778.00   3766728.00        0.02833  (12110924)                410828.00
3766728.00        0.02403  (12110924)
        410878.00   3766728.00        0.02155  (11061324)                410928.00
3766728.00        0.02139  (11061324)
        410228.00   3766778.00        0.01871  (11011024)                410278.00
3766778.00        0.01794  (11110424)
        410328.00   3766778.00        0.02494  (12032924)                410378.00
3766778.00        0.03028m (11121424)
        410428.00   3766778.00        0.02588m (11121424)                410478.00
3766778.00        0.02579  (10033124)
        410528.00   3766778.00        0.02314  (10033124)                410578.00
3766778.00        0.02549  (09012524)
        410628.00   3766778.00        0.03169  (09012524)                410678.00
3766778.00        0.03144  (09012524)
        410728.00   3766778.00        0.02560  (09012524)                410778.00
3766778.00        0.02512  (12110924)
        410828.00   3766778.00        0.02372  (12110924)                410878.00
3766778.00        0.02111  (12110924)
        410928.00   3766778.00        0.01804  (12110924)                410228.00
3766828.00        0.01529  (11011024)
        410278.00   3766828.00        0.01523  (11110424)                410328.00
3766828.00        0.02100  (12032924)
        410378.00   3766828.00        0.02561m (11121424)                410428.00
3766828.00        0.02377m (11121424)
        410478.00   3766828.00        0.02057  (10033124)                410528.00
3766828.00        0.02104  (10033124)
        410578.00   3766828.00        0.01856  (10052324)                410628.00
3766828.00        0.02227  (09012524)
        410678.00   3766828.00        0.02644  (09012524)                410728.00
3766828.00        0.02614  (09012524)
        410778.00   3766828.00        0.02197  (09012524)                410828.00
3766828.00        0.02046  (12110924)
        410878.00   3766828.00        0.01995  (12110924)                410928.00
3766828.00        0.01844  (12110924)
        410735.98   3766317.87        0.04145m (12072024)                410200.00
3766421.00        0.20328  (11010124)
        410346.00   3766300.00        0.16989  (09121724)                410507.00
3766494.00        0.14988  (11061324)
        410432.00   3766558.00        0.10413  (09012524)                410351.00
3766458.00        0.37060  (10121524)
        410279.00   3766516.00        0.15319c (09010324)

♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  16
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER 5 YEARS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3
**

```
                         NETWORK
GROUP ID                        AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

ALL        1ST HIGHEST VALUE IS       0.20070 AT (  410328.00,  3766428.00,    93.00,
   93.00,     0.00)  DC
           2ND HIGHEST VALUE IS       0.15608 AT (  410351.00,  3766458.00,    93.00,
   93.00,     0.00)  DC
           3RD HIGHEST VALUE IS       0.13564 AT (  410378.00,  3766428.00,    93.00,
   93.00,     0.00)  DC
           4TH HIGHEST VALUE IS       0.08634 AT (  410378.00,  3766478.00,    93.00,
   93.00,     0.00)  DC
           5TH HIGHEST VALUE IS       0.08155 AT (  410428.00,  3766478.00,    93.00,
   93.00,     0.00)  DC
           6TH HIGHEST VALUE IS       0.07071 AT (  410328.00,  3766478.00,    93.00,
   93.00,     0.00)  DC
           7TH HIGHEST VALUE IS       0.06949 AT (  410278.00,  3766428.00,    93.00,
   93.00,     0.00)  DC
           8TH HIGHEST VALUE IS       0.06749 AT (  410328.00,  3766378.00,    93.00,
   93.00,     0.00)  DC
           9TH HIGHEST VALUE IS       0.06267 AT (  410428.00,  3766428.00,    93.00,
   93.00,     0.00)  DC
          10TH HIGHEST VALUE IS       0.05441 AT (  410278.00,  3766378.00,    93.00,
   93.00,     0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  17
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL
```

*** THE SUMMARY OF HIGHEST 1-HR
RESULTS ***

** CONC OF PM_2.5 IN MICROGRAMS/M**3
**

```
                                                    DATE
                                         NETWORK
GROUP ID                            AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)     OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
```

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ALL      HIGH   1ST HIGH VALUE IS       1.12460  ON 12011319: AT (  410328.00,
3766428.00,    93.00,    93.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  18
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

                                                 *** THE SUMMARY OF HIGHEST 24-HR
RESULTS ***


                                    ** CONC OF PM_2.5   IN MICROGRAMS/M**3
               **

                                                        DATE
                                             NETWORK
GROUP ID                            AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)     OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS       0.60999m ON 12012924: AT (  410328.00,
3766428.00,    93.00,    93.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♀ *** AERMOD - VERSION  15181 ***   *** C:\Emissions Models\Industry, City of\Neslon
Ave\Nelson Business Par ***        09/12/16
 *** AERMET - VERSION  14134 ***   ***
                       ***        16:02:11

                                  PAGE  19
 **MODELOPTs:   NonDFAULT CONC      FLAT      RURAL

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         1436 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of          347 Calm Hours Identified

 A Total of         1089 Missing Hours Identified (  2.48 Percent)


    ******** FATAL ERROR MESSAGES ********
                 ***  NONE  ***
```

```
********    WARNING MESSAGES    ********
            ***   NONE   ***


************************************
*** AERMOD Finishes Successfully ***
************************************
```

APPENDIX B: GEOTECH NORCAL ENGINEERING

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

October 30, 2015 Project Number 18473-15

Executive Development LLC
13181 Crossrtoads Parkway North, Suite 440
City of Industry, California 91746

Attn.: Mr. Philip Lee

RE: **Soil Infiltration Study** - Proposed Industrial Development - Located at 14624 and 14700 E. Nelson Avenue, in the City of Industry, California

Dear Mr. Lee:

Pursuant to your request, this firm has performed a Soils Infiltration Study for the above referenced project in accordance with your approval of proposal dated October 5, 2015. The purpose of this study is to evaluate the feasibility of an on-site drainage disposal system for the proposed industrial development. The scope of work included the following: 1) site reconnaissance; 2) subsurface geotechnical exploration; 3) double ring infiltration testing; 4) engineering analysis of field and laboratory data; and 5) preparation o' a report.

It is proposed to construct two (2) industrial warehouse buildings totaling 465,221 square feet in area on the 10.68-acre subject property as shown on the attached site plan. The buildings will consist of concrete tilt-up structures supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements will consist of property line screen walls, concrete and asphaltic pavement, landscaping and hardscape. It is assumed that the proposed grading for the development will include minor cut and fill procedures. The proposed on-site drainage disposal system will consist of shallow detention basins/trenches.

Site Description

The subject property is situated within the east 14700 block and south side of Nelson Avenue, in the City of Industry. The generally L-shaped parcel is elongated in a north to south direction with topography of the relatively level property descending slightly from front to rear on the order of a few feet. The site is currently an undeveloped lot covered with a sparse growth of vegetation cover consisting of natural grasses and weeds.

Field Exploration

The testing was conducted on October 17, 2015 and consisted of using the double ring infiltrometer at two (2) locations to determine the infiltration rate of the proposed drainage disposal system. The location of these tests is shown on the attached Site Plan. These test locations were excavated by a backhoe to depths of 5 and 10 feet below ground surface (bgs). No caving occurred to the depth of these test excavations and no groundwater was encountered.

Detailed description of the subsurface soils is shown on the attached test excavations logs in Appendix B. In general, the site was found to be underlain by alluvial deposits consisting of light grey, sandy SILT to silty SAND and clayey SILT. These soils were noted to be firm to medium dense and damp to moist.

Infiltration Test Procedure and Results

The infiltration test consisted of the double ring infiltration test per ASTM Method D 3385. "The double ring infiltrometer method consists of driving two open cylinders, one inside the other, into the ground, partially filling the ring with water or other liquid, and then maintaining the liquid at a constant level. The volume of liquid added to the inner ring, to maintain the liquid level constant is the measure of the volume of liquid that infiltrates the soil.

The volume infiltrated during timed intervals is converted to an incremental infiltration velocity, usually expressed in centimeters per hour or inches per hour and plotted verses elapsed time. The maximum-steady state or average incremental infiltration velocity, depending on the purpose/application of the test is equivalent to the infiltration rate".

Along the bottom of the infiltration test pits, dual infiltration rings were inserted 7 cm vertically into the soil by an impact-absorbing hammer. Guelph tubes, also referred to as bubblers were installed to maintain constant water level in each of the rings. Water levels were maintained at a constant level in both the inner ring and annular space between rings throughout the test, to prevent flow of water from one ring to the other.

The volume of liquid used during each measured time interval was converted into an incremental infiltration velocity of both the inner ring in the annular space using the following equations:

For the inner ring calculated as follows:

$$Vir=\Delta Vir/(Air\Delta t)$$

where:

Vir = inner ring incremental infiltration velocity, cm/hr

ΔVir = volume of water used during time interval to maintain constant head in the inner ring, cm^3

Air = internal area of the inner ting, cm^2

Δt = time interval, hr

The last reading was used for design purposes in each of the test pits. The testing data sheets are attached in Appendix B and summarized in the table below. These excavations were immediately backfilled with the excavated soils and compacted. The double ring infiltration results are shown in Appendix B.

Test No.	Depth (feet bgs)	Soil Type	Infiltration Rate (cm/hr)	Infiltration Rate (in/hr)
1	5'	Silty Sand	93.0	37.2
2	10'	Clayey Silt	0.8	0.3

Groundwater Information

Groundwater was not encountered during our field investigation for this percolation study. The exposed sidewalls of our excavations did not reveal any evidence (mottling, etc.) that groundwater had been near the surface. Groundwater was not encountered to a depth of 50 feet below ground surface during our Geotechnical Engineering Investigation also dated October 30, 2015. A review of the "Seismic Hazard Zone Report for the Baldwin Park 7.5-minute Quadrangle, Los Angeles County, California, (1998)" indicates a historic groundwater level of 10 feet (Plate 1.2).

Discussion of Results

Based upon the results of our testing, the subsurface soils encountered in the proposed on-site drainage disposal system shall utilize a conservative design rate of 1 in/hr. All systems must meet the latest city and/or county specifications and California Regional Water Quality Control Board (CRWQCB) requirements.

It is recommended that proposed foundations shall be set back a minimum distance of 10 feet from the drainage disposal system and the bottom of footing shall be a minimum of 10 feet from the expected zone of saturation. The boundary of the zone of saturation may be assumed to project downward from the top of the permeable portion of the disposal system at an inclination of 1 to 1 or flatter, as determined by the soils engineer.

Closure

The recommendations and conclusions contained in this report are based upon the soil conditions uncovered in our test excavations. No warranty of the soil condition between our excavations is implied. NorCal Engineering should be notified for possible further recommendations if unexpected to unfavorable conditions are encountered during construction phase.

This firm should have the opportunity to review the final plans to verify that all our recommendations are incorporated. This report and all conclusions are subject to the review of the controlling authorities for the project. Our representative should be present during the grading operations and construction phase to certify that such recommendations are complied within the field.

This geotechnical investigation has been conducted in a manner consistent with the level of care and skill exercised by members of our profession currently practicing under similar conditions in the Southern California area. All work was performed under the supervision of the Geotechnical Engineer. No other warranty, expressed or implied is made. No other warranty, expressed or implied is made.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/16
GEOTECHNICAL
STATE OF CALIFORNIA

Scott D. Spensiero
Project Manager

List of Appendices

(in order of appearance)

Appendix A

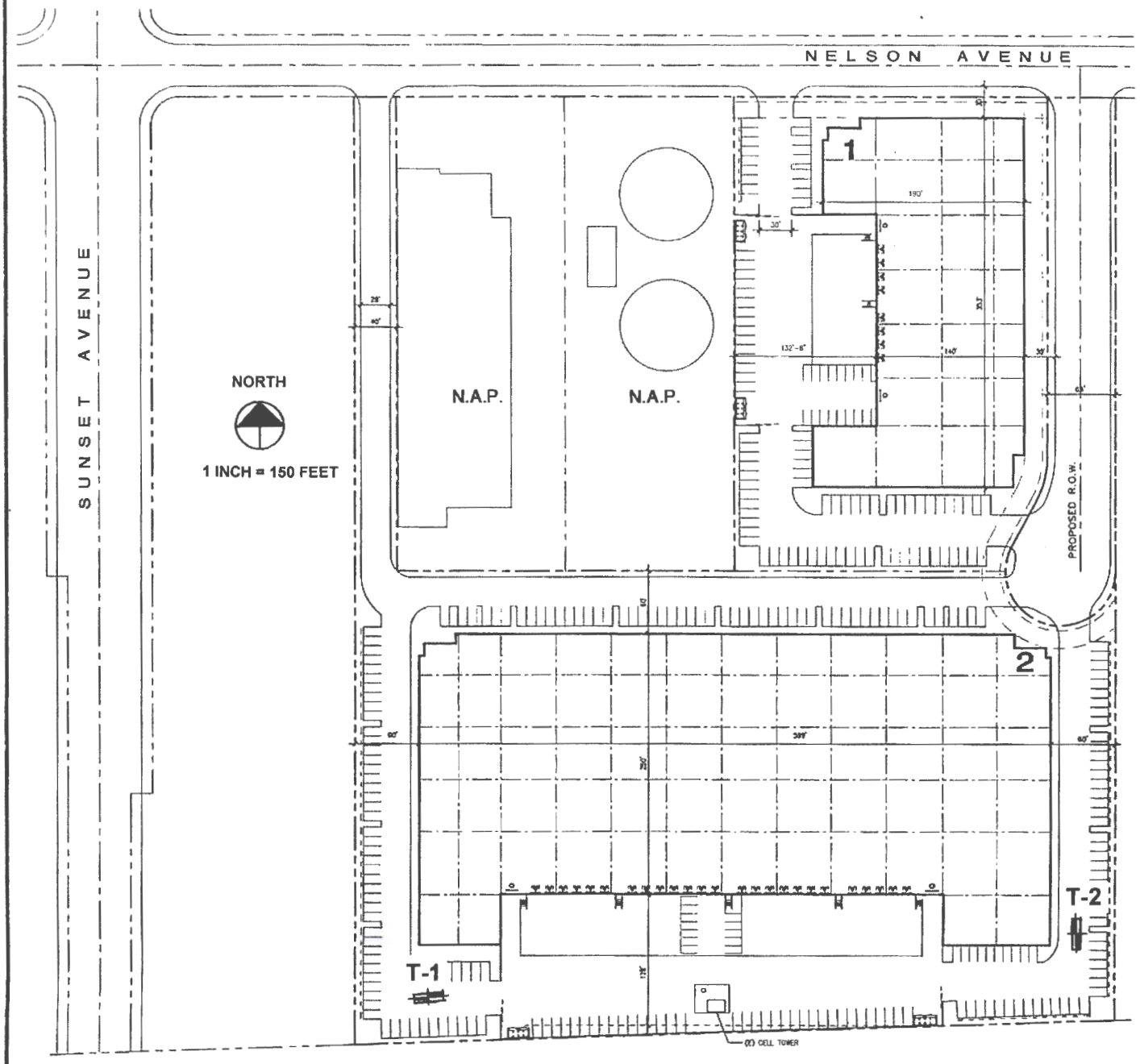
Site Plan

Appendix B

Log of Trenches T-1 and T-2

Field Test Data

Appendix A



NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS

SITE PLAN

PROJECT	18473-15	DATE	OCTOBER 2015

Appendix B

MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL, SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY:

- ■ Indicates 2.5-inch Inside Diameter. Ring Sample.
- ☒ Indicates 2-inch OD Split Spoon Sample (SPT).
- ⧅ Indicates Shelby Tube Sample.
- ◫ Indicates No Recovery.
- ◧ Indicates SPT with 140# Hammer 30 in. Drop.
- ⊠ Indicates Bulk Sample.
- ◩ Indicates Small Bag Sample.
- ◨ Indicates Non-Standard
- ⊠ Indicates Core Run.

COMPONENT PROPORTIONS

DESCRIPTIVE TERMS	RANGE OF PROPORTION
Trace	1 - 5%
Few	5 - 10%
Little	10 - 20%
Some	20 - 35%
And	35 - 50%

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

MOISTURE CONTENT

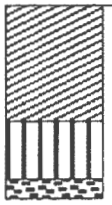
DRY	Absence of moisture, dusty, dry to the touch.
DAMP	Some perceptible moisture; below optimum
MOIST	No visible water; near optimum moisture content
WET	Visible free water, usually soil is below water table.

RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N -VALUE

COHESIONLESS SOILS		COHESIVE SOILS		
Density	N (blows/ft)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	Very Soft	0 to 2	< 250
Loose	4 to 10	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	Very Stiff	15 to 30	2000 - 4000
		Hard	over 30	> 4000

Executive Development 18473-15	Log of Trench T-1

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Clayey SILT Brown, soft to firm, damp; with base material, gravel and occasional asphalt					
		NATURAL Sandy SILT Brown, firm, moist					
5		SAND (fine to medium grained) Light brown, medium dense, damp; slightly silty					
		Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\18473-15.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-2

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15

Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight:

Drop:

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Clayey SILT Dark brown, soft to firm, damp to moist; with gravel and some asphalt					
5		NATURAL Sandy SILT Brown, firm, moist					
		Silty (fine to medium grained) SAND Light brown, medium dense, damp to moist; slightly silty to silty					
10		Clayey SILT Brown, firm, moist Trench completed at depth of 10'					
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\18473-15.log Date: 10/27/2015

NorCal Engineering

NORCAL ENGINEERING

SOILS AND GEOTECHNICAL CONSULTANTS

Project: Executive Development, LLC
Project No: 18473-15
Date: 10/17/15
Test No. 1
Depth: 5'
Tested By: J.S.

	TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE (cm)	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
1	8:00			43.4			108.9					
	8:02	2	2	46.5	3.1		113.0	4.1				
2	8:02			41.0			107.5					
	8:04	2	4	43.9	2.9		111.0	3.5				
3	8:04			39.9			106.7					
	8:06	2	6	42.7	2.8		109.8	3.1				
4	8:06			40.7			107.1					
	8:08	2	8	43.3	2.6		110.9	3.8				
5	8:08			41.6			107.0					
	8:10	2	10	44.5	2.9		110.4	3.4				
6	8:10			40.1			106.1					
	8:12	2	12	43.0	2.9		109.9	3.8		87	114	
7	8:12			41.7			105.5					
	8:14	2	14	44.5	2.8		109.2	3.7		84	111	
8	8:14			43.7			108.0					
	8:16	2	16	46.7	3.0		111.7	3.7		90	111	
9	8:16			42.1			105.9					
	8:18	2	18	45.3	3.2		108.9	3.0		96	90	
10	8:18			40.5			104.1					
	8:20	2	20	43.7	3.2		107.3	3.2		96	96	
11	8:20			43.7			107.3					
	8:22	2	22	46.9	3.2		110.7	3.4		96	102	
12	8:22			43.6			106.9					
	8:24	2	24	47.0	3.4		110.0	3.1		102	93	

NORCAL ENGINEERING

SOILS AND GEOTECHNICAL CONSULTANTS

Project: Executive Development, LLC
Project No: 18473-15
Date: 10/17/15
Test No. 2
Depth: 10'
Tested By: J.S.

	TIME (hr/min)	CHANGE TIME (min)	CUMULATIVE TIME (min)	INNER RING READING (cm)	INNER RING CHANGE	INNER RING FLOW (cc)	OUTER RING READING (cm)	OUTER RING CHANGE (cm)	OUTER RING FLOW (cc)	INNER RING INF RATE (cm/hr)	OUTER RING INF RATE (cm/hr)	INNER RING INF RATE (ft/hr)
1	9:21			39.9			106.5					
	9:36	15	15	40.4	0.5		106.7	0.2				
2	9:36			40.4			106.7					
	9:51	15	30	40.8	0.4		107.0	0.3				
3	9:51			40.8			107.0					
	10:06	15	45	41.0	0.2		107.1	0.1				
4	10:06			41.0			107.1					
	10:21	15	60	41.2	0.2		107.3	0.2				
5	10:21			41.2			107.3					
	10:36	15	75	41.5	0.3		107.4	0.1				
6	10:36			41.5			107.4					
	10:51	15	90	41.5	0.0		107.4	0.0		0.0	0.0	
7	10:51			41.5			107.4					
	11:06	15	105	41.8	0.3		107.7	0.3		1.2	1.2	
8	11:06			41.8			107.7					
	11:21	15	120	42.0	0.2		108.0	0.3		0.8	1.2	
9	11:21			42.0			108.0					
	11:36	15	135	42.2	0.2		108.2	0.2		0.8	0.8	
10	11:36			42.2			108.2					
	11:51	15	150	42.4	0.2		108.4	0.2		0.8	0.8	
11	11:51			42.4			108.4					
	12:06	15	165	42.7	0.3		108.7	0.3		1.2	1.2	
12	12:06			42.7			108.7					
	12:21	15	180	42.9	0.2		109.0	0.3		0.8	1.2	

Geotechnical Engineering Investigation

Proposed Industrial Development
14624 and 14700 E. Nelson Avenue
Industry, California

Executive Development LLC
13181 Crossrtoads Parkway North, Suite 440
City of Industry, California 91746

Attn.: Mr. Philip Lee

October 30, 2015
Project Number 18473-15

NorCal Engineering

Soils and Geotechnical Consultants
10641 Humbolt Street Los Alamitos, CA 90720
(562) 799-9469 Fax (562) 799-9459

October 30, 2015 Project Number 18473-15

Executive Development LLC
13181 Crossrtoads Parkway North, Suite 440
City of Industry, California 91746

Attn.: Mr. Philip Lee

RE: **Geotechnical Engineering Investigation** - Proposed Industrial Development - Located at 14624 and 14700 E. Nelson Avenue, in the City of Industry, California

Dear Mr. Lee:

Pursuant to your request, this firm has performed a Geotechnical Engineering Investigation for the above referenced project in accordance to our proposal dated October 5, 2015. The purpose of this investigation is to evaluate the subsurface conditions of the subject site and to provide recommendations for the proposed industrial development.

The scope of work included the following: 1) site reconnaissance; 2) subsurface geotechnical exploration and sampling; 3) laboratory testing; 4) engineering analysis of field and laboratory data; and 5) preparation of a geotechnical engineering report. It is the opinion of this firm that the proposed development is feasible from a geotechnical standpoint provided that the recommendations presented in this report are followed in the design and construction of the project.

1.0 Project Description

It is proposed to construct two (2) industrial warehouse buildings totaling 465,221 square feet in area on the 10.68-acre subject property as shown on the attached site plan. The buildings will consist of concrete tilt-up structures supported by a conventional slab-on-grade foundation system with perimeter-spread footings and isolated interior footings. Other improvements will consist of property line screen walls, concrete and asphaltic pavement, landscaping and hardscape. It is assumed that the proposed grading for the development will include minor cut and fill procedures. Final building plans shall be reviewed by this firm prior to submittal for city approval to determine the need for any additional study and revised recommendations pertinent to the proposed development, if necessary.

2.0 Site Description

The subject property is situated within the east 14700 block and south side of Nelson Avenue, in the City of Industry. The generally L-shaped parcel is elongated in a north to south direction with topography of the relatively level property descending slightly from front to rear on the order of a few feet. The site is currently an undeveloped lot covered with a sparse growth of vegetation cover consisting of natural grasses and weeds.

3.0 Site Exploration

The investigation consisted of the placement of ten (10) subsurface exploratory trenches by a backhoe and one (1) subsurface exploratory boring by a truck-mounted drill rig with eight inch outside diameter hollow-stem, continuous flight augers and hand augers to depths ranging from 5 to 50 feet below current ground elevations. The explorations were visually classified and logged by a field engineer with locations of the subsurface explorations shown on the attached Site Plan.

The exploratory trenches/boring revealed the existing earth materials to consist of a fill and natural soil. A detailed description of the subsurface conditions is listed on the excavation logs in Appendix A. It should be noted that the transition from one soil type to another as shown on the borings logs is approximate and may in fact be a gradual transition. The soils encountered are described as follows:

Fill: A fill soil classifying as a brown, clayey to sandy to clayey SILT was encountered to a depth of 1 to 4 feet below ground surface. These soils were noted to be soft to firm and dry to moist.

Natural: An undisturbed alluvium soil classifying as a brown, sandy SILT was encountered beneath the fill soils. These native soils were observed to be firm and moist. Deeper soils consisted of silty sands to sandy and clayey silts which were noted to be medium dense to firm and damp to moist.

The overall engineering characteristics of the earth material were relatively uniform with each trench and boring. Groundwater was not encountered to the depth of our borings and no caving occurred.

4.0 Laboratory Tests

Relatively undisturbed samples of the subsurface soils were obtained to perform laboratory testing and analysis for direct shear, consolidation tests, and to determine in-place moisture/densities. These relatively undisturbed ring samples were obtained by driving a thin-walled steel sampler lined with one inch long brass rings with an inside diameter of 2.42 inches into the undisturbed soils. The sampler was driven a total of twelve inches with blow counts taken in six inch increments.

Standard penetration tests were obtained by driving a steel sampler unlined with an inside diameter of 1.5 inches into the soils. This standard penetrometer sampler was driven a total of eighteen inches with blow counts tallied every six inches. Blow count data is given on the Boring Logs in Appendix A.

Bulk bag samples were obtained in the upper soils for expansion index tests and maximum density tests. Wall loadings on the order of 4,000 lbs./lin.ft. and maximum compression loads on the order of 100 kips were utilized for testing and design purposes. All test results are included in Appendix B, unless otherwise noted.

4.1 **Field moisture content** (ASTM: D 2216-10) and the dry density of the ring samples were determined in the laboratory. This data is listed on the logs of explorations.

4.2 **Sieve analyses** (ASTM: D 422) and the percent by weight of soil finer than the No. 200 sieve (ASTM: 1140) were performed on selected soil samples. These results are shown later within the body of this report.

4.3 **Maximum density tests** (ASTM: D-1557-12) were performed on typical samples of the upper soils. Results of these tests are shown on Table I.

4.4 **Expansion index tests** (ASTM: D 4829-11) were performed on remolded samples of the upper soils. Results of these tests are provided on Table II.

4.5 **Atterberg Limits** (ASTM: D 4318-10) consisting of liquid limit, plastic limit and plasticity index were performed on representative soil samples. Results are shown on Table III.

4.6 **Corrosion tests** consisting of sulfate, pH, resistivity and chloride analysis to determine potential corrosive effects of soils on concrete and underground utilities were performed in the laboratory. Test results are provided on Table IV.

4.7 **Direct shear tests** (ASTM: D-3080-11) were performed on undisturbed and disturbed samples of the subsurface soils. The test is performed under saturated conditions at loads of 1,000 lbs./sq.ft., 2,000 lbs./sq.ft., and 3,000 lbs./sq.ft. with results shown on Plates A and B.

4.8 **Consolidation tests** (ASTM: D-2435-11) were performed on undisturbed samples to determine the differential and total settlement which may be anticipated based upon the proposed loads. Water was added to the samples at a surcharge of one KSF and the settlement curves are plotted on Plates C to E.

5.0 Seismicity Evaluation

There are no known active or potentially active faults trending toward or through the site. The proposed development lies outside of any Alquist Priolo Special Studies Zone and the potential for damage due to direct fault rupture is considered very remote. Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults.

The seismic design of the project has been updated to the latest 2010 ASCE 7-10 (with July 2013 errata) standards and the mapped seismic ground motions were provided by using the Java based program available from the United States Geological Survey (USGS) website: http://geohazards.usgs.gov/designmaps/us/application.php. The earthquake design parameters are in accordance with the 2013 California Building Code (CBC) and are listed below.

Seismic Design Parameters

Site Location	Latitude	34.035°
	Longitude	-117.971°
Site Class		D
Risk Category		I/II/III
Maximum Spectral Response Acceleration	S_S	2.165g
	S_1	0.762g
Adjusted Maximum Acceleration	S_{MS}	2.165g
	S_{M1}	1.143g
Design Spectral Response Acceleration Parameters	S_{DS}	1.443g
	S_{D1}	0.762g

6.0 Liquefaction Evaluation

The site is expected to experience ground shaking and earthquake activity that is typical of Southern California area. It is during severe ground shaking that loose, granular soils below the groundwater table can liquefy. A review of the exploratory boring log and the laboratory test results on selected soil samples obtained indicate the following soil classifications, field blowcounts and amounts of fines passing through the No. 200 sieve.

Field Blowcount and Gradation Data

Location	Classification	Blowcounts (blows/ft)	Relative Density	% Passing No. 200 Sieve
B-1 @ 5'	ML	20	Very Stiff	51
B-1 @ 10'	CL	16	Stiff	63
B-1 @ 15'	SM	13	Dense	23
B-1 @ 20'	CL	19	Stiff	68
B-1 @ 25'	ML	20	Stiff	53
B-1 @ 30'	CL	20	Firm	77
B-1 @ 35'	ML	31	Very Stiff	56
B-1 @ 40'	SW	32	Dense	8
B-1 @ 45'	SW	45	Very Dense	6
B-1 @ 50'	SM	38	Dense	35

Based upon information in the California Division of Mines and Geology "Seismic Hazard Zone Map – Baldwin Park Quadrangle", dated March 25, 1999, the subject site is situated in an area of historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions to indicate a potential for permanent ground displacement.

Our liquefaction evaluation utilized the nearest node of predominate magnitude 6.6 Mw earthquake that was obtained from the USGS Interactive Disaggregation web site: http://geohazards.usgs.gov/deaggint/2008/. The analysis indicates the potential for liquefaction at this site is considered to be low based upon a historic groundwater level of 10 feet deep (Seismic Hazard Zone Report for the Baldwin Park 7.5-Minute Quadrangle, Los Angeles County - Plate 1.2).

The associated seismic-induced settlements would be on the order of less 1¾ inches and would occur rather uniformly across the site. Differential settlements would be on the order of 1 inch over a 50-foot (horizontal) distance in the building pad area. Thus, the design of the proposed construction in conformance with the latest Building Code provisions for earthquake design is expected to provide mitigation of ground shaking hazards that are typical to Southern California.

7.0 Conclusions and Recommendations

Based upon our evaluations, the proposed development is acceptable from a geotechnical engineering standpoint. By following the recommendations and guidelines set forth in our report, the structures and grading will be safe from settlements under the anticipated design loadings and conditions. The proposed development shall meet all requirements of the City Building Ordinance and will not impose any adverse effect on existing adjacent structures.

The following recommendations are based upon geotechnical conditions encountered in our field investigation and laboratory data. Therefore, these surface and subsurface conditions could vary across the site. Variations in these conditions may not become evident until the commencement of grading operations and any unusual conditions which may be encountered in the course of the project development may require the need for additional study and revised recommendations.

It is recommended that site inspections are performed by a representative of this firm during all grading and construction of the development to verify the findings and recommendations documented in this report. The following sections present a discussion of geotechnical related requirements for specific design recommendations of different aspects of the project.

7.1.1 Removal and Recompaction Recommendations

All fill soils (about 1 to 4 feet) shall be removed to competent native material, the exposed surface scarified to a depth of 6 inches, brought to within 2% of optimum moisture content and compacted to a minimum of 90% of the laboratory standard (ASTM: D-1557-07) prior to placement of any additional compacted fill soils, foundations, slabs-on-grade and pavement. Grading shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

It is possible that isolated areas of undiscovered fill not described in this report are present on site. If found, these areas should be treated as discussed earlier. A diligent search shall also be conducted during grading operations in an effort to uncover any underground structures, irrigation or utility lines. If encountered, these structures and lines shall be either removed or properly abandoned prior to the proposed construction.

Any imported fill material should be preferably soil similar to the upper soils encountered at the subject site. All soils shall be approved by this firm prior to importing at the site and will be subjected to additional laboratory testing to assure concurrence with the recommendations stated in this report.

Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase. Adequate drainage away from the structures, pavement and slopes should be provided at all times.

If placement of slabs-on-grade and pavement is not completed immediately upon completion of grading operations, additional testing and grading of the areas may be necessary prior to continuation of construction operations. Likewise, if adverse weather conditions occur which may damage the subgrade soils, additional assessment by the geotechnical engineer as to the suitability of the supporting soils may be needed.

7.1.2 Fill Blanket Recommendations

Due to the potential for differential settlement of foundations placed on compacted fill and the native soils, it is recommended that all foundations be underlain by a uniform compacted fill blanket at least two feet in thickness. This fill blanket shall extend a minimum of five horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

7.2 Temporary Excavations

Temporary unsurcharged excavations in the existing site materials less than 4 feet high may be made at a vertical gradient unless cohesionless soils are encountered. In areas where soils with little or no binder are encountered, where adverse geological conditions are exposed, or where excavations are adjacent to existing structures, shoring, slot-cutting, or flatter excavations may be required. The temporary cut slope gradients given do not preclude local raveling and sloughing. All excavations shall be made in accordance with the requirements of CAL-OSHA and other public agencies having jurisdiction. Care should be taken to provide or maintain adequate lateral support for all adjacent improvements and structures at all times during the grading operations and construction phase.

7.3 Foundation Design

All foundations shall be designed utilizing the following safe bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths:

Allowable Safe Bearing Capacity (psf)

Width (ft)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

The bearing value may be increased by 500 psf for each additional foot of depth in excess of the 24 -inch minimum depth, up to a maximum of 4,000 psf. A one third increase may be used when considering short term loading and seismic forces. Any foundations located along the property lines or where lateral overexcavation is not possible may utilize a safe bearing capacity of 1,000 psf. All continuous foundations shall be reinforced with a minimum of one No. 4 bar, top and bottom; isolated pad foundations reinforced at the discretion of the project structural engineer. A representative of this firm shall inspect all foundation excavations prior to pouring concrete.

7.4 Settlement Analysis

Resultant pressure curves for the consolidation tests are shown on Plates C to E. Computations utilizing these curves and the recommended safe bearing capacities reveal that the foundations will experience settlements on the order of ¾ inch and differential settlements of less than ¼ inch.

7.5 Lateral Resistance

The following values may be utilized in resisting lateral loads imposed on the structure. Requirements of the latest Building Code should be adhered to when the coefficient of friction and passive pressures are combined.

Coefficient of Friction - 0.35

Equivalent Passive Fluid Pressure = 200 lbs./cu.ft.

Maximum Passive Pressure = 2,000 lbs./cu.ft.

The passive pressure recommendations are valid only for approved compacted fill soils.

7.6 Retaining Wall Design Parameters

Active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. These values are for approved select **granular backfill material** placed behind the walls at various ground slopes above the walls.

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb./cu.ft.)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

Any applicable short-term construction surcharges and seismic forces should be added to the above lateral pressure values. An equivalent fluid pressure of 45 pcf may be utilized for the restrained wall condition with a level grade behind the wall.

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The subsurface drainage system shall consist of 4-inch diameter perforated PVC pipe encased with gravel and wrapped with filter fabric. The granular backfill to be utilized immediately adjacent to the retaining/basement walls shall consist of an approved granular soils with a sand equivalency greater than 30. This backfill zone of free draining material shall consist of a wedge beginning a minimum of one horizontal foot from the base of the wall extending upward at an inclination of no less than 3/4 to 1 (horizontal to vertical).

The seismic-induced lateral soil pressure for walls greater than 6 feet shall be computed using a triangular pressure distribution with the maximum value at the top of the wall. The maximum lateral pressure of (20 pcf) H, where H is the height of the retained soils above the wall footing should be utilized in final design of retaining walls. Sliding resistance values and passive fluid pressures given in our referenced report may be increased by 1/3 during short-term wind and seismic loading conditions.

7.7 Slab Design

All concrete slabs shall be at least six inches in the proposed warehouse area and four inches in hardscape and office areas, all reinforced using No. 3 bars at sixteen inch spacing in each direction and positioned in the center of the slab. Additional reinforcement requirements and an increase in thickness of the slabs-on-grade may be necessary based upon proposed loading conditions in the structures and should be evaluated further by the project engineers and/or architect. These slabs shall be placed on approved subgrade soils moisture conditioned to 3% above optimum moisture content to a depth of eighteen inches.

A vapor retarder (10-mil minimum thickness) should be utilized in areas which would be sensitive to the infiltration of moisture. This retarder shall meet requirements of ASTM E 96, *Water Vapor Transmission of Materials* and ASTM E 1745, *Standard Specification for Water Vapor Retarders used in Contact with Soil or Granular Fill Under Concrete Slabs.* The vapor retarder shall be installed in accordance with procedures stated in ASTM E 1643, *Standard practice for Installation of Water Vapor Retarders used in Contact with Earth or Granular Fill Under Concrete Slabs.*

The moisture retarder may be placed directly upon approved subgrade soils, although one to two inches of sand beneath the membrane is desirable. The subgrade upon which the retarder is placed shall be smooth and free of rocks, gravel or other protrusions which may damage the retarder. Use of sand above the retarder is under the purview of the structural engineer; if sand is used over the retarder, it should be placed in a dry condition.

7.8 Pavement Section Design

The table below provides a preliminary pavement design based upon an R-Value of 30 for the proposed pavement areas. Final pavement design may need to be based on R-Value testing of the subgrade soils near the conclusion of rough grading to assure that these soils are consistent with those assumed in this preliminary design.

Type of Traffic	Traffic Index	Asphaltic Concrete (in)	Base Material (in)
Parking Stalls	4.0	3.0	4.0
Drive Circulation Areas	5.0	3.5	5.5
Medium Truck Access (GVW < 42,000 lbs, 3-axle)	6.0	3.5	8.0
Heavy Truck Access (GVW < 90,000 lbs, 5-axle)	7.0	4.0	10.5

All concrete slabs to be utilized for pavement shall be a minimum of six inches in thickness and placed on approved subgrade soils. Client should submit anticipated traffic loadings, when available, so that pavement sections may be reviewed to determine adequacy to support these loads.

All pavement areas shall have positive drainage toward an approved outlet from the site. Drain lines behind curbs and/or adjacent to landscape areas should be considered by client and the appropriate design engineers to prevent water from infiltrating beneath pavement. If such infiltration occurs, damage to pavement, curbs and flow lines, especially on sites with expansive soils, may occur during the life of the project.

Any approved base material shall consist of a Class II aggregate or equivalent and should be compacted to a minimum of 95% relative compaction. All pavement materials shall conform to the requirements set forth by the City of Industry. The base material and asphaltic concrete should be tested prior to delivery to the site and during placement to determine conformance with the project specifications. A pavement engineer shall designate the specific asphalt mix design to meet the required project specifications.

7.9 Utility Trench and Excavation Backfill

Trenches from installation of utility lines and other excavations may be backfilled with on-site soils or approved imported soils compacted to a minimum of 90% relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

7.10 Corrosion Design Criteria

Representative samples of the surficial soils, typical of the subgrade soils expected to be encountered within foundation excavations and underground utilities were tested for corrosion potential. The minimum resistivity value obtained for the samples tested is representative of an environment that may be corrosive to metals. The soil pH value was considered mildly acidic and may not have a significant effect on soil corrosivity. Consideration should be given to corrosion protection systems for buried metal such as protective coatings, wrappings or the use of PVC where permitted by local building codes.

According to Table 4.3.1 of ACI 318 Building Code and Commentary, these contents revealed negligible levels of sulfate exposure. Therefore, a Type II cement according to latest CBC specifications may be utilized for building foundations at this time. Additional sulfate tests shall be performed at the completion of site grading to assure that these soils are consistent with the recommendations stated in this design. Corrosion test results may be found on the attached Table IV.

7.11 Expansive Soil

Since expansive soils were encountered, special attention should be given to the project design and maintenance. The attached *Expansive Soil Guidelines* should be reviewed by the engineers, architects, owner, maintenance personnel and other interested parties and considered during the design of the project and future property maintenance.

8.0 Closure

The recommendations and conclusions contained in this report are based upon the soil conditions uncovered in our test excavations. No warranty of the soil condition between our excavations is implied. NorCal Engineering should be notified for possible further recommendations if unexpected to unfavorable conditions are encountered during construction phase.

It is the responsibility of the owner to ensure that all information within this report is submitted to the Architect and appropriate Engineers for the project. This firm should have the opportunity to review the final plans to verify that all our recommendations are incorporated. This report and all conclusions are subject to the review of the controlling authorities for the project.

A preconstruction conference should be held between the developer, general contractor, grading contractor, city inspector, architect, and soil engineer to clarify any questions relating to the grading operations and subsequent construction. Our representative should be present during the grading operations and construction phase to certify that such recommendations are complied within the field.

This geotechnical investigation has been conducted in a manner consistent with the level of care and skill exercised by members of our profession currently practicing under similar conditions in the Southern California area. No other warranty, expressed or implied is made.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

Keith D. Tucker
Project Engineer
R.G.E. 841

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12/31/16
GEOTECHNICAL
STATE OF CALIFORNIA

Scott D. Spensiero
Project Manager

SPECIFICATIONS FOR PLACEMENT OF COMPACTED FILL

Excavation

Any existing low density soils and/or saturated soils shall be removed to competent natural soil under the inspection of the Soils Engineering Firm. After the exposed surface has been cleansed of debris and/or vegetation, it shall be scarified until it is uniform in consistency, brought to the proper moisture content and compacted to a minimum of 90% relative compaction (in accordance with ASTM: D-1557-07).

In any area where a transition between fill and native soil or between bedrock and soil are encountered, additional excavation beneath foundations and slabs will be necessary in order to provide uniform support and avoid differential settlement of the structure.

Material For Fill

The on-site soils or approved import soils may be utilized for the compacted fill provided they are free of any deleterious materials and shall not contain any rocks, brick, asphaltic concrete, concrete or other hard materials greater than eight inches in maximum dimensions. Any import soil must be approved by the Soils Engineering firm a minimum of 24 hours prior to importation of site.

Placement of Compacted Fill Soils

The approved fill soils shall be placed in layers not excess of six inches in thickness. Each lift shall be uniform in thickness and thoroughly blended. The fill soils shall be brought to within 2% of the optimum moisture content, unless otherwise specified by the Soils Engineering firm. Each lift shall be compacted to a minimum of 90% relative compaction (in accordance with ASTM: D-1557-07) and approved prior to the placement of the next layer of soil. Compaction tests shall be obtained at the discretion of the Soils Engineering firm but to a minimum of one test for every 500 cubic yards placed and/or for every 2 feet of compacted fill placed.

The minimum relative compaction shall be obtained in accordance with accepted methods in the construction industry. The final grade of the structural areas shall be in a dense and smooth condition prior to placement of slabs-on-grade or pavement areas. No fill soils shall be placed, spread or compacted during unfavorable weather conditions. When the grading is interrupted by heavy rains, compaction operations shall not be resumed until approved by the Soils Engineering firm.

Grading Observations

The controlling governmental agencies should be notified prior to commencement of any grading operations. This firm recommends that the grading operations be conducted under the observation of a Soils Engineering firm as deemed necessary. A 24 hour notice must be provided to this firm prior to the time of our initial inspection.

Observation shall include the clearing and grubbing operations to assure that all unsuitable materials have been properly removed; approve the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished grade and designate areas of overexcavation; and perform field compaction tests to determine relative compaction achieved during fill placement. In addition, all foundation excavations shall be observed by the Soils Engineering firm to confirm that appropriate bearing materials are present at the design grades and recommend any modifications to construct footings.

Expansive Soil Guidelines

The following expansive soil guidelines are provided for your project. The intent of these guidelines is to inform you, the client, of the importance of proper design and maintenance of projects supported on expansive soils. ***You, as the owner or other interested party, should be warned that you have a duty to provide the information contained in the soil report including these guidelines to your design engineers, architects, landscapers and other design parties in order to enable them to provide a design that takes into consideration expansive soils.***

In addition, you should provide the soil report with these guidelines to any property manager, lessee, property purchaser or other interested party that will have or assume the responsibility of maintaining the development in the future.

Expansive soils are fine-grained silts and clays which are subject to swelling and contracting. The amount of this swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. Expansive soils are divided into five categories ranging from "very low" to "very high". Expansion indices are assigned to each classification and are included in the laboratory testing section of this report. *If the expansion index of the soils on your site, as stated in this report, is 21 or higher, you have expansive soils.* The classifications of expansive soils are as follows:

Classification of Expansive Soil*

Expansion Index	Potential Expansion
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very High

When expansive soils are compacted during site grading operations, care is taken to place the materials at or slightly above optimum moisture levels and perform proper compaction operations. Any subsequent excessive wetting and/or drying of expansive soils will cause the soil materials to expand and/or contract. These actions are likely to cause distress of foundations, structures, slabs-on-grade, sidewalks and pavement over the life of the structure. ***It is therefore imperative that even after construction of improvements, the moisture contents are maintained at relatively constant levels, allowing neither excessive wetting or drying of soils.***

Evidence of excessive wetting of expansive soils may be seen in concrete slabs, both interior and exterior. Slabs may lift at construction joints producing a trip hazard or may crack from the pressure of soil expansion. Wet clays in foundation areas may result in lifting of the structure causing difficulty in the opening and closing of doors and windows, as well as cracking in exterior and interior wall surfaces. In extreme wetting of soils to depth, settlement of the structure may eventually result. Excessive wetting of soils in landscape areas adjacent to concrete or asphaltic pavement areas may also result in expansion of soils beneath pavement and resultant distress to the pavement surface.

Excessive drying of expansive soils is initially evidenced by cracking in the surface of the soils due to contraction. Settlement of structures and on-grade slabs may also eventually result along with problems in the operation of doors and windows.

Projects located in areas of expansive clay soils will be subject to more movement and "hairline" cracking of walls and slabs than similar projects situated on non-expansive sandy soils. There are, however, measures that developers and property owners may take to reduce the amount of movement over the life the development. The following guidelines are provided to assist you in both design and maintenance of projects on expansive soils:

- Drainage away from structures and pavement is essential to prevent excessive wetting of expansive soils. Grades should be designed to the latest building code and maintained to allow flow of irrigation and rain water to approved drainage devices or to the street. Any "ponding" of water adjacent to buildings, slabs and pavement after rains is evidence of poor drainage; the installation of drainage devices or regrading of the area may be required to assure proper drainage. Installation of rain gutters is also recommended to control the introduction of moisture next to buildings. Gutters should discharge into a drainage device or onto pavement which drains to roadways.

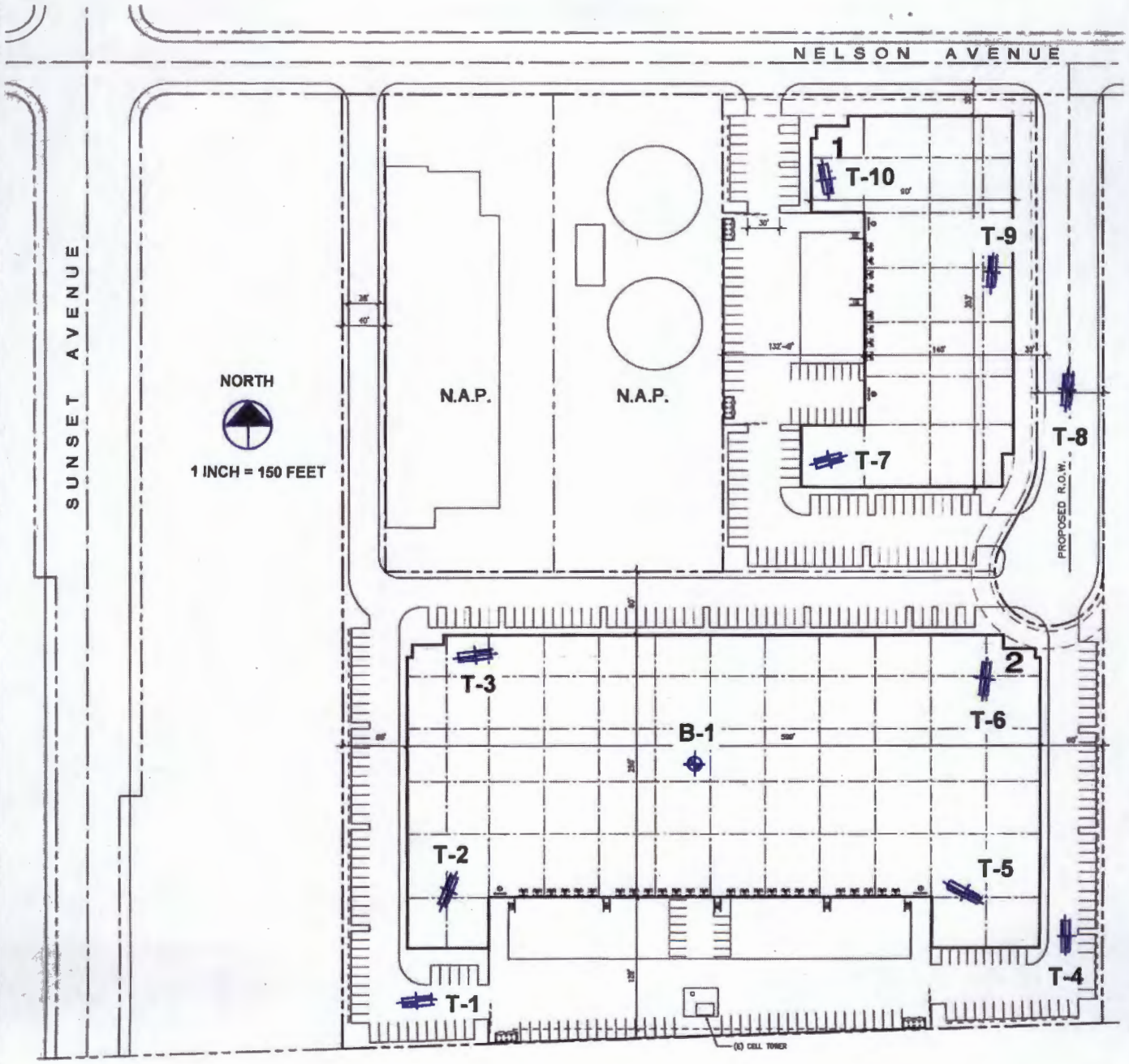
- Irrigation should be strictly controlled around building foundations, slabs and pavement and may need to be adjusted depending upon season. This control is essential to maintain a relatively uniform moisture content in the expansive soils and to prevent swelling and contracting. Over-watering adjacent to improvements may result in damage to those improvements. NorCal Engineering makes no specific recommendations regarding landscape irrigation schedules.

- Planting schemes for landscaping around structures and pavement should be analyzed carefully. Plants (including sod) requiring high amounts of water may result in excessive wetting of soils. Trees and large shrubs may actually extract moisture from the expansive soils, thus causing contraction of the fine-grained soils.

- Thickened edges on exterior slabs will assist in keeping excessive moisture from entering directly beneath the concrete. A six-inch thick or greater deepened edge on slabs may be considered. Underlying interior and exterior slabs with 6 to 12 inches or more of non-expansive soils and providing presaturation of the underlying clayey soils as recommended in the soil report will improve the overall performance of on-grade slabs.

- Increase the amount of steel reinforcing in concrete slabs, foundations and other structures to resist the forces of expansive soils. The precise amount of reinforcing should be determined by the appropriate design engineers and/or architects.

- Recommendations of the soil report should always be followed in the development of the project. Any recommendations regarding presaturation of the upper subgrade soils in slab areas should be performed in the field and verified by the Soil Engineer.



NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS

SITE PLAN

PROJECT	18473-15	DATE	OCTOBER 2015

List of Appendices

(in order of appearance)

Appendix A - Log of Excavations

- Log of Boring B-1
- Log of Trenches T-1 to T-10

Appendix B - Laboratory Tests

- Table I - Maximum Dry Density
- Table II – Expansion
- Table III – Atterberg
- Table IV - Corrosion

- Plates A and B - Direct Shear
- Plates C to F – Consolidation

Appendix C – Liquefaction Evaluation

Appendix A

MAJOR DIVISION			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL, SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINE (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

KEY:

- ■ Indicates 2.5-inch Inside Diameter. Ring Sample.
- ☒ Indicates 2-inch OD Split Spoon Sample (SPT).
- ⧅ Indicates Shelby Tube Sample.
- ◫ Indicates No Recovery.
- ◧ Indicates SPT with 140# Hammer 30 in. Drop.
- ✉ Indicates Bulk Sample.
- ◩ Indicates Small Bag Sample.
- ◨ Indicates Non-Standard
- ⧗ Indicates Core Run.

COMPONENT PROPORTIONS

DESCRIPTIVE TERMS	RANGE OF PROPORTION
Trace	1 - 5%
Few	5 - 10%
Little	10 - 20%
Some	20 - 35%
And	35 - 50%

COMPONENT DEFINITIONS

COMPONENT	SIZE RANGE
Boulders	Larger than 12 in
Cobbles	3 in to 12 in
Gravel	3 in to No 4 (4.5mm)
Coarse gravel	3 in to 3/4 in
Fine gravel	3/4 in to No 4 (4.5mm)
Sand	No. 4 (4.5mm) to No. 200 (0.074mm)
Coarse sand	No. 4 (4.5 mm) to No. 10 (2.0 mm)
Medium sand	No. 10 (2.0 mm) to No. 40 (0.42 mm)
Fine sand	No. 40 (0.42 mm) to No. 200 (0.074 mm)
Silt and Clay	Smaller than No. 200 (0.074 mm)

MOISTURE CONTENT

DRY	Absence of moisture, dusty, dry to the touch.
DAMP	Some perceptible moisture; below optimum
MOIST	No visible water; near optimum moisture content
WET	Visible free water, usually soil is below water table.

RELATIVE DENSITY OR CONSISTENCY VERSUS SPT N -VALUE

COHESIONLESS SOILS		COHESIVE SOILS		
Density	N (blows/ft)	Consistency	N (blows/ft)	Approximate Undrained Shear Strength (psf)
Very Loose	0 to 4	Very Soft	0 to 2	< 250
Loose	4 to 10	Soft	2 to 4	250 - 500
Medium Dense	10 to 30	Medium Stiff	4 to 8	500 - 1000
Dense	30 to 50	Stiff	8 to 15	1000 - 2000
Very Dense	over 50	Very Stiff	15 to 30	2000 - 4000
		Hard	over 30	> 4000

Executive Development
18473-15

Log of Boring B-1

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 8/17/15 | Groundwater Depth: None Encountered

Drilling Method: Simco 2800HS

Hammer Weight: 140 lbs | Drop: 30"

Surface Elevation: Not Measured

GWT not encountered

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft, damp					
		NATURAL Sandy SILT Brown, firm to stiff, moist					
5			X	7/8/12	9.9		51
		Clayey SILT Brown, frim to stiff, moist					
10			X	6/7/9	15.0		63
		Silty SAND Light brown, medium dense, moist					
15			X	6/6/7	8.2		23
		Clayey SILT Grey-brown, stiff, moist					
20			X	8/9/10	18.0		68
		Sandy SILT Brown, stiff, moist					
25			X	9/9/11	17.1		53
		Silty CLAY Brown, stiff, moist					
30			X	6/8/12	24.5		77
		Sandy SILT Brown, stiff, moist					
35							

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/29/2015

NorCal Engineering

Executive Development
18473-15

Log of Boring B-1

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 8/17/15 | Groundwater Depth: None Encountered

Drilling Method: Simco 2800HS

Hammer Weight: 140 lbs | Drop: 30"

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
35		Sandy SILT Brown, stiff, moist	X	11/15/16	18.9		56
40		SAND (fine to coarse grained) Light brown, dense, damp; slightly silty with gravel	X	15/15/17	3.3		8
45			X	15/21/24	4.8		6
50		Silty (fine to medium grained) SAND Grey, dense, very moist	X	15/17/21	14.9		35
		Boring completed at depth of 51.5'					
55							
60							
65							
70							

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/29/2015

NorCal Engineering

Executive Development 18473-15	Log of Trench T-1

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Clayey SILT Brown, soft to firm, damp; with base material, gravel and occasional asphalt					
	GWT not encountered	NATURAL Sandy SILT Brown, firm, moist					
5		SAND (fine to medium grained) Light brown, medium dense, damp; slightly silty					
		Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

NorCal Engineering

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

Executive Development
18473-15

Log of Trench T-2

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15 | Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight: | Drop:

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft, dry	■		7.3	109.6	
		NATURAL Sandy SILT Brown, firm, moist					
5		Silty (fine to medium grained) SAND Brown, medium dense, damp to moist	■		4.1	112.8	
		Clayey SILT Brown, firm, moist					
10			■		12.2	107.4	
15		Trench completed at depth of 15'	■		13.3	107.9	
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-3

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples Type	Samples Blow Counts	Laboratory Moisture	Laboratory Dry Density	Laboratory % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft, damp; with gravel and base					
		NATURAL Sandy SILT Brown, firm, damp	■		6.7	114.7	
5							
		Silty (fine to medium grained) SAND Light brown, medium dense, damp; slightly silty	■		5.0	111.9	
10		Trench completed at depth of 10'					
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development 18473-15	Log of Trench T-4

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Clayey SILT Brown, soft to firm, damp to moist; with gravel and some asphalt					
5	GWT not encountered	NATURAL Sandy SILT Brown, firm, moist					
		Silty (fine to medium grained) SAND Brown, medium dense, damp to moist					
10		Clayey SILT Brown, firm, moist Trench completed at depth of 10'					
15							
20							
25							
30							
35							

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-5

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15 | Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight: | Drop:

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples Type	Samples Blow Counts	Laboratory Moisture	Laboratory Dry Density	Laboratory % Passing 200 Sieve
0		FILL Sandy to Clayey SILT Brown, soft to firm, moist; with gravel and some base material					
		NATURAL Sandy SILT Brown, firm, moist	■		5.3	108.7	
5		Silty (fine to medium grained) SAND Brown, medium dense, moist	■		11.9	107.7	
10		Sandy SILT Brown, firm, moist	■		9.0	111.9	
		Trench completed at depth of 10'					
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-6

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples Type	Samples Blow Counts	Laboratory Moisture	Laboratory Dry Density	Laboratory % Passing 200 Sieve
0		FILL Sandy to Clayey SILT Brown, soft to firm, moist; with base material					
		NATURAL Sandy SILT Brown, firm, moist	■		8.3	104.4	
5		Silty (fine to medium grained) SAND Brown, medium dense, moist	■		8.8	106.3	
10		Clayey SILT Brown, firm, moist Trench completed at depth of 10'					
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-7

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15 | Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight: | Drop:

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples Type	Samples Blow Counts	Laboratory Moisture	Laboratory Dry Density	Laboratory % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft to firm, damp; with some clay					
		NATURAL Sandy SILT Brown, firm, moist					
5			■		8.4	109.1	
		Silty (fine to medium grained) SAND Brown, medium dense, moist					
10		Trench completed at depth of 10'	■		7.3	107.7	
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-8

Boring Location: 14624 & 14700 E Nelson, Industry	
Date of Drilling: 10/17/15	Groundwater Depth: None Encountered
Drilling Method: Backhoe	
Hammer Weight:	Drop:
Surface Elevation: Not Measured	

Depth (feet)	Lith-ology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft to firm, moist					
		NATURAL Sandy SILT Brown, firm, moist			6.0	108.7	
5		Trench completed at depth of 5'					
10							
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-9

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15 | Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight: | Drop:

Surface Elevation: Not Measured

Depth (feet)	Lithology	Material Description	Samples: Type	Samples: Blow Counts	Laboratory: Moisture	Laboratory: Dry Density	Laboratory: % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft to firm, moist	■		7.2	8-7	
		NATURAL Sandy SILT Brown, firm, damp to moist	▽				
5		SAND (fine to medium grained) Brown, medium dense, moist	■		7.8	106.5	
		Clayey SILT Brown, firm, moist	■		14.4	99.4	
		Sandy SILT Brown, firm, moist					
15		Trench completed at depth of 15'	■		8.9	102.9	
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Executive Development
18473-15

Log of Trench T-10

Boring Location: 14624 & 14700 E Nelson, Industry

Date of Drilling: 10/17/15 | Groundwater Depth: None Encountered

Drilling Method: Backhoe

Hammer Weight: | Drop:

Surface Elevation: Not Measured

Depth (feet)	Lith-ology	Material Description	Samples Type	Samples Blow Counts	Laboratory Moisture	Laboratory Dry Density	Laboratory % Passing 200 Sieve
0		FILL Sandy SILT Brown, soft, damp; with gravel and some clay					
		NATURAL Sandy SILT Brown, firm, moist	■		5.3	110.3	
5		Silty (fine to medium grained) SAND Brown, medium dense, damp; slightly silty	■		1.4	105.0	
10		Clayey SILT Brown, frim, moist					
		Trench completed at depth of 10'					
15							
20							
25							
30							
35							

GWT not encountered

SuperLog CivilTech Software, USA www.civiltech.com File: C:\Superlog4\PROJECT\1847315-2.log Date: 10/27/2015

NorCal Engineering

Appendix B

TABLE I
MAXIMUM DENSITY TESTS

Sample	Classification	Optimum Moisture	Maximum Dry Density (lbs./cu.ft.)
T-2 @ 2'	Sandy SILT	12.0	121.0
T-9 @ 2'	Sandy SILT	12.5	119.0

TABLE II
EXPANSION INDEX TESTS

Soil Type	Classification	Expansion Index
T-2 @ 2'	Sandy SILT	36
T-9 @ 2'	Sandy SILT	43

TABLE III
ATTERBERG LIMITS

Sample	Liquid Limit	Plastic Limit	Plasticity Index
B-1 @ 5'	23	20	3
B-1 @ 10'	29	21	8
B-1 @ 20'	31	21	10
B-1 @ 30'	35	22	13

TABLE IV
CORROSION TESTS

Sample	pH	Electrical Resistivity (ohm-cm)	Sulfate (%)	Chloride (ppm)
T-2 @ 2'	6.9	2,233	0.005	225
T-9 @ 2'	6.8	2,450	0.005	237

ND denotes not detected
% by weight
ppm – mg/kg

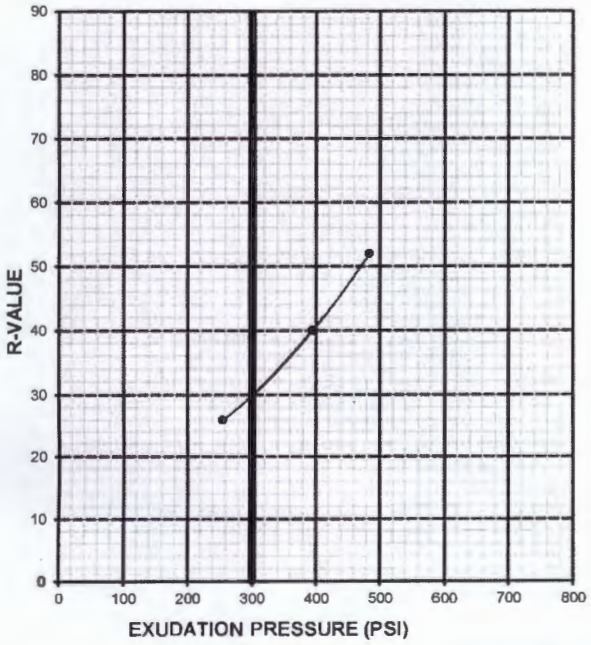
GMU GEOTECHNICAL, INC.

R-VALUE TEST RESULTS

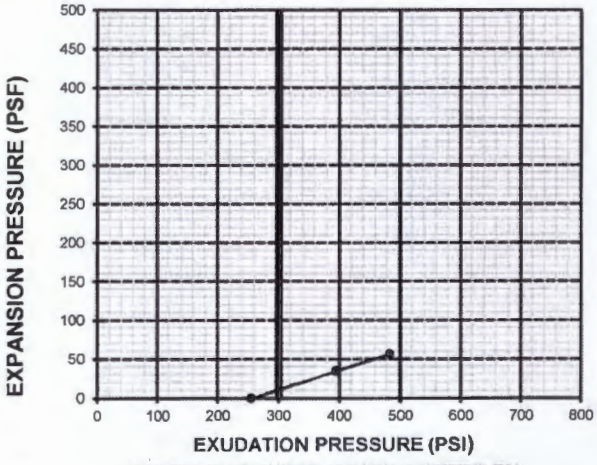
PROJECT NAME:	Norcal (Executive Development LLC)	PROJECT NUMBER:	L-151002
SAMPLE LOCATION:	14624 & 14700 E. Nelson Ave, City of Industry. CA	SAMPLE NUMBER:	T 8 @ 2'
SAMPLE DESCRIPTION:	Sandy, Silty Clay (CL)	TECHNICIAN:	JV
		DATE TESTED	10/28/2015

TEST SPECIMEN	A	B	C
MOISTURE AT COMPACTION %	10.4	11.3	12.3
WEIGHT OF SAMPLE, grams	1144	1145	1143
HEIGHT OF SAMPLE, Inches	2.53	2.55	2.58
DRY DENSITY, pcf	124.1	122.3	119.5
COMPACTOR AIR PRESSURE, psi	300	290	160
EXUDATION PRESSURE, psi	483	394	255
EXPANSION, Inches x 10exp-4	13	8	0
STABILITY Ph 2,000 lbs (160 psi)	58	76	99
TURNS DISPLACEMENT	4.07	4.16	4.73
R-VALUE UNCORRECTED	52	40	25
R-VALUE CORRECTED	52	40	26
EXPANSION PRESSURE (psf)	56.2	34.6	0.0

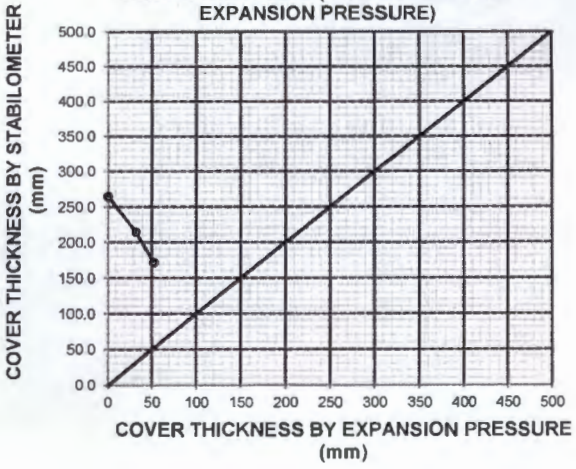
R-VALUE VS. EXUDATION PRESSURE



EXPANSION PRESSURE VS. EXUDATION PRESSURE



COVER THICKNESS (STABILOMETER BY EXPANSION PRESSURE)

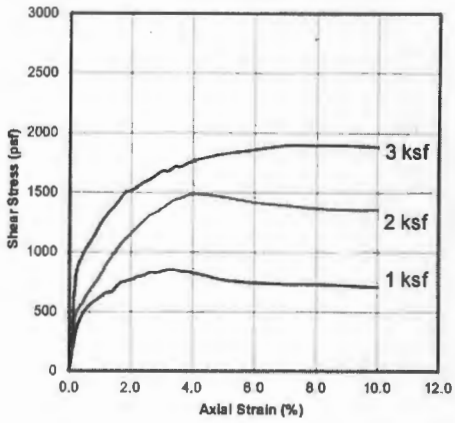


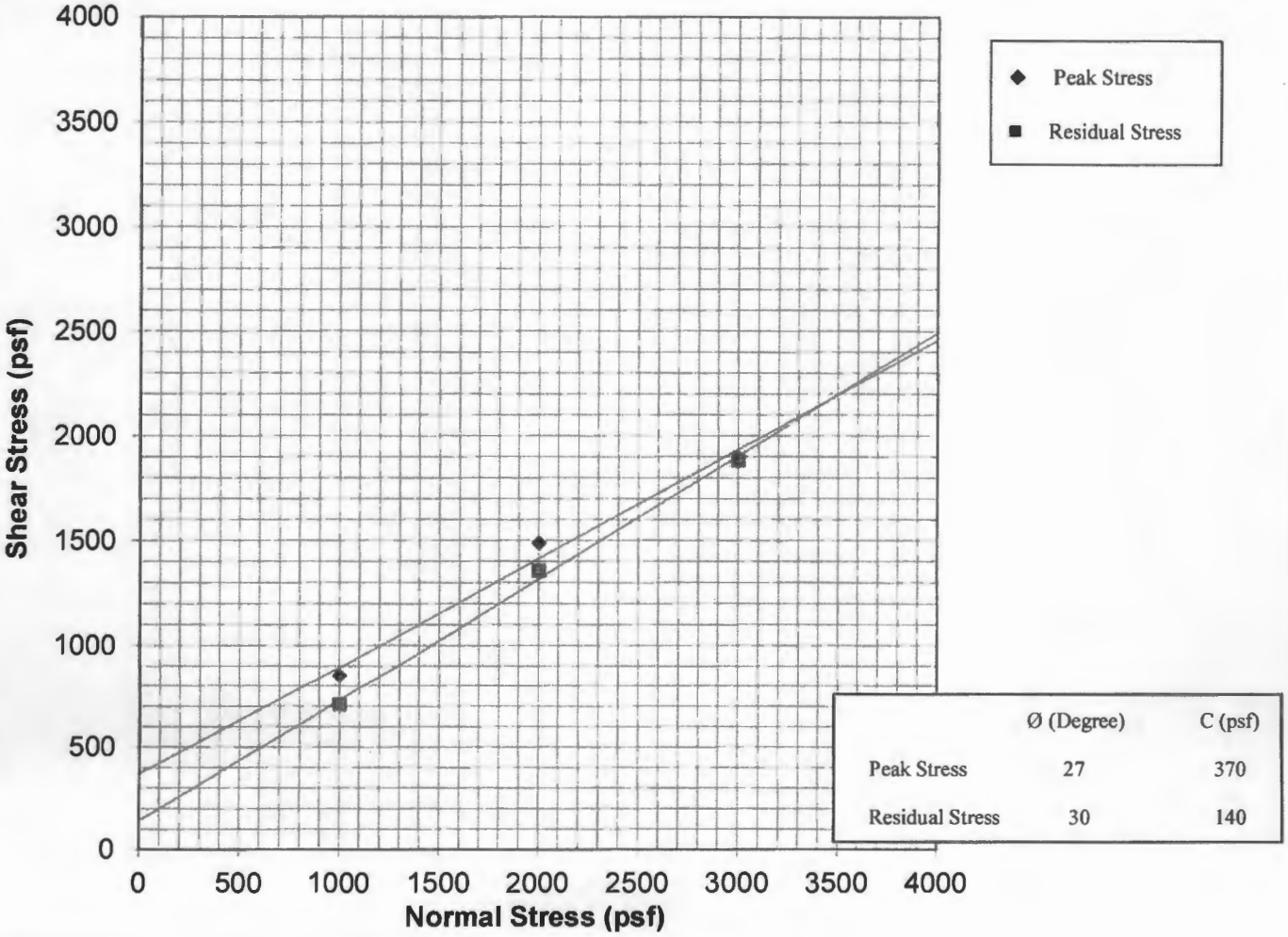
R-VALUE AT EQUILIBRIUM:	30

R-VALUE BY EXUDATION PRESSURE:	N.A.
R-VALUE BY EXPANSION PRESSURE:	30
EXPANSION PRESSURE AT 300 PSI EXUDATION:	10
TRAFFIC INDEX (Assumed):	5.5
GRAVEL FACTOR (Assumed):	1.5
UNIT MASS OF COVER MATERIAL, kg/m^3 (Assumed):	2100.0

Sample No.	T2@2'
Sample Type:	Undisturbed/Saturated
Soil Description:	Silty Sand w/ Some Clay

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	852	1488	1896
Displacement	(in)	0.080	0.100	0.175
Residual Stress	(psf)	708	1356	1884
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	109.6	109.6	109.6
In Situ Water Content	(%)	7.3	7.3	7.3
Saturated Water Content	(%)	19.9	19.9	19.9
Strain Rate	(in/min)	0.020	0.020	0.020





	Ø (Degree)	C (psf)
Peak Stress	27	370
Residual Stress	30	140

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SOILS AND GEOTECHNICAL CONSULTANTS

Executive Development

PROJECT NUMBER: 18473-15 DATE: 10/30/2015

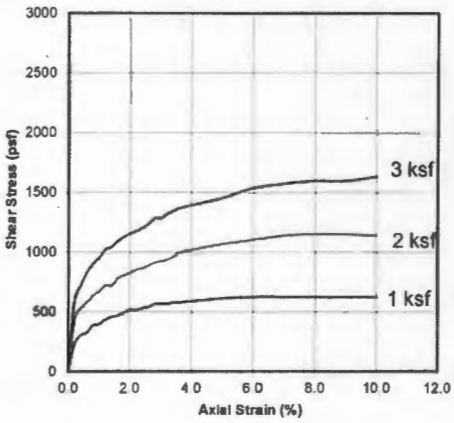
DIRECT SHEAR TEST

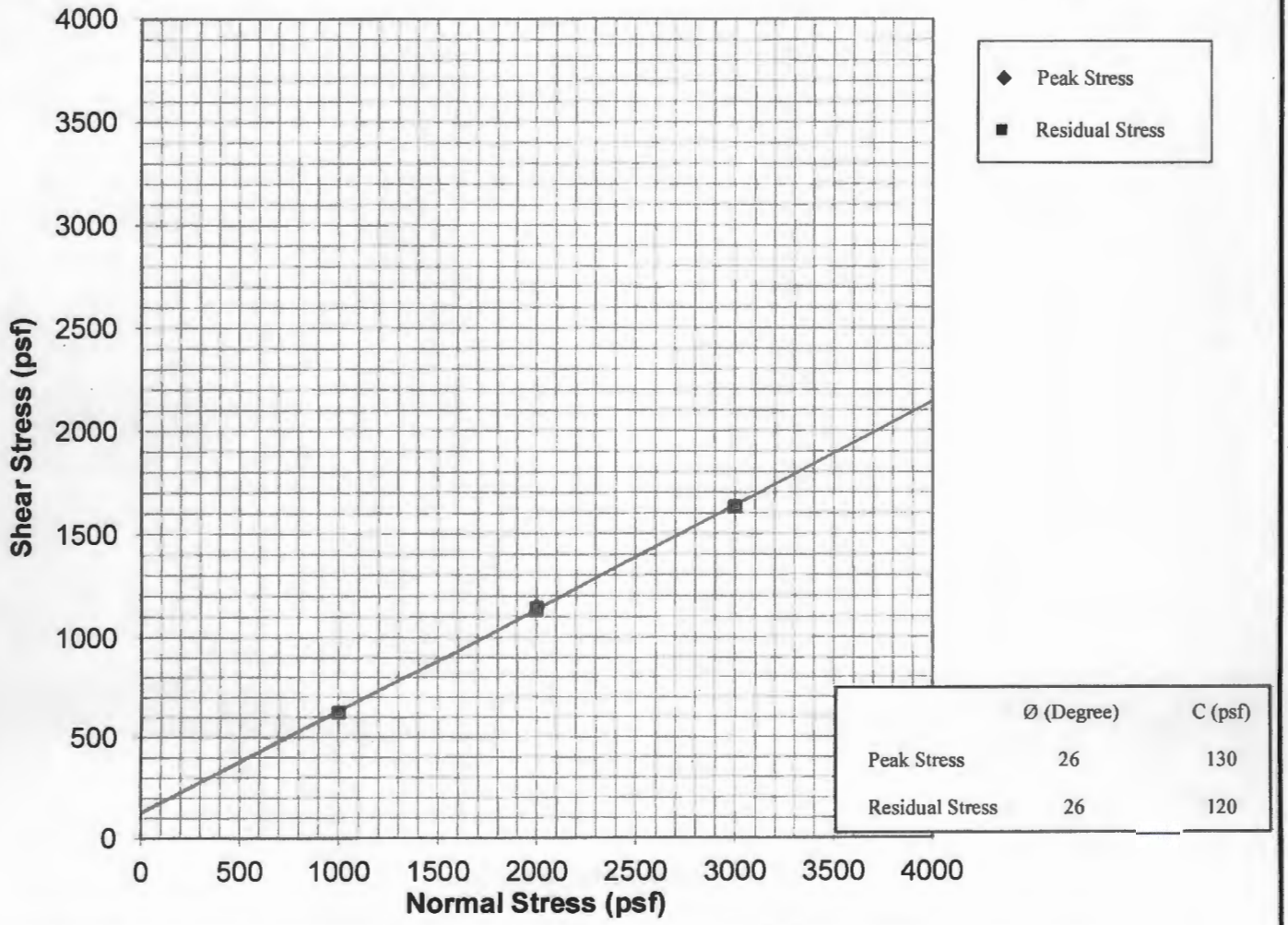
ASTM D3080

Plate A

Sample No.	T9@2'	
Sample Type:	Undisturbed/Saturated	
Soil Description:	Silty Clay w/ Some Sand	

		1	2	3
Normal Stress	(psf)	1000	2000	3000
Peak Stress	(psf)	624	1152	1632
Displacement	(in.)	0.150	0.200	0.250
Residual Stress	(psf)	624	1140	1632
Displacement	(in.)	0.250	0.250	0.250
In Situ Dry Density	(pcf)	108.7	108.7	108.7
In Situ Water Content	(%)	7.2	7.2	7.2
Saturated Water Content	(%)	20.3	20.3	20.3
Strain Rate	(in/min)	0.020	0.020	0.020





	Ø (Degree)	C (psf)
Peak Stress	26	130
Residual Stress	26	120

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SOILS AND GEOTECHNICAL CONSULTANTS

Executive Development

PROJECT NUMBER: 18473-15 DATE: 10/30/2015

DIRECT SHEAR TEST

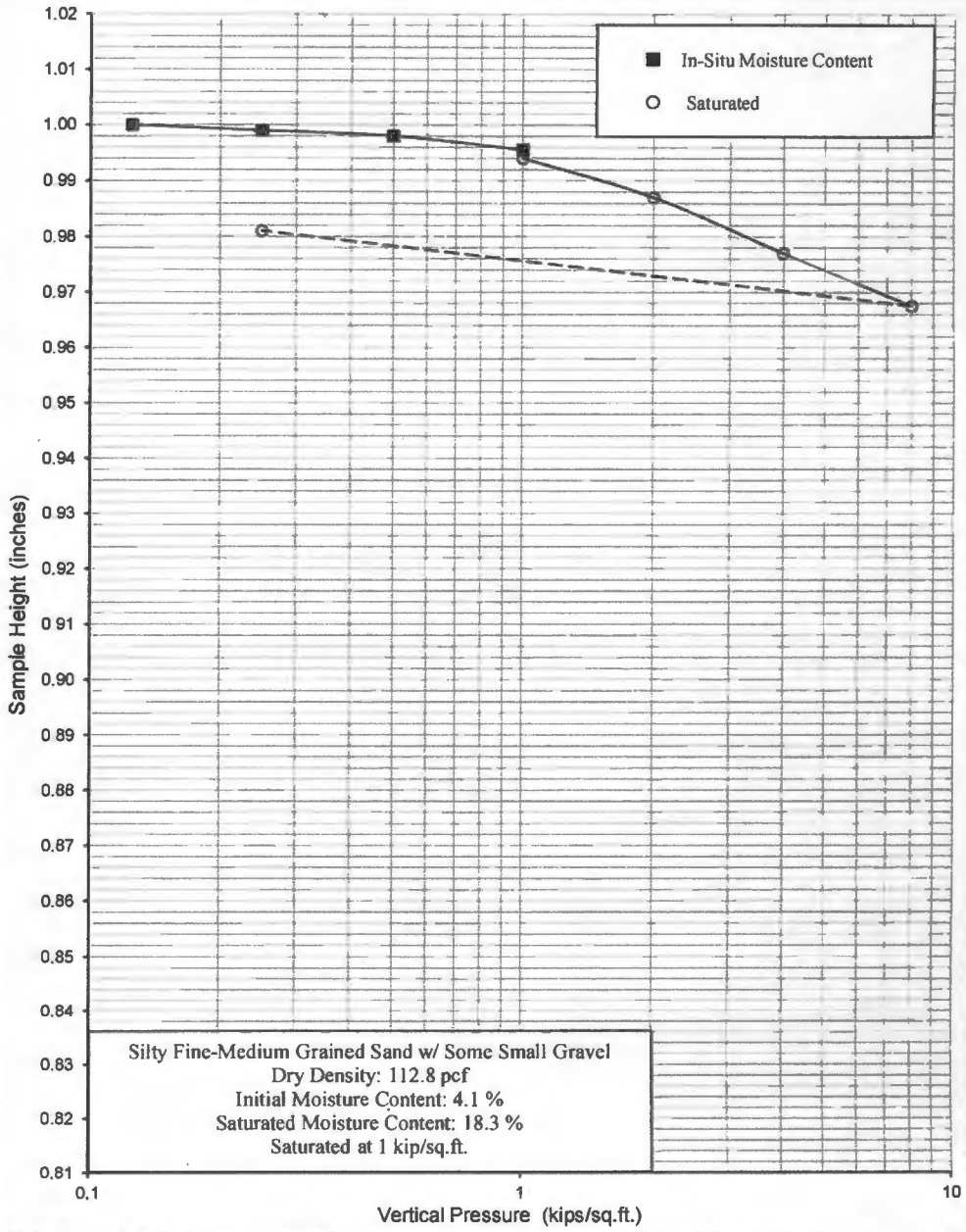
ASTM D3080

Plate B

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	
0.125	1.0000	0.0	
0.25	0.9990	0.1	
0.5	0.9980	0.2	
1	0.9955	0.4	
1	0.9940	0.6	
2	0.9870	1.3	
4	0.9770	2.3	
8	0.9675	3.3	Saturated
0.25	0.9810	1.9	

Date Tested: 10/26/2015
Sample: T2
Depth: 5'

Sample No.	T2	Depth	5'	Date	10/30/2015



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SOILS AND GEOTECHNICAL CONSULTANTS

Executive Development

PROJECT NUMBER: 18473-15 DATE: 10/30/2015

CONSOLIDATION TEST

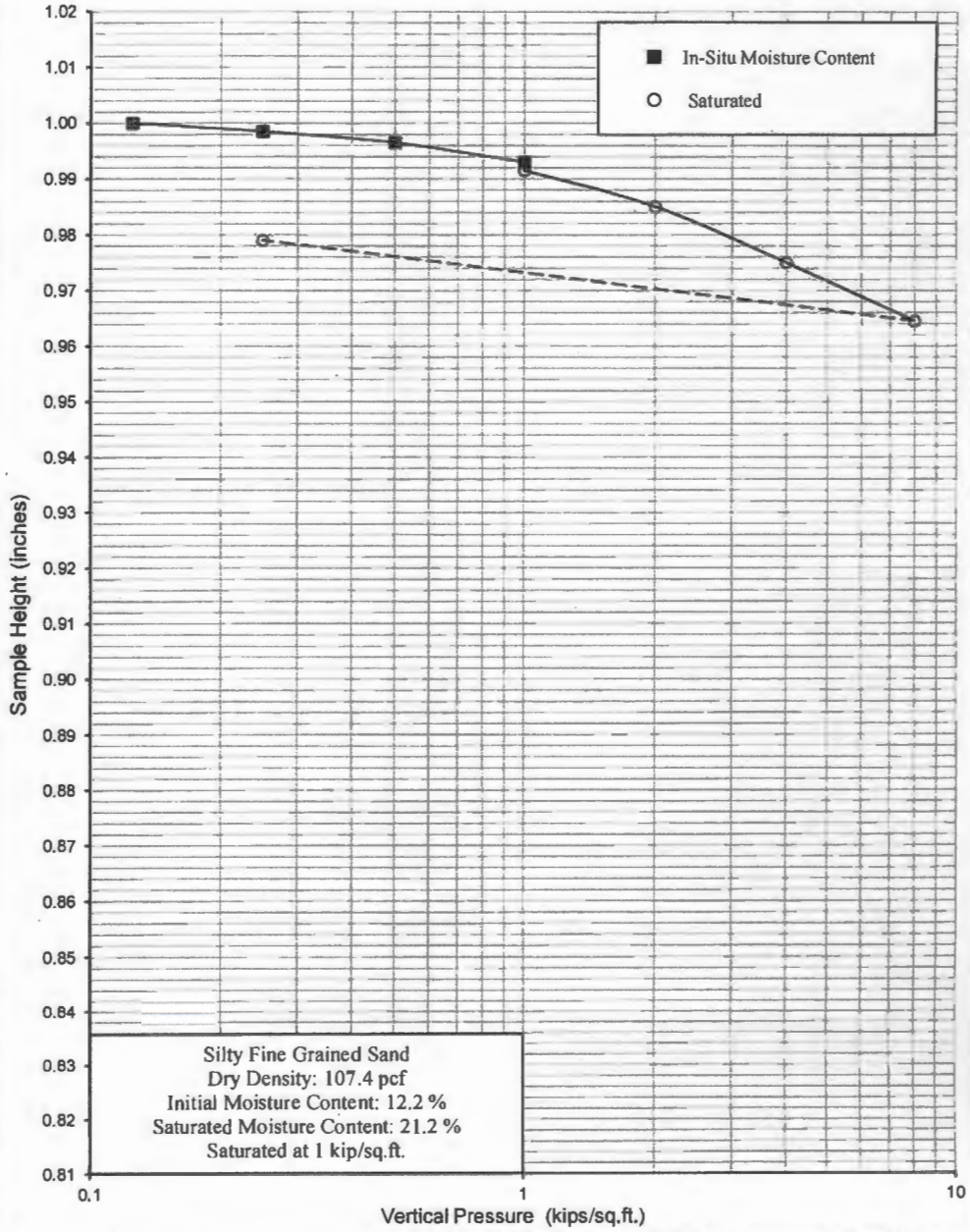
ASTM D2435

Plate C

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)	
0.125	1.0000	0.0	
0.25	0.9985	0.2	
0.5	0.9965	0.4	
1	0.9930	0.7	
1	0.9915	0.8	
2	0.9850	1.5	
4	0.9750	2.5	
8	0.9645	3.6	Saturated
0.25	0.9790	2.1	

Sample No.	T2	Depth	10'	Date	10/30/2015

Date Tested: 10/26/2015
Sample: T2
Depth: 10'



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SOILS AND GEOTECHNICAL CONSULTANTS

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PROJECT NUMBER: 18473-15 DATE: 10/30/2015

CONSOLIDATION TEST

ASTM D2435

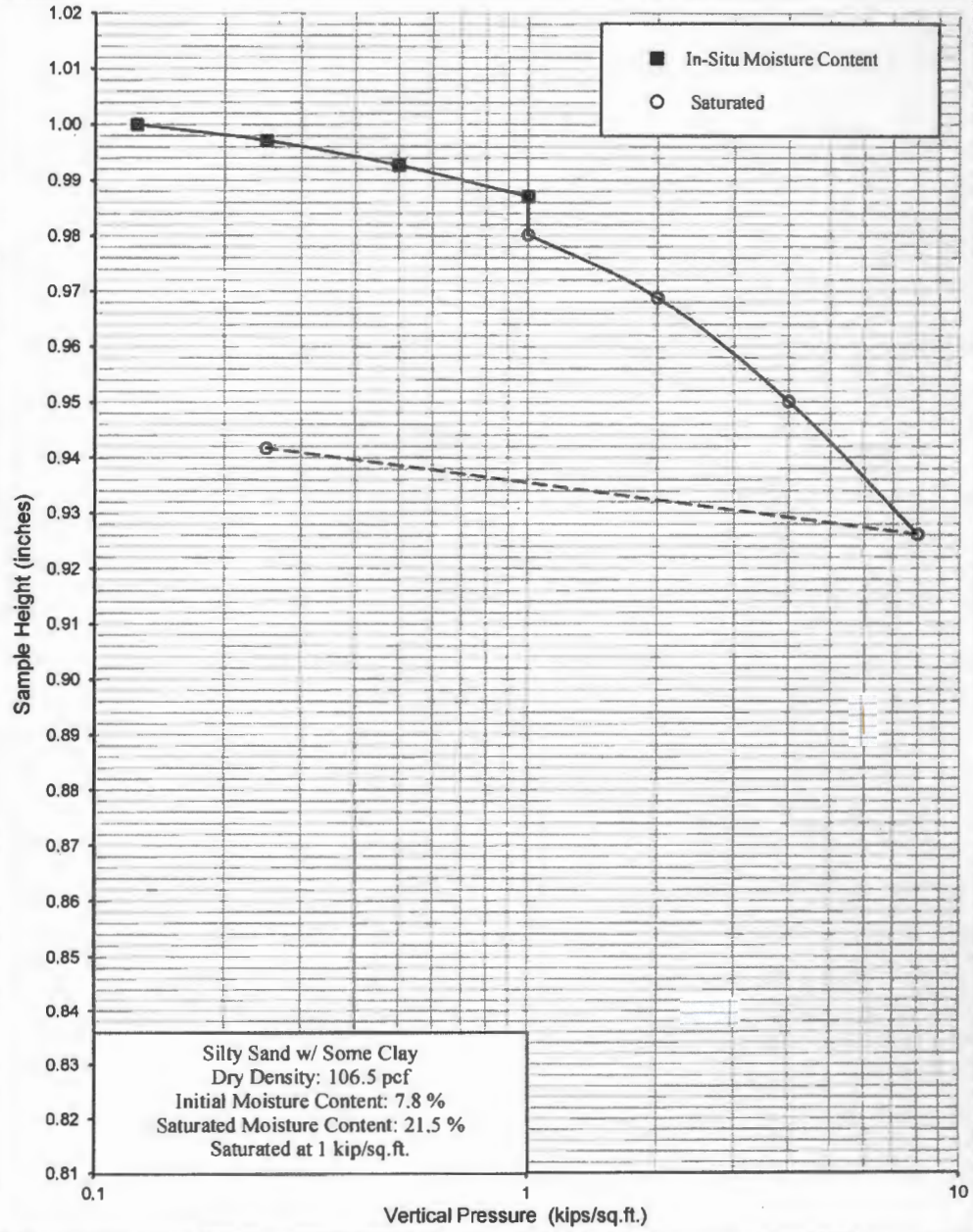
Plate D

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)
0.125	1.0000	0.0
0.25	0.9971	0.3
0.5	0.9927	0.7
1	0.9871	1.3
1	0.9802	2.0
2	0.9688	3.1
4	0.9501	5.0
8	0.9261	7.4
0.25	0.9417	5.8

Saturated

Date Tested: 10/26/2015
Sample: T9
Depth: 5'

Sample No.	T9	Depth	5'	Date	10/30/2015



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SOILS AND GEOTECHNICAL CONSULTANTS

Executive Development

PROJECT NUMBER: 18473-15 DATE: 10/30/2015

CONSOLIDATION TEST

ASTM D2435

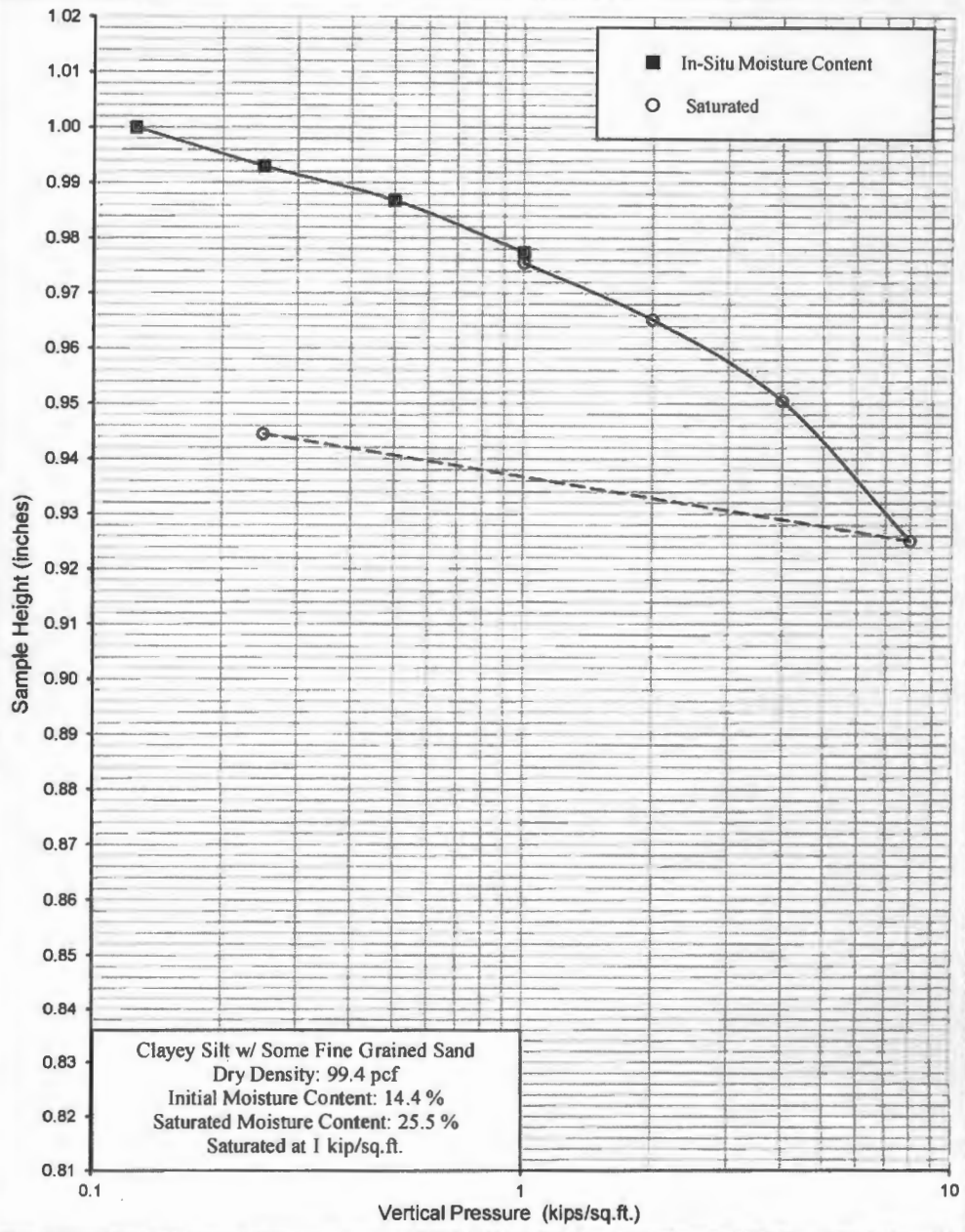
Plate E

Vertical Pressure (kips/sq.ft.)	Sample Height (inches)	Consolidation (percent)
0.125	1.0000	0.0
0.25	0.9930	0.7
0.5	0.9868	1.3
1	0.9774	2.3
1	0.9755	2.5
2	0.9652	3.5
4	0.9505	5.0
8	0.9251	7.5
0.25	0.9445	5.6

Saturated

Sample No.	T9	Depth	10'	Date	10/30/2015

Date Tested: 10/27/2015
Sample: T9
Depth: 10'



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SOILS AND GEOTECHNICAL CONSULTANTS

Executive Development

PROJECT NUMBER: 18473-15 DATE: 10/30/2015

CONSOLIDATION TEST

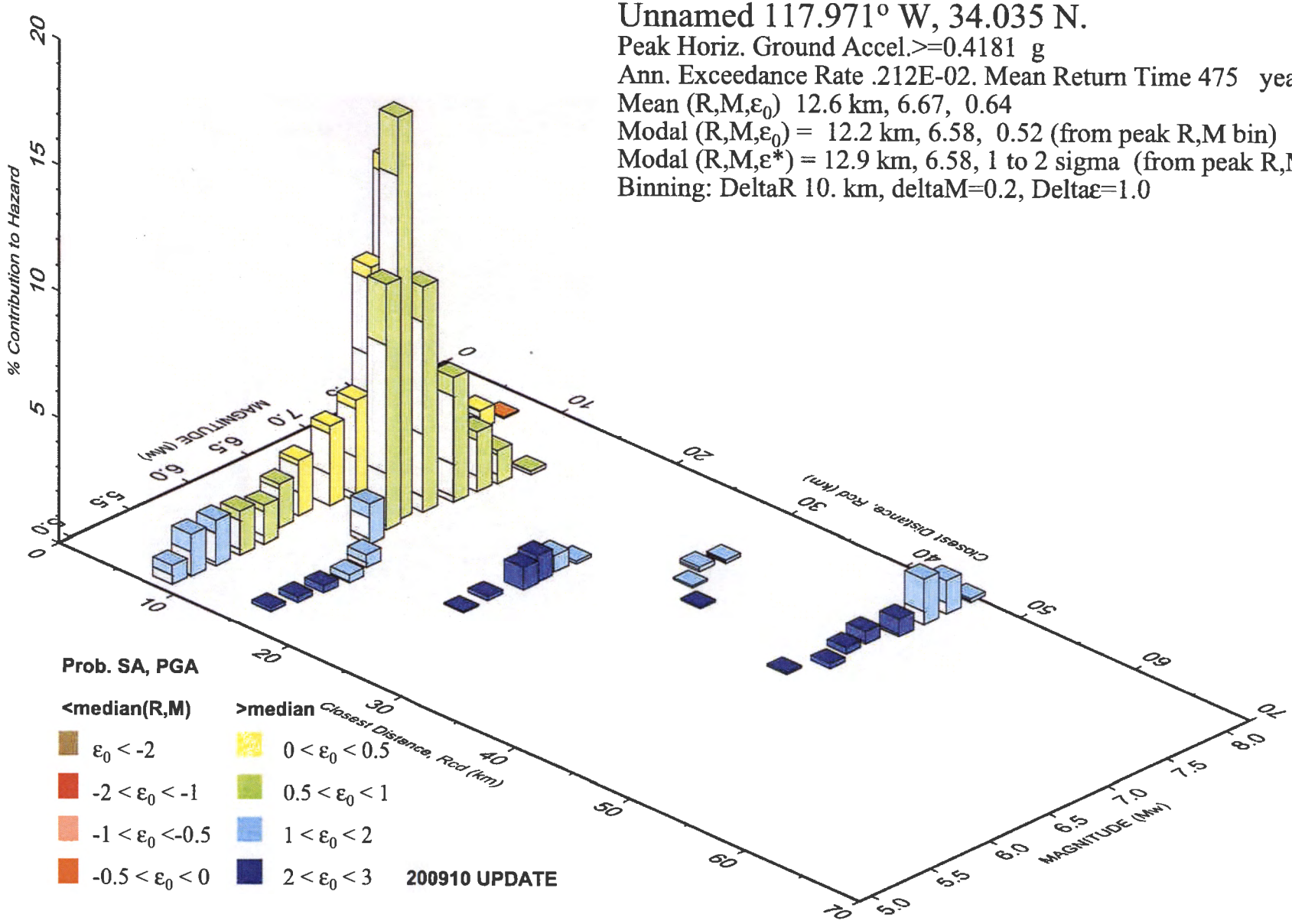
ASTM D2435

Plate F

Appendix C

PSH Deaggregation on NEHRP BC rock
Unnamed 117.971° W, 34.035 N.

Peak Horiz. Ground Accel.>=0.4181 g
Ann. Exceedance Rate .212E-02. Mean Return Time 475 years
Mean (R,M,ε_0) 12.6 km, 6.67, 0.64
Modal (R,M,ε_0) = 12.2 km, 6.58, 0.52 (from peak R,M bin)
Modal (R,M,ε*) = 12.9 km, 6.58, 1 to 2 sigma (from peak R,M,ε bin)
Binning: DeltaR 10. km, deltaM=0.2, Deltaε=1.0



GMT 2015 Oct 26 20:33:03 Distance (R), magnitude (M), epsilon (E0,E) deaggregation for a site on rock with average vs= 760. m/s top 30 m. USGS CGHT PSHA2008 UPDATE Bins with lt 0.05% contrib. omitted

USGS Design Maps Summary Report

User-Specified Input

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 34.035°N, 117.971°W

Site Soil Classification Site Class D – "Stiff Soil"

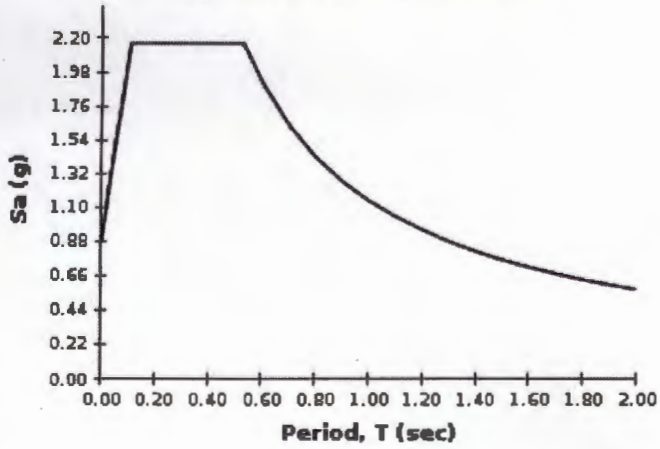
Risk Category I/II/III

USGS-Provided Output

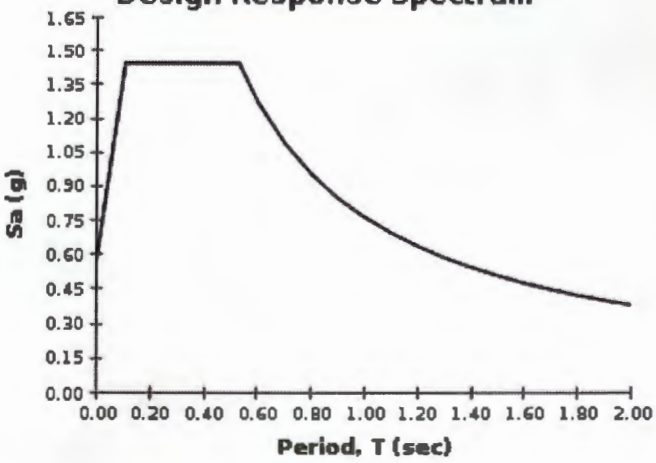
S_S =	2.165 g	S_{MS} =	2.165 g	S_{DS} =	1.443 g
S_1 =	0.762 g	S_{M1} =	1.143 g	S_{D1} =	0.762 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.

MCE_R Response Spectrum



Design Response Spectrum



For PGA_M, T_L, C_{RS}, and C_{R1} values, please view the detailed report.

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter

USGS Design Maps Detailed Report

ASCE 7-10 Standard (34.035°N, 117.971°W)

Site Class D – "Stiff Soil", Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_S) and 1.3 (to obtain S_1). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From Figure 22-1 [1] $S_S = 2.165$ g

From Figure 22-2 [2] $S_1 = 0.762$ g

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Chapter 20.

Table 20.3–1 Site Classification

Site Class	$\bar{v}_s$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
	Any profile with more than 10 ft of soil having the characteristics: • Plasticity index $PI > 20$, • Moisture content $w \geq 40\%$, and • Undrained shear strength $\bar{s}_u < 500$ psf		
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 11.4.3 — Site Coefficients and Risk-Targeted Maximum Considered Earthquake (MCE_R) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient F_a

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at Short Period				
	$S_S \leq 0.25$	$S_S = 0.50$	$S_S = 0.75$	$S_S = 1.00$	$S_S \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_S

For Site Class = D and S_S = 2.165 g, F_a = 1.000

Table 11.4-2: Site Coefficient F_v

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at 1-s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_1

For Site Class = D and S_1 = 0.762 g, F_v = 1.500

Equation (11.4-1): $S_{MS} = F_a S_S = 1.000 \times 2.165 = 2.165$ g

Equation (11.4-2): $S_{M1} = F_v S_1 = 1.500 \times 0.762 = 1.143$ g

Section 11.4.4 — Design Spectral Acceleration Parameters

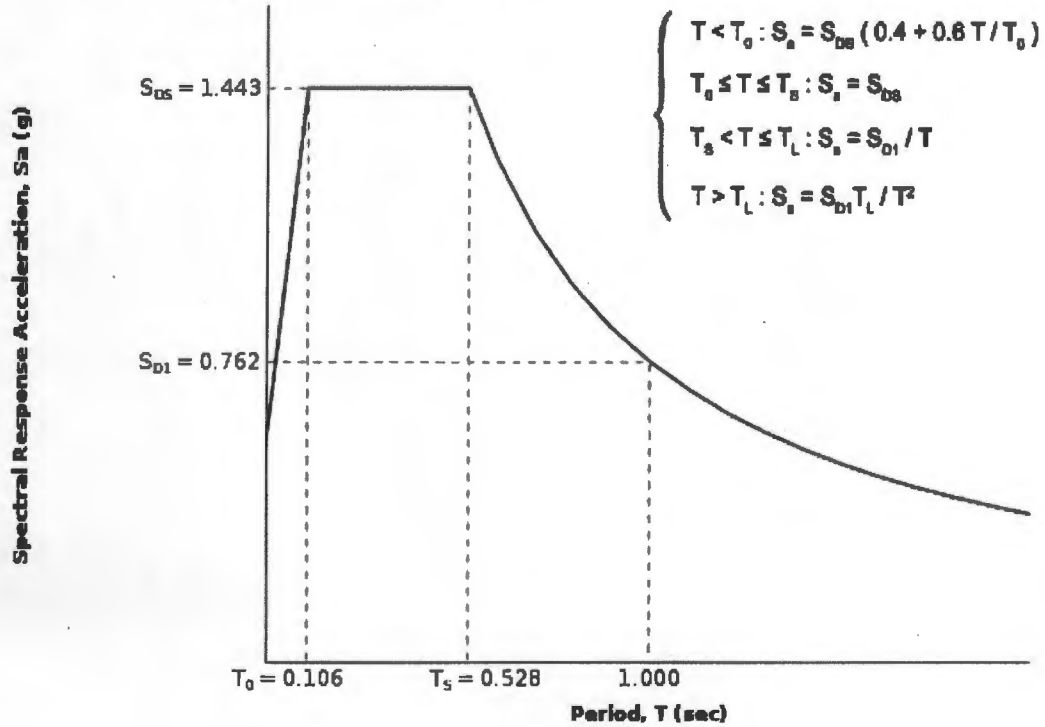
Equation (11.4-3): $S_{DS} = ⅔\ S_{MS} = ⅔ \times 2.165 = 1.443$ g

Equation (11.4-4): $S_{D1} = ⅔\ S_{M1} = ⅔ \times 1.143 = 0.762$ g

Section 11.4.5 — Design Response Spectrum

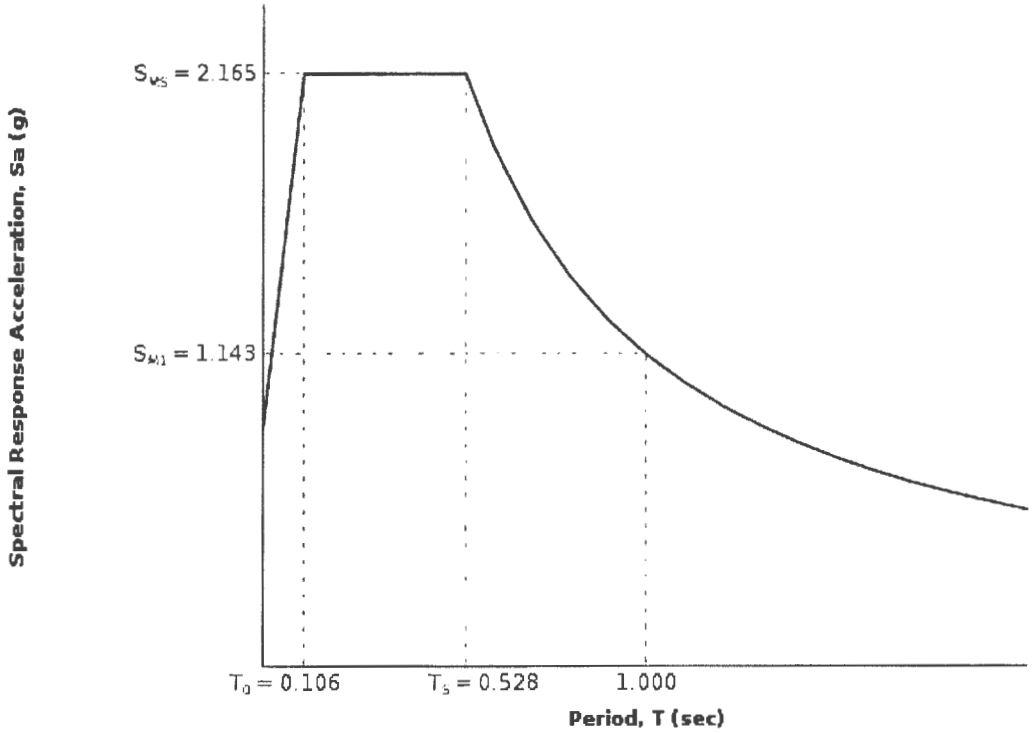
From Figure 22-12 [3] $T_L = 8$ seconds

Figure 11.4-1: Design Response Spectrum



Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE_R) Response Spectrum

The MCE_R Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From Figure 22-7 [4] PGA = 0.783

Equation (11.8-1): $PGA_M = F_{PGA}PGA = 1.000 \times 0.783 = 0.783$ g

Table 11.8-1: Site Coefficient F_{PGA}

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of PGA

For Site Class = D and PGA = 0.783 g, F_{PGA} = 1.000

Section 21.2.1.1 — Method 1 (from Chapter 21 - Site-Specific Ground Motion Procedures for Seismic Design)

From Figure 22-17 [5] C_{RS} = 0.983

From Figure 22-18 [6] C_{R1} = 1.004

Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \le S_{DS} < 0.33g$	B	B	C
$0.33g \le S_{DS} < 0.50g$	C	C	D
$0.50g \le S_{DS}$	D	D	D

For Risk Category = I and S_{DS} = 1.443 g, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \le S_{D1} < 0.133g$	B	B	C
$0.133g \le S_{D1} < 0.20g$	C	C	D
$0.20g \le S_{D1}$	D	D	D

For Risk Category = I and S_{D1} = 0.762 g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category ≡ "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = E

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

1. *Figure 22-1*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
2. *Figure 22-2*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf
3. *Figure 22-12*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
4. *Figure 22-7*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf
5. *Figure 22-17*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
6. *Figure 22-18*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf

SITE LOCATION: _____

GEOTECHNICAL REPORT: _____

GEOLOGY REPORT: _____

DEPTH TO WATER TABLE = 10'

EARTHQUAKE MAGNITUDE = 6.6

PEAK GROUND ACCELERATION = 0.78g

DEPTH BELOW FINAL GRADE (FEET)	MOIST DENSITY (PCF)	σ_o TOTAL STRESS (PSF)	$\bar{\sigma}_o$ EFFECTIVE STRESS (PSF)	$\sigma_o/\bar{\sigma}_o$ (-)	r_d (-)	① $\tau_h/\bar{\sigma}_o$ (-)	N VALUE (BLOWS/FT)	RELATIVE DENSITY (%)	C_N (-)	C_E (-)	C_B (-)	C_R (-)	C_S (-)	$(N_1)_{60}$ (BLOWS/FT)	FINES (%)	CRR M=7.5	MSF (-)	CRR M=6.6	LIQ. F.S.
5	115	575	Same	1.00	0.99	0.51	20	>90	1.6	1.00	1.05	0.70	1.20	>28	51	>0.50	1.6	>0.80	>1.6
10	120	1175	↓	↓	0.96	0.49	16	75	1.3			0.75		20	63	>0.40		>0.64	>1.3
15		1775	1463	1.21	0.92	0.57	13	65	1.05			0.85		14.5	23	0.22		0.35	0.6
20		2375	1751	1.36	0.87	0.60	19	70	0.92			0.90		20	68	>0.40		>0.64	>1.1
25		2975	2039	1.46	0.80	0.60	20	70	0.85			0.95		20	53	>0.40		>0.64	>1.1
30		3575	2327	1.54	0.74	0.58	20	65	0.79			1.00		20	77	>0.40		>0.64	>1.1 NL
35		4175	2615	1.60	0.68	0.55	31	75	0.74					29	56	>0.50		>0.80	>1.5
40		4775	2903	1.64	0.64	0.54	32	70	0.70					28	8	0.40		0.64	1.2
45		5375	3191	1.68	0.61	0.52	45	80	0.65					37	6	>0.50		>0.80	>1.5
50	↓	5975	3479	1.72	0.58	0.51	38	70	0.62	↓	↓	↓	↓	29	35	>0.50	↓	>0.80	>1.6

① INDUCED CYCLIC STRESS RATIO = $\tau_{ave}/\bar{\sigma}_o = 0.65 \cdot \frac{a_{max}}{g} \cdot \frac{\sigma_o}{\bar{\sigma}_o} \cdot r_d$

- C_E = Corr. - Energy Ratio = Energy Ratio / 60%
- C_B = Corr. - Borehole Dia. = 1.15 for 8" dia. borehole
- C_R = Corr. - Rod Length
- C_S = Corr. - Sampling Method

Actual Energy Ratio = 0.67-1.17 (Safety Hammer)
= 0.50-1.00 (Donut Hammer)

Sampling Method = 1.0 Standard sampler
= 1.2 ~~Sampler w/o liners~~

NorCal Engineering
SOILS AND GEOTECHNICAL CONSULTANTS

PROJECT | DATE

EVALUATION OF LIQUEFACTION POTENTIAL

SEISMIC SETTLEMENT EVALUATION ⇒ GWT @ 10'

EQ Magnitude = 6.6, Hor. Ground Acceleration = 0.78g

Depth (ft)	N_{160} (Blows/ft)	Fines (%)	EQ CSR	M_{design} / $M_{7.5}$	Design CSR	Vert. Strain	Seismic Settle	Liquefaction F.S.
15'	14.5 (18.5)	23 (5)	0.57	1.6	0.36	1.7%	1.0"	0.6
20'	20 (30)	68 (5)	0.60		0.38	0.5%	0.3"	>1.1
25'	20 (30)	53 (5)	0.60		0.38	0.5%	0.3"	>1.1
30'	20 (30)	77 (5)	0.58		0.36	0.2%	0.1" ×	>1.1 NL

$\Sigma = 1.7"$

NL – Non liquefiable soil layers with LL > 32%, PI > 12%

Say $\Delta_{EQ} \leq 1\frac{3}{4}"$

NorCal Engineering
SOILS AND GEOTECHNICAL CONSULTANTS

DATE

Appendix C: Greenhouse Gas

Greenhouse Gas Emissions – CalEEMod Output Files

Nelson Avenue Business Park

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	231.21	1000sqft	8.63	231,210.00	0
Parking Lot	319.00	Space	2.87	127,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	9			**Operational Year**	2017
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 - Acreage per Project Applicant.

Construction Phase - Adjusted per Project Applicant.

Off-road Equipment -

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment per Project Applicant.

Off-road Equipment - Equipment list per Project Applicant.

Grading - Acreage per Project Applicant.

Architectural Coating - Per SCAQMD Rule 1113.

Vehicle Trips - Adjusted per Traffic Report.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Vechicle Emission Factors - Per Traffic Impact Analysis.

Energy Use - Per Project Applicant.

Water And Wastewater - Per Project Applicant.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403. Tier 3 mitigation for grading equipment.

Mobile Land Use Mitigation -

Water Mitigation -

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tblVehicleEF	LDA	0.13	0.09
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tblVehicleEF	LDT1	0.39	0.24
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.17	0.12
tblVehicleEF	LDT2	0.26	0.17
tblVehicleEF	LDT2	2.1980e-003	2.3520e-003
tblVehicleEF	LDT2	2.9550e-003	4.0740e-003
tblVehicleEF	LDT2	2.0260e-003	2.1760e-003
tblVehicleEF	LDT2	2.7290e-003	3.7730e-003
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.16	0.13
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.51	0.42
tblVehicleEF	LDT2	0.21	0.14
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.15	0.11
tblVehicleEF	LDT2	0.24	0.16
tblVehicleEF	LDT2	2.1980e-003	2.3520e-003
tblVehicleEF	LDT2	2.9550e-003	4.0740e-003
tblVehicleEF	LDT2	2.0260e-003	2.1760e-003
tblVehicleEF	LDT2	2.7290e-003	3.7730e-003
tblVehicleEF	LDT2	0.11	0.09
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.47	0.39
tblVehicleEF	LDT2	0.18	0.12
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LDT2	0.17	0.12
tblVehicleEF	LDT2	0.27	0.17
tblVehicleEF	LDT2	2.1980e-003	2.3520e-003
tblVehicleEF	LDT2	2.9550e-003	4.0740e-003
tblVehicleEF	LDT2	2.0260e-003	2.1760e-003
tblVehicleEF	LDT2	2.7290e-003	3.7730e-003
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.18	0.14
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.60	0.50
tblVehicleEF	LDT2	0.22	0.14
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.08	0.70
tblVehicleEF	LHD1	1.59	1.35
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	3.0500e-003	2.4030e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.8750e-003	1.6570e-003

tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.42	0.36
tblVehicleEF	LHD1	0.51	0.36
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.00	0.64
tblVehicleEF	LHD1	1.53	1.30
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	4.5550e-003	3.5700e-003
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.6940e-003	2.3200e-003
tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.40	0.35
tblVehicleEF	LHD1	0.45	0.32
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.06	0.68
tblVehicleEF	LHD1	1.60	1.36
tblVehicleEF	LHD1	3.6100e-004	3.5000e-004
tblVehicleEF	LHD1	0.04	0.04

tblVehicleEF	LHD1	7.1950e-003	5.3340e-003
tblVehicleEF	LHD1	1.4040e-003	8.4800e-004
tblVehicleEF	LHD1	3.3200e-004	3.2200e-004
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	6.6230e-003	4.9100e-003
tblVehicleEF	LHD1	1.2860e-003	7.7900e-004
tblVehicleEF	LHD1	3.2950e-003	2.4790e-003
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	1.8700e-003	1.6210e-003
tblVehicleEF	LHD1	0.12	0.07
tblVehicleEF	LHD1	0.46	0.39
tblVehicleEF	LHD1	0.53	0.37
tblVehicleEF	LHD2	6.2730e-003	0.00
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.76	1.12
tblVehicleEF	LHD2	1.11	0.92
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.0000e-003	1.5270e-003

tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.2260e-003	1.0550e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.31	0.23
tblVehicleEF	LHD2	0.34	0.23
tblVehicleEF	LHD2	6.2730e-003	0.00
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.65	1.06
tblVehicleEF	LHD2	1.07	0.88
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.9860e-003	2.2710e-003
tblVehicleEF	LHD2	0.06	0.05
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.7650e-003	1.4800e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.29	0.22
tblVehicleEF	LHD2	0.30	0.21
tblVehicleEF	LHD2	6.2730e-003	0.00

tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	1.73	1.10
tblVehicleEF	LHD2	1.12	0.93
tblVehicleEF	LHD2	9.0700e-004	8.7700e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	9.6980e-003	9.6990e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.8700e-004	5.2500e-004
tblVehicleEF	LHD2	8.3400e-004	8.0600e-004
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	2.4240e-003	2.4250e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0700e-004	4.7900e-004
tblVehicleEF	LHD2	2.1480e-003	1.5700e-003
tblVehicleEF	LHD2	0.06	0.05
tblVehicleEF	LHD2	0.03	0.02
tblVehicleEF	LHD2	1.2110e-003	1.0270e-003
tblVehicleEF	LHD2	0.10	0.07
tblVehicleEF	LHD2	0.33	0.26
tblVehicleEF	LHD2	0.34	0.24
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.16	1.14
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	0.93	0.91
tblVehicleEF	MCY	0.44	0.41
tblVehicleEF	MCY	0.55	0.53
tblVehicleEF	MCY	2.40	2.34
tblVehicleEF	MCY	1.46	1.28
tblVehicleEF	MCY	2.10	2.06
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.01	1.00
tblVehicleEF	MCY	0.29	0.29
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004
tblVehicleEF	MCY	1.48	1.46
tblVehicleEF	MCY	0.49	0.46
tblVehicleEF	MCY	0.91	0.89
tblVehicleEF	MCY	2.33	2.28
tblVehicleEF	MCY	1.35	1.18
tblVehicleEF	MCY	1.84	1.81
tblVehicleEF	MCY	3.6850e-003	0.00
tblVehicleEF	MCY	1.13	1.12
tblVehicleEF	MCY	0.31	0.31
tblVehicleEF	MCY	0.04	0.04
tblVehicleEF	MCY	4.3900e-004	3.3100e-004
tblVehicleEF	MCY	1.4570e-003	1.0640e-003
tblVehicleEF	MCY	3.6000e-004	2.7700e-004
tblVehicleEF	MCY	1.1690e-003	8.7900e-004

tblVehicleEF	MCY	1.02	1.00
tblVehicleEF	MCY	0.57	0.52
tblVehicleEF	MCY	0.52	0.51
tblVehicleEF	MCY	2.42	2.36
tblVehicleEF	MCY	1.72	1.53
tblVehicleEF	MCY	2.16	2.11
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.30	0.20
tblVehicleEF	MDV	0.46	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.21	0.19
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.65	0.58
tblVehicleEF	MDV	0.42	0.27
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.26	0.17
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.22	0.20

tblVehicleEF	MDV	0.13	0.13
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.61	0.54
tblVehicleEF	MDV	0.36	0.23
tblVehicleEF	MDV	0.13	0.04
tblVehicleEF	MDV	0.29	0.19
tblVehicleEF	MDV	0.47	0.30
tblVehicleEF	MDV	2.5860e-003	2.5090e-003
tblVehicleEF	MDV	3.4540e-003	4.1210e-003
tblVehicleEF	MDV	2.3810e-003	2.3180e-003
tblVehicleEF	MDV	3.1850e-003	3.8130e-003
tblVehicleEF	MDV	0.09	0.08
tblVehicleEF	MDV	0.23	0.20
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.07	0.05
tblVehicleEF	MDV	0.76	0.67
tblVehicleEF	MDV	0.43	0.28
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.38	0.96
tblVehicleEF	MH	0.85	0.69
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004

tblVehicleEF	MH	1.20	0.78
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.50	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.08	1.32
tblVehicleEF	MH	0.51	0.36
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.26	0.88
tblVehicleEF	MH	0.82	0.67
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.71	1.11
tblVehicleEF	MH	0.08	0.05
tblVehicleEF	MH	0.69	0.49
tblVehicleEF	MH	0.14	0.08
tblVehicleEF	MH	2.03	1.29
tblVehicleEF	MH	0.43	0.31
tblVehicleEF	MH	1.6630e-003	0.00
tblVehicleEF	MH	1.35	0.94
tblVehicleEF	MH	0.86	0.70
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	8.4510e-003	8.4550e-003

tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.3820e-003	7.9000e-004
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1130e-003	2.1140e-003
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	1.2190e-003	7.0200e-004
tblVehicleEF	MH	1.40	0.87
tblVehicleEF	MH	0.11	0.06
tblVehicleEF	MH	0.53	0.36
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	2.20	1.40
tblVehicleEF	MH	0.52	0.38
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.92	4.57
tblVehicleEF	MHD	2.78	1.80
tblVehicleEF	MHD	2.00	1.45
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	2.7820e-003	2.0830e-003
tblVehicleEF	MHD	0.11	0.09

tblVehicleEF	MHD	0.16	0.17
tblVehicleEF	MHD	1.7390e-003	1.4420e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.49	0.40
tblVehicleEF	MHD	1.18	0.82
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	6.11	4.72
tblVehicleEF	MHD	2.61	1.69
tblVehicleEF	MHD	1.92	1.39
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	4.1960e-003	3.1190e-003
tblVehicleEF	MHD	0.11	0.09
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	2.5490e-003	2.0500e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.48	0.39
tblVehicleEF	MHD	1.03	0.72
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	5.65	4.37

tblVehicleEF	MHD	2.73	1.76
tblVehicleEF	MHD	2.02	1.46
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.11	0.11
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.07	0.05
tblVehicleEF	MHD	2.5000e-003	1.4430e-003
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	2.7990e-003	2.7980e-003
tblVehicleEF	MHD	0.06	0.05
tblVehicleEF	MHD	2.1670e-003	1.2620e-003
tblVehicleEF	MHD	3.0270e-003	2.1680e-003
tblVehicleEF	MHD	0.13	0.10
tblVehicleEF	MHD	0.17	0.18
tblVehicleEF	MHD	1.7460e-003	1.4190e-003
tblVehicleEF	MHD	0.14	0.11
tblVehicleEF	MHD	0.54	0.44
tblVehicleEF	MHD	1.22	0.85
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.55	4.37
tblVehicleEF	OBUS	3.74	2.41
tblVehicleEF	OBUS	1.38	1.06
tblVehicleEF	OBUS	0.01	9.6540e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004

tblVehicleEF	OBUS	9.6700e-003	8.8810e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.2400e-004	8.5100e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.40	0.48
tblVehicleEF	OBUS	4.9500e-004	4.9100e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.29
tblVehicleEF	OBUS	0.61	0.47
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.73	4.51
tblVehicleEF	OBUS	3.52	2.27
tblVehicleEF	OBUS	1.32	1.02
tblVehicleEF	OBUS	8.8610e-003	8.1380e-003
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	8.1520e-003	7.4870e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	1.3330e-003	1.2280e-003
tblVehicleEF	OBUS	0.03	0.03

tblVehicleEF	OBUS	0.38	0.46
tblVehicleEF	OBUS	6.9500e-004	6.7800e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.31	0.28
tblVehicleEF	OBUS	0.54	0.41
tblVehicleEF	OBUS	2.4780e-003	0.00
tblVehicleEF	OBUS	5.30	4.18
tblVehicleEF	OBUS	3.67	2.37
tblVehicleEF	OBUS	1.39	1.07
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.10	0.10
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	7.7500e-004	5.2400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	2.6520e-003	2.6660e-003
tblVehicleEF	OBUS	0.04	0.04
tblVehicleEF	OBUS	6.9800e-004	4.7500e-004
tblVehicleEF	OBUS	9.7400e-004	8.6200e-004
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.44	0.52
tblVehicleEF	OBUS	4.8700e-004	4.7500e-004
tblVehicleEF	OBUS	0.14	0.12
tblVehicleEF	OBUS	0.34	0.31
tblVehicleEF	OBUS	0.63	0.48
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.05	5.85

tblVehicleEF	SBUS	8.37	5.90
tblVehicleEF	SBUS	2.33	1.83
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.12	0.14
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.32	1.56
tblVehicleEF	SBUS	2.29	1.56
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	8.31	6.04
tblVehicleEF	SBUS	7.88	5.56
tblVehicleEF	SBUS	2.21	1.74
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003

tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.06	0.04
tblVehicleEF	SBUS	0.28	0.20
tblVehicleEF	SBUS	0.11	0.14
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.13	1.43
tblVehicleEF	SBUS	2.02	1.40
tblVehicleEF	SBUS	5.4400e-004	0.00
tblVehicleEF	SBUS	7.69	5.59
tblVehicleEF	SBUS	8.23	5.80
tblVehicleEF	SBUS	2.37	1.86
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.58	0.57
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.09	0.06
tblVehicleEF	SBUS	6.6280e-003	3.7240e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	0.25	0.24
tblVehicleEF	SBUS	2.7720e-003	2.7490e-003
tblVehicleEF	SBUS	0.08	0.06
tblVehicleEF	SBUS	5.8360e-003	3.2980e-003
tblVehicleEF	SBUS	0.05	0.03
tblVehicleEF	SBUS	0.34	0.24

tblVehicleEF	SBUS	0.13	0.16
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.44	0.34
tblVehicleEF	SBUS	2.73	1.86
tblVehicleEF	SBUS	2.36	1.61
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.67	9.85
tblVehicleEF	UBUS	0.88	0.77
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	4.4500e-003	3.2360e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	2.4800e-003	1.9260e-003
tblVehicleEF	UBUS	0.82	0.57
tblVehicleEF	UBUS	0.65	0.47
tblVehicleEF	UBUS	0.59	0.48
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	12.89	9.29
tblVehicleEF	UBUS	0.84	0.74
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	6.2970e-003	4.5910e-003
tblVehicleEF	UBUS	0.08	0.06
tblVehicleEF	UBUS	3.4160e-003	2.6640e-003

tblVehicleEF	UBUS	0.83	0.57
tblVehicleEF	UBUS	0.60	0.43
tblVehicleEF	UBUS	0.53	0.43
tblVehicleEF	UBUS	3.1540e-003	0.00
tblVehicleEF	UBUS	13.41	9.66
tblVehicleEF	UBUS	0.89	0.78
tblVehicleEF	UBUS	0.22	0.17
tblVehicleEF	UBUS	6.7600e-004	4.0600e-004
tblVehicleEF	UBUS	0.20	0.16
tblVehicleEF	UBUS	6.0900e-004	3.6700e-004
tblVehicleEF	UBUS	5.2130e-003	3.6580e-003
tblVehicleEF	UBUS	0.10	0.07
tblVehicleEF	UBUS	2.6830e-003	1.9870e-003
tblVehicleEF	UBUS	0.81	0.57
tblVehicleEF	UBUS	0.76	0.56
tblVehicleEF	UBUS	0.60	0.49
tblVehicleTrips	ST_TR	2.59	4.66
tblVehicleTrips	SU_TR	2.59	4.66
tblVehicleTrips	WD_TR	2.59	4.66
tblWater	IndoorWaterUseRate	53,467,312.50	419,750.00
tblWater	OutdoorWaterUseRate	0.00	973,132.00

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					
2016	0.1190	0.8783	0.7915	1.2000e-003	0.1099	0.0495	0.1594	0.0462	0.0467	0.0928	0.0000	103.0564	103.0564	0.0172	0.0000	103.4183
2017	0.8190	1.7464	1.8769	3.3500e-003	0.1045	0.0993	0.2038	0.0281	0.0947	0.1228	0.0000	275.4598	275.4598	0.0365	0.0000	276.2259
Total	**0.9380**	**2.6247**	**2.6685**	**4.5500e-003**	**0.2144**	**0.1488**	**0.3632**	**0.0743**	**0.1413**	**0.2156**	**0.0000**	**378.5162**	**378.5162**	**0.0537**	**0.0000**	**379.6442**

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					
2016	0.1190	0.8783	0.7915	1.2000e-003	0.0615	0.0495	0.1110	0.0229	0.0467	0.0696	0.0000	103.0563	103.0563	0.0172	0.0000	103.4182
2017	0.8190	1.7464	1.8769	3.3500e-003	0.1045	0.0993	0.2038	0.0281	0.0947	0.1228	0.0000	275.4596	275.4596	0.0365	0.0000	276.2257
Total	**0.9380**	**2.6246**	**2.6685**	**4.5500e-003**	**0.1660**	**0.1488**	**0.3148**	**0.0510**	**0.1413**	**0.1924**	**0.0000**	**378.5159**	**378.5159**	**0.0537**	**0.0000**	**379.6440**

	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**	**22.59**	**0.00**	**13.34**	**31.36**	**0.00**	**10.80**	**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	1.5696	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,155.8964	1,155.8964	0.0531	0.0110	1,160.4200
Mobile	0.9109	7.6787	15.3666	0.0413	1.8197	0.1455	1.9652	0.4923	0.1339	0.6262	0.0000	3,479.2455	3,479.2455	0.0626	0.0000	3,480.5606
Waste						0.0000	0.0000		0.0000	0.0000	44.1181	0.0000	44.1181	2.6073	0.0000	98.8714
Water						0.0000	0.0000		0.0000	0.0000	0.1332	4.6580	4.7911	0.0139	3.7000e-004	5.1967
Total	**2.4805**	**7.6788**	**15.3737**	**0.0413**	**1.8197**	**0.1455**	**1.9652**	**0.4923**	**0.1339**	**0.6263**	**44.2512**	**4,639.8135**	**4,684.0647**	**2.7370**	**0.0114**	**4,745.0632**

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	1.5696	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1,155.8964	1,155.8964	0.0531	0.0110	1,160.4200
Mobile	0.9109	7.6787	15.3666	0.0413	1.3197	0.1455	1.9652	0.4923	0.1339	0.6262	0.0000	3,479.2455	3,479.2455	0.0626	0.0000	3,480.5606
Waste						0.0000	0.0000		0.0000	0.0000	44.1181	0.0000	44.1181	2.6073	0.0000	98.8714
Water						0.0000	0.0000		0.0000	0.0000	0.1124	4.2252	4.3376	0.0117	3.1000e-004	4.6809
Total	**2.4805**	**7.6788**	**15.3737**	**0.0413**	**1.3197**	**0.1455**	**1.9652**	**0.4923**	**0.1339**	**0.6263**	**44.2305**	**4,639.3808**	**4,683.6112**	**2.7348**	**0.0113**	**4,744.5474**

	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**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.05**	**0.01**	**0.01**	**0.08**	**0.53**	**0.01**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2016	11/3/2016	5	3	
2	Grading	Grading	11/4/2016	11/18/2016	5	11	
3	Building Construction	Building Construction	11/21/2016	5/19/2017	5	130	
4	Paving	Paving	5/22/2017	6/5/2017	5	11	
5	Architectural Coating	Architectural Coating	6/6/2017	6/26/2017	5	15	

Acres of Grading (Site Preparation Phase): 11.5

Acres of Grading (Grading Phase): 11.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 352,557; Non-Residential Outdoor: 117,519 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Scrapers	1	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	2	8.00	174	0.41
Grading	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	3	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.36
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	151.00	59.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					6.1000e-003	0.0000	6.1000e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0500e-003	0.0462	0.0271	4.0000e-005		2.2700e-003	2.2700e-003		2.0900e-003	2.0900e-003	0.0000	3.3749	3.3749	1.0200e-003	0.0000	3.3962
Total	**4.0500e-003**	**0.0462**	**0.0271**	**4.0000e-005**	**6.1000e-003**	**2.2700e-003**	**8.3700e-003**	**6.6000e-004**	**2.0900e-003**	**2.7500e-003**	**0.0000**	**3.3749**	**3.3749**	**1.0200e-003**	**0.0000**	**3.3962**

3.2 Site Preparation - 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	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1283	0.1283	1.0000e-005	0.0000	0.1285
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1283**	**0.1283**	**1.0000e-005**	**0.0000**	**0.1285**

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					2.3300e-003	0.0000	2.3300e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0500e-003	0.0462	0.0271	4.0000e-005		2.2700e-003	2.2700e-003		2.0900e-003	2.0900e-003	0.0000	3.3749	3.3749	1.0200e-003	0.0000	3.3962
Total	**4.0500e-003**	**0.0462**	**0.0271**	**4.0000e-005**	**2.3300e-003**	**2.2700e-003**	**4.6000e-003**	**2.5000e-004**	**2.0900e-003**	**2.3400e-003**	**0.0000**	**3.3749**	**3.3749**	**1.0200e-003**	**0.0000**	**3.3962**

3.2 Site Preparation - 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	5.0000e-005	8.0000e-005	8.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.1283	0.1283	1.0000e-005	0.0000	0.1285
Total	**5.0000e-005**	**8.0000e-005**	**8.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1283**	**0.1283**	**1.0000e-005**	**0.0000**	**0.1285**

3.3 Grading - 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					
Fugitive Dust					0.0723	0.0000	0.0723	0.0371	0.0000	0.0371	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.3138	0.2044	2.1000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	19.9348	19.9348	6.0100e-003	0.0000	20.0610
Total	**0.0297**	**0.3138**	**0.2044**	**2.1000e-004**	**0.0723**	**0.0171**	**0.0895**	**0.0371**	**0.0158**	**0.0528**	**0.0000**	**19.9348**	**19.9348**	**6.0100e-003**	**0.0000**	**20.0610**

3.3 Grading - 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	4.3000e-004	6.3000e-004	6.5800e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0586	1.0586	6.0000e-005	0.0000	1.0599
Total	**4.3000e-004**	**6.3000e-004**	**6.5800e-003**	**1.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0586**	**1.0586**	**6.0000e-005**	**0.0000**	**1.0599**

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					0.0277	0.0000	0.0277	0.0142	0.0000	0.0142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.3138	0.2044	2.1000e-004		0.0171	0.0171		0.0158	0.0158	0.0000	19.9347	19.9347	6.0100e-003	0.0000	20.0610
Total	**0.0297**	**0.3138**	**0.2044**	**2.1000e-004**	**0.0277**	**0.0171**	**0.0448**	**0.0142**	**0.0158**	**0.0299**	**0.0000**	**19.9347**	**19.9347**	**6.0100e-003**	**0.0000**	**20.0610**

3.3 Grading - 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	4.3000e-004	6.3000e-004	6.5800e-003	1.0000e-005	1.0800e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0586	1.0586	6.0000e-005	0.0000	1.0599
Total	**4.3000e-004**	**6.3000e-004**	**6.5800e-003**	**1.0000e-005**	**1.0800e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0586**	**1.0586**	**6.0000e-005**	**0.0000**	**1.0599**

3.4 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	0.0669	0.4222	0.2969	4.3000e-004		0.0287	0.0287		0.0275	0.0275	0.0000	36.7217	36.7217	8.6300e-003	0.0000	36.9030
Total	**0.0669**	**0.4222**	**0.2969**	**4.3000e-004**		**0.0287**	**0.0287**		**0.0275**	**0.0275**	**0.0000**	**36.7217**	**36.7217**	**8.6300e-003**	**0.0000**	**36.9030**

3.4 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	7.9600e-003	0.0810	0.1052	1.9000e-004	5.4300e-003	1.2200e-003	6.6400e-003	1.5500e-003	1.1200e-003	2.6700e-003	0.0000	17.6189	17.6189	1.3000e-004	0.0000	17.6217
Worker	9.8900e-003	0.0145	0.1507	3.2000e-004	0.0248	2.4000e-004	0.0251	6.5900e-003	2.2000e-004	6.8100e-003	0.0000	24.2192	24.2192	1.3700e-003	0.0000	24.2481
Total	**0.0179**	**0.0954**	**0.2558**	**5.1000e-004**	**0.0303**	**1.4600e-003**	**0.0317**	**8.1400e-003**	**1.3400e-003**	**9.4800e-003**	**0.0000**	**41.8381**	**41.8381**	**1.5000e-003**	**0.0000**	**41.8698**

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	0.0669	0.4222	0.2969	4.3000e-004		0.0287	0.0287		0.0275	0.0275	0.0000	36.7217	36.7217	8.6300e-003	0.0000	36.9029
Total	**0.0669**	**0.4222**	**0.2969**	**4.3000e-004**		**0.0287**	**0.0287**		**0.0275**	**0.0275**	**0.0000**	**36.7217**	**36.7217**	**8.6300e-003**	**0.0000**	**36.9029**

3.4 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	7.9600e-003	0.0810	0.1052	1.9000e-004	5.4300e-003	1.2200e-003	6.6400e-003	1.5500e-003	1.1200e-003	2.6700e-003	0.0000	17.6189	17.6189	1.3000e-004	0.0000	17.6217
Worker	9.8900e-003	0.0145	0.1507	3.2000e-004	0.0248	2.4000e-004	0.0251	6.5900e-003	2.2000e-004	6.8100e-003	0.0000	24.2192	24.2192	1.3700e-003	0.0000	24.2481
Total	**0.0179**	**0.0954**	**0.2558**	**5.1000e-004**	**0.0303**	**1.4600e-003**	**0.0317**	**8.1400e-003**	**1.3400e-003**	**9.4800e-003**	**0.0000**	**41.8381**	**41.8381**	**1.5000e-003**	**0.0000**	**41.8698**

3.4 Building Construction - 2017

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	0.2007	1.3099	0.9627	1.4400e-003		0.0861	0.0861		0.0824	0.0824	0.0000	121.5197	121.5197	0.0275	0.0000	122.0967
Total	**0.2007**	**1.3099**	**0.9627**	**1.4400e-003**		**0.0861**	**0.0861**		**0.0824**	**0.0824**	**0.0000**	**121.5197**	**121.5197**	**0.0275**	**0.0000**	**122.0967**

3.4 Building Construction - 2017

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	0.0242	0.2459	0.3317	6.5000e-004	0.0181	3.6100e-003	0.0217	5.1600e-003	3.3200e-003	8.4800e-003	0.0000	57.7915	57.7915	4.2000e-004	0.0000	57.8004
Worker	0.0295	0.0436	0.4536	1.0500e-003	0.0827	7.6000e-004	0.0835	0.0220	7.0000e-004	0.0227	0.0000	77.7052	77.7052	4.2400e-003	0.0000	77.7942
Total	**0.0537**	**0.2895**	**0.7853**	**1.7000e-003**	**0.1008**	**4.3700e-003**	**0.1052**	**0.0271**	**4.0200e-003**	**0.0312**	**0.0000**	**135.4967**	**135.4967**	**4.6600e-003**	**0.0000**	**135.5946**

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	0.2007	1.3099	0.9627	1.4400e-003		0.0861	0.0861		0.0824	0.0824	0.0000	121.5196	121.5196	0.0275	0.0000	122.0966
Total	**0.2007**	**1.3099**	**0.9627**	**1.4400e-003**		**0.0861**	**0.0861**		**0.0824**	**0.0824**	**0.0000**	**121.5196**	**121.5196**	**0.0275**	**0.0000**	**122.0966**

3.4 Building Construction - 2017

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	0.0242	0.2459	0.3317	6.5000e-004	0.0181	3.6100e-003	0.0217	5.1600e-003	3.3200e-003	8.4800e-003	0.0000	57.7915	57.7915	4.2000e-004	0.0000	57.8004
Worker	0.0295	0.0436	0.4536	1.0500e-003	0.0827	7.6000e-004	0.0835	0.0220	7.0000e-004	0.0227	0.0000	77.7052	77.7052	4.2400e-003	0.0000	77.7942
Total	**0.0537**	**0.2895**	**0.7853**	**1.7000e-003**	**0.1008**	**4.3700e-003**	**0.1052**	**0.0271**	**4.0200e-003**	**0.0312**	**0.0000**	**135.4967**	**135.4967**	**4.6600e-003**	**0.0000**	**135.5946**

3.5 Paving - 2017

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	0.0124	0.1287	0.0947	1.4000e-004		7.4800e-003	7.4800e-003		6.8900e-003	6.8900e-003	0.0000	13.0806	13.0806	3.9600e-003	0.0000	13.1637
Paving	3.7600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0161**	**0.1287**	**0.0947**	**1.4000e-004**		**7.4800e-003**	**7.4800e-003**		**6.8900e-003**	**6.8900e-003**	**0.0000**	**13.0806**	**13.0806**	**3.9600e-003**	**0.0000**	**13.1637**

3.5 Paving - 2017

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	4.3000e-004	6.3000e-004	6.6100e-003	2.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1321	1.1321	6.0000e-005	0.0000	1.1334
Total	**4.3000e-004**	**6.3000e-004**	**6.6100e-003**	**2.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1321**	**1.1321**	**6.0000e-005**	**0.0000**	**1.1334**

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	0.0124	0.1287	0.0947	1.4000e-004		7.4800e-003	7.4800e-003		6.8900e-003	6.8900e-003	0.0000	13.0806	13.0806	3.9600e-003	0.0000	13.1637
Paving	3.7600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0161**	**0.1287**	**0.0947**	**1.4000e-004**		**7.4800e-003**	**7.4800e-003**		**6.8900e-003**	**6.8900e-003**	**0.0000**	**13.0806**	**13.0806**	**3.9600e-003**	**0.0000**	**13.1637**

3.5 Paving - 2017

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	4.3000e-004	6.3000e-004	6.6100e-003	2.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1321	1.1321	6.0000e-005	0.0000	1.1334
Total	**4.3000e-004**	**6.3000e-004**	**6.6100e-003**	**2.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.1321**	**1.1321**	**6.0000e-005**	**0.0000**	**1.1334**

3.6 Architectural Coating - 2017

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	0.5447					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4900e-003	0.0164	0.0140	2.0000e-005		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	1.9149	1.9149	2.0000e-004	0.0000	1.9192
Total	**0.5472**	**0.0164**	**0.0140**	**2.0000e-005**		**1.3000e-003**	**1.3000e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**1.9149**	**1.9149**	**2.0000e-004**	**0.0000**	**1.9192**

3.6 Architectural Coating - 2017

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	8.8000e-004	1.3000e-003	0.0135	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.8000e-004	0.0000	2.3157	2.3157	1.3000e-004	0.0000	2.3184
Total	**8.8000e-004**	**1.3000e-003**	**0.0135**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.5000e-004**	**2.0000e-005**	**6.8000e-004**	**0.0000**	**2.3157**	**2.3157**	**1.3000e-004**	**0.0000**	**2.3184**

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	0.5447					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4900e-003	0.0164	0.0140	2.0000e-005		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	1.9149	1.9149	2.0000e-004	0.0000	1.9192
Total	**0.5472**	**0.0164**	**0.0140**	**2.0000e-005**		**1.3000e-003**	**1.3000e-003**		**1.3000e-003**	**1.3000e-003**	**0.0000**	**1.9149**	**1.9149**	**2.0000e-004**	**0.0000**	**1.9192**

3.6 Architectural Coating - 2017

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	8.8000e-004	1.3000e-003	0.0135	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.8000e-004	0.0000	2.3157	2.3157	1.3000e-004	0.0000	2.3184
Total	**8.8000e-004**	**1.3000e-003**	**0.0135**	**3.0000e-005**	**2.4700e-003**	**2.0000e-005**	**2.4900e-003**	**6.5000e-004**	**2.0000e-005**	**6.8000e-004**	**0.0000**	**2.3157**	**2.3157**	**1.3000e-004**	**0.0000**	**2.3184**

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	0.9109	7.6787	15.3666	0.0413	1.8197	0.1455	1.9652	0.4923	0.1339	0.6262	0.0000	3,479.2455	3,479.2455	0.0626	0.0000	3,480.5606
Unmitigated	0.9109	7.6787	15.3666	0.0413	1.8197	0.1455	1.9652	0.4923	0.1339	0.6262	0.0000	3,479.2455	3,479.2455	0.0626	0.0000	3,480.5606

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,077.44	1,077.44	1077.44	4,617,597	4,617,597
Total	1,077.44	1,077.44	1,077.44	4,617,597	4,617,597

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.607600	0.000000	0.000000	0.039900	0.000000	0.000000	0.070500	0.282000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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	1,155.8964	1,155.8964	0.0531	0.0110	1,160.4200
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,155.8964	1,155.8964	0.0531	0.0110	1,160.4200
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
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	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		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.03924e+006	1,155.8964	0.0531	0.0110	1,160.4200
Total		**1,155.8964**	**0.0531**	**0.0110**	**1,160.4200**

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	1.5696	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145
Unmitigated	1.5696	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145

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	0.2724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145
Total	**1.5696**	**7.0000e-005**	**7.1500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0137**	**0.0137**	**4.0000e-005**	**0.0000**	**0.0145**

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	0.2724					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2966					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.9000e-004	7.0000e-005	7.1500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0145
Total	**1.5696**	**7.0000e-005**	**7.1500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0137**	**0.0137**	**4.0000e-005**	**0.0000**	**0.0145**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.3376	0.0117	3.1000e-004	4.6809
Unmitigated	4.7911	0.0139	3.7000e-004	5.1967

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.41975 / 0.973132	4.7911	0.0139	3.7000e-004	5.1967
Total		**4.7911**	**0.0139**	**3.7000e-004**	**5.1967**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.354269 / 0.913771	4.3376	0.0117	3.1000e-004	4.6809
Total		**4.3376**	**0.0117**	**3.1000e-004**	**4.6809**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	44.1181	2.6073	0.0000	98.8714
Unmitigated	44.1181	2.6073	0.0000	98.8714

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	217.34	44.1181	2.6073	0.0000	98.8714
Total		**44.1181**	**2.6073**	**0.0000**	**98.8714**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	217.34	44.1181	2.6073	0.0000	98.8714
Total		**44.1181**	**2.6073**	**0.0000**	**98.8714**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

APPENDIX D: PHASE 1 REM

PHASE I
ENVIRONMENTAL ASSESSMENT REPORT

OCTOBER 29, 2015

14624 & 14700 NELSON AVE (APN 8208-006-900, 901, & 902)
CITY OF INDUSTRY, CA 91744

PREPARED FOR

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PROJECT NO. 260815

TABLE OF CONTENTS

1. INTRODUCTION 5

1.1 Objective 5
1.2 Scope of Work 5

2. PROPERTY DESCRIPTION 6

2.1 Geographical Description of Property 6
2.2 General Description of the Subject Property 6
2.3 Present Tenants and Business Operation 6
2.4 Past Tenants and Business Operation 6
2.4.1 Co. Assessor's Office Records 7
2.4.2 Historic Aerial Photo Records 7
2.4.3 Historic City Directory Records 7
2.4.4 DTSC Site HW Disposal Records 7
2.4.5 Site Development/Occupancy History Summary 7
2.5 Regional Physical Setting 8
2.6 Hydrogeological Information 8
2.7 Historical Hazardous Substance Usage 9
2.7.1 Record Search Sources 9
2.7.2 List & Quantities of Hazardous Materials 10
2.7.3 Permits, Licenses and Registrations 10
2.7.4 Environmental Lien Records 10

3. PROPERTY RECONNAISSANCE 11

3.1 Air Quality – Indoor & Visible Emissions 11
3.2 Asbestos Containing Material (ACM) 11
3.3 Lead Based Paint (LBP) 11
3.4 Polychlorinated Biphenyl (PCB) 11
3.5 Underground Storage Tank (UST) 11
3.6 Aboveground Storage Tank (AST) 12
3.7 Fuel Islands 12
3.8 Hydraulic Hoist Unit 12
3.9 Hazardous Materials/Petroleum Products Storage & Handling 12
3.10 Other Containers 12
3.11 Hazardous Waste Storage 12
3.12 Distressed Vegetation 12

TABLE OF CONTENTS (continued)

3.13 Stockpiled Soils 13
3.14 Wastewater Treatment Unit & Clarifiers 13
3.15 Solid Waste Disposal 13
3.16 Wells 13
3.17 Underground Pipelines 13
3.18 Boilers & HVAC Systems 13
3.19 Visual Indication of Spills, Leakage, Staining 14
3.20 Soil Staining or Surface Staining on Natural/Unpaved Land 14
3.21 Pits, Ponds, Lagoons 14
3.22 Herbicides/Pesticides 14
3.23 Radon 14

4. NEIGHBORING PROPERTIES 16

4.1 Adjacent/Adjoining Businesses 16
4.2 Historical Hazardous Substance Usage 16

5. GOVERNMENT RECORDS SEARCH AND POTENTIAL OFF-SITE CONTAMINATION SOURCES 18

5.1 Historical Background & Scope of Coverage 18

5.2 Database Sources 18
A. Federal Sources 18
B. California State Sources 19
C. Regional Sources 20
D. Other Sources 20

5.3 Case Study Refererices 21
A. Case-Closure 21
B. Lawrence Livermore National Laboratory Reports on LUFT (LUST)'s 21
C. Groundwater Flow Gradient 21

5.4 Potential Sources of Contamination 22
5.5 UST, Disposal Sites, and Generators 23

TABLE OF CONTENTS (continued)

6. SUMMARY AND CONCLUSION 24

7. LIMITATIONS AND CERTIFICATION STAMP 28

8. QUALIFICATION STATEMENT FOR PERSONNEL CONDUCTING THE PHASE I ASSESSMENT 29

APPENDICES

APPENDIX A FIGURES & PHOTOS

FIGURE 1 SITE PHOTOS
FIGURE 2 SITE LOCATION MAP
FIGURE 3 RECENT AERIAL PHOTOGRAPH SHOWING SITE AND ITS VICINITY GENERAL LAYOUT

APPENDIX B CO. ASSESSOR'S OFFICE RECORDS SUMMARIES

APPENDIX C HISTORIC AERIAL PHOTO RECORDS

APPENDIX D 2/1991 SITE UST REMOVAL REPORT TEXT/FIGURE AND CLADPW'S 12/1991 RESPONSE TO THE REPORT

APPENDIX E DTSC SITE HW DISPOSAL RECORDS SUMMARY

APPENDIX F PAGES OF RWQCB-LA WIP MASTER FACILITIES LISTING SHOWING STATUS OF SITE FILES

APPENDIX G GOVERNMENT RECORDS SEARCH DATABASE

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1. INTRODUCTION

1.1 Objective

This report summarizes the results of a Phase I Environmental Site Assessment of the subject property performed by Robin Environmental Management (REM) in October 2015. The purpose of this Environmental Site Assessment is to evaluate the potential for environmental concerns or liabilities due to past and/or current land use practices at the subject site or from nearby properties. This assessment included in this report is solely targeted for CERCLA (Superfund) liability and the "innocent landowner defense", to permit user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability, by conducting all appropriate inquiries to identify recognized environmental conditions (REC's).

1.2 Scope of Work

A walk-through for Phase I environmental assessment was conducted on 14624 & 14700 Nelson Avenue, City of Industry, California on October 26, 2015. The scope of services for this assessment includes the following tasks:

- Visual investigation of the property to obtain information regarding obvious visual signs of adverse environmental conditions, contamination, hazardous material usage, storage and handling on and in the vicinity of the subject property.

- Visual survey of the adjoining land uses and determination of any current nearby operations which may potentially impact the subject site;

- Government document search of records compiled by various government agencies for on site or nearby operations (past and present) to aid in the identification of any potential contamination sources;

- Review of building permit records available at the local building department to identify any potential past on-site operation which may have environmental implications.

2. PROPERTY DESCRIPTION

2.1 Geographical Description of Property

The subject site, 14624 & 14700 Nelson Avenue (APN 8208-006-900, 901, & 902), is a roughly "U"-shaped (with opening of "U" facing north-northeast and two arms of "U" with different widths) bordered by Nelson Avenue to the north and Southern Pacific Railroad to the south within the block between Sunset Avenue to the west and California Avenue to the east within a light industrial zone in the western portion of the City of Industry, California as shown in Figure 1 (Site Photos), Figure 2 (Site Location Map), and Figure 3 (Recent Aerial Photograph Showing Site and Its Vicinity General Layout Plan).

2.2 General Description of the Subject Property

The subject site, 14624 & 14700 Nelson Avenue (APN 8208-006-900, 901, & 902), is a roughly "U"-shaped (with opening of "U" facing north-northeast and two arms of "U" with different widths) bordered by Nelson Avenue to the north and Southern Pacific Railroad to the south within the block between Sunset Avenue to the west and California Avenue to the east in the western portion of the City of Industry, California. The site is currently mainly a fenced unpaved vacant lot with also small paved parking at the northwestern corner of the eastern arm of the roughly "U"-shaped subject lot, and paved driveway occupying the entire western arm of the roughly "U"-shaped subject lot. No pits, ponds, swamps, dry wells, or lagoons were observed on the subject property. No apparently significant surface staining was observed within the entire unpaved/paved out door areas of the site.

2.3 Present Tenants and Business Operation

During REM's site inspection on October 26, 2015, the subject site was mainly a fenced unpaved vacant lot with also small paved parking at the northwestern corner of the eastern arm of the roughly "U"-shaped subject lot, and paved driveway occupying the entire western arm of the roughly "U"-shaped subject lot.

2.4 Past Tenants and Business Operation

Methods of researching historic use of ownership of the subject property employed by REM are as follows:

- Co. Assessor's Office Records
- Historic Aerial Photograph Records

- Historic City Directory Records
- DTSC Site Hazardous Wastes Disposal Records

2.4.1 Co. Assessor's Office Records

Los Angeles Co. Assessor's Office records summaries for site parcels included in Appendix B indicate that the site was formerly with structures built between 1970 and 1983.

2.4.2 Historic Aerial Photograph Records

Historic aerial photo records for the site area included in Appendix C showed that, in 1948 and 1952, the site was generally for agricultural usage with farm houses present at the northeastern corner of the site. In 1965, the site was generally vacant lot with houses present at the northeastern corner of the site. In 1972, the eastern portion of the site appeared being mainly occupied by a lumber yard and the western portion of the site was generally vacant lot. From prior to 1980 to at least 2012, the entire site appeared generally occupied by a lumber yard.

2.4.3 Historic City Directory Records

REM staff reviewed historic city directory records available at the Sherman Library, Newport Beach, CA. Based on available historic city directory records, from the 1940' to the 1960's, various residences occupied the site. In the 1970's, Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address) occupied the eastern portion of the site. In the 1980's, in addition to Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address) occupying the eastern portion of the site, Scott-Caudill Lumber (14624 Nelson Avenue) was shown as occupant for the western portion of the site. In the 1990's and the 2000's, Scott-Caudill Lumber (14624 Nelson Avenue) was shown as the sole occupant of the site.

2.4.4 DTSC Site Hazardous Wastes Disposal Records

California Dept. of Toxic Substances Control (DTSC) site hazardous wastes disposal records summary included in Appendix E showed that 2 tons of asbestos-containing wastes (apparently derived from demolition of formerly on-site structures) was disposed of from the site in 2012.

2.4.4 Site Development/Occupancy History

Based on historic site occupancy data listed above, development/occupancy history of the subject site can be summarized below:

The 1940's and the 1950's – The site was generally for agricultural usage with farm houses present at the northeastern corner of the site

The 1960's - The site was generally vacant lot with houses present at the northeastern corner of the site

The 1970's - The eastern portion of the site was developed for being occupied by Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address); and the western portion of the site remained vacant

The 1980's - Scott-Caudill Lumber (14624 Nelson Avenue) occupied the western portion of the site; and Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address) occupied the eastern portion of the site

The 1990's and the 2000's - Scott-Caudill Lumber (14624 Nelson Avenue) was shown as the sole occupant of the site

2012 – The formerly on-site structures were demolished

2.5 Regional Physical Setting

The subject property's physical locations were researched employing a United States Geological Survey (USGS) 7.5 Minute Topographic Quadrangle (Quad) Map relevant to the subject property. The USGS 7.5 Minute Quad Map has an approximate scale of 1 inch to 2,000 feet, and shows physical features with environmental significance such as wetlands, water bodies, roadways, mines, and buildings. Please refer to Figure 2 in Appendix A.

The physical and natural features illustrated on the Quad Map served as areas of visual emphasis when conducting the site inspection of the subject property. The USGS 7.5 Minute Quad Map was used as the only Standard Physical Setting Source, and is sufficient as a single reference. The surface elevation of the subject site is 303 feet above Mean Sea Level (MSL) and exhibits a rather gentle topographic down gradient generally towards west.

2.6 Hydrogeological Information

The subject site lies within the San Gabriel Valley – the northeastern one third of the Los Angeles Coastal Basin Plain. The Los Angeles Coastal Basin Plain is an alluviated, coastal lowland plain bordered on the north, northeast, east, and southeast by mountains and hills, and transected by numerous faults. Water well drilling logs show that the upper sediments that underlie the subject property are typified by gravel, sand, and silt. These sediments comprise Recent and Pleistocene Alluvium deposits which extend from the surface to a depth of approximately 280 feet. The shallow groundwater zone occurs in Recent and Pleistocene Alluvium deposits at a depth of approximately 60 feet below ground surface (County of Los Angeles Department of Public Works, "San Gabriel Valley

Groundwater Contours", 1998).

Hydrogeologically, the subject property is located within the west-central portion of the Puente Groundwater Basin, an east-west trending sub-basin (extending from Whittier Narrows at its western end eastward to Pomona at its eastern end, the sub-basin is bounded by San Jose Hills to the north and Puente Hills to the south) of San Gabriel Valley Groundwater Basin. In general, the groundwater zones of the basin are unconfined, and hence are somewhat unprotected from downward migrating surface pollutants. The general direction of groundwater flow in the vicinity of the subject property is reported to be towards west-northwest (County of Los Angeles Department of Public Works, "San Gabriel Valley Groundwater Contours", 1998).

2.7 Historical Hazardous Substance Usage

2.7.1 Record search sources

REM's field engineer visited or contacted the following public agencies to find any records of former operation of underground storage tank (UST) of gasoline or any other hazardous substances on the subject premise:

- County of Los Angeles Department of Public Works (CLADPW), Environmental Programs Division
- California Regional Water Quality Control Board – Los Angeles Region

On October 28, 2015, REM staff visited the CLADPW, Environmental Programs Division, Alhambra office to review/photocopy pertinent site UST removal records (included as Appendix D) for the site. Based on available records, in December 1990, one 6,000-gallon gasoline UST located to the west of office building (see 2012 aerial photo for the site area included in Appendix C for location) for the 14624 Nelson Avenue address and its associated piping/dispenser were removed from the site by H.B Cover, Inc. (HBC). Post-UST removal under removed gasoline UST soil sampling/analysis conducted under the supervision of the CLADPW inspector by Connor Environmental Management, Inc. (Connor) did not reveal significant evidence of soil contamination.

Activities/findings of the 12/1990 site UST removal were summarized in Connor's 2/9/1991 UST Removal Report (with text/figure included in Appendix D) submitted to the CLADPW for review on 4/22/1991. Upon reviewing the said submittal, the CLADPW issued a 12/31/2011 response letter (copy also included in Appendix D) addressing to Mr. George Caudill (apparently the then site owner) and requiring 1) clarification on the sampling date (7/19/1990; which was apparently wrong as UST was removed in 12/2010) indicated on Table 1 of the report; 2) signature by operator of UST cleaning rinsate receiving facility on

the manifest; and 3) put "all site work was done under the direct supervision of the signing professional" statement into the report. Based no records available at the CLADPW, no response to above three CLADPW's requirement has ever been provided to the CLADPW; and, therefore, the site 1990 UST removal case remains with an "open' status.

2.7.2 List and quantities of the hazardous materials

List and quantities of the hazardous materials previously or presently used, disposed, treated, stored, or generated at the subject property were searched and assessed. During the site inspection, the use, storage, and generation of significant quantity of hazardous materials was not observed.

REM staff also searched the State Department of Toxic Substances Control-compiled records website for all documented hazardous wastes disposal activities throughout California in the past at http://hwts.dtsc.ca.gov/report_list.cfm for site addresses and found that (see Appendix E) City of Industry (with 14700 Nelson Ave address) disposed of 2 tons of asbestos-containing wastes (apparently derived from demolition of formerly on-site structures) with no spills or violation records.

2.7.3 Permits, licenses, and registrations

All present and past records of permits, licenses, registrations, certificates of environmental relation were searched. The formerly on-site UST (removed in 12/1990; see Section 2.7.1) was permitted by the CLADPW for its operations.

2.7.4 Environmental lien records

Under current environment regulation, government agency may place an environmental lien on the property with known contamination and no cleanup/mitigation activities apparently intended being conducted by the site owner upon the agency issued the cleanup enforcement order. Based on historic site usage and government records search summary documented in this section, the subject property is not a known contamination site and no environmental liens are likely being imposed on the subject property. Furthermore, the conducted government records search shows that there are no environmental liens placed by the federal environmental agency under CERCLA regulations for the subject site. REM staff searched the California State Department of Toxic Substances website EnviroStor data search and found no environmental liens were placed by the State environmental agency for the subject site. City of Industry records also show that there are no environmental liens placed by the local environmental agency for the subject site.

3. PROPERTY RECONNAISSANCE

REM's environmental assessor/geologist performed the field survey of the subject site and adjacent properties on October 26, 2015. A site location map and a recent aerial photograph showing the site and its vicinity general layout are included as Figures 2 and 3, respectively.

3.1 Air Quality - Indoor and Visible Emissions

No unusual smells, obnoxious odors, or visual emissions were observed during the inspection of the subject property. Neither air emission stacks nor paint booth were present, thus no pertinent permits were searched for the previous records of violation history.

3.2 Asbestos-Containing Material (ACM)

Since the subject lot is currently with no structures, asbestos-containing building materials are not of environmental concern.

3.3 Lead-Based Paint (LBP)

Since the subject lot is currently with no structures, lead-based paint is also not potentially environmental concern.

3.4 Polychlorinated Biphenyl (PCB's)

Prior to 1978, PCBs were commonly used in dielectric fluids in transformers, capacitors, and light ballasts due to their desirable thermal characteristics, and hydraulic fluid compactor. Due to their demonstrated toxicity and persistence in the environment, PCB manufacturing in the United States was discontinued.

Pole- and pad-mounted transformers were found in the vicinity of the subject site buildings, appearing in good condition without any sign of leakage. No PCB-containing hydraulic fluid trash compactor was discovered.

3.5 Underground Storage Tank (UST)

The visual inspection of the subject site revealed no evidence of surface or above ground features (e.g., fill pipe, vent pipes, fill connections, concrete pads, saw cuts, sumps, spill containment device, leak detection device, etc.) normally associated with underground storage tanks (UST's).

3.6 Aboveground Storage Tank

REM's field officer performed the visual inspection of the subject site to find evidence of surface or above ground features (e.g., fill pipe, vent pipes, fill connections, concrete pads, saw cuts, concrete pad, drains in vicinity, etc.) normally associated with aboveground storage tanks (AST's). Visual observation also includes the inspection to identify any surface markings indicating the existence of aboveground product pipelines. No evidence on the presence of any aboveground storage tank on the site premise was identified.

3.7 Fuel Islands

The visual inspection of the subject site revealed no evidence of fuel islands or dispensers either in operation or abandoned.

3.8 Hydraulic Hoist Unit

The visual inspection of the subject site revealed no presence of underground hydraulic hoist units within the subject site premise.

3.9 Hazardous Materials/Petroleum Products Storage & Handling

No containers storing automotive or industrial batteries, pesticides, or chemicals seemingly exhibiting toxic hazards at the time of site inspection. No major spills, leakage, or staining were observed throughout the site

3.10 Other Containers

No other containers indicating any sign of environmental concern were observed during the site inspection.

3.11 Hazardous Waste Treatment, Storage, Disposal (TSD)

No storage, treatment, or disposal of hazardous wastes was found during the site investigation. No severely improper waste stream processing or disposal practices were observed on the subject property.

3.12 Distress Vegetation

Planters and vegetation in the vicinity of and within the subject site were found well-maintained on bare soil or within separate planters in relatively good appearance with no

sign of chemical stress or unnatural appearance.

3.13 Stockpiled Soils

REM's site inspection did not reveal any evidence of stockpiled soils on the ground of subject property.

3.14 Wastewater Treatment Unit/Clarifier

No underground industrial wastewater treatment facility, i.e., clarifier was observed on the subject property during the site visit.

Storm water drainage system in the close proximity of the subject area did not identify any abnormal accumulation of petroleum or chemical run-off or foreign materials. No unusual blockage of the storm-water control system was observed during the site visual investigation on the outdoor parking lot or surface areas. REM recommends no additional investigation on described storm-water systems at the subject property.

3.15 Solid Waste Disposal

No improper activities of treatment or disposal of hazardous, medical, or toxic wastes are performed on the subject site.

3.16 Wells

REM's site walk-through did not discover any irrigation wells, injection wells, abandoned wells, groundwater-monitoring wells, dry wells, septic wells oil wells, gas wells, domestic water wells, other-monitoring wells on the subject premises.

3.17 Underground Pipelines

REM's site inspection did not reveal any evidence of underground pipelines beneath the ground of subject property, other than public utility lines such as sewer, power, and electric lines, for which public "dig-alert" service would easily identify upon 48-hour telephone notice in advance.

3.18 Boilers & HVAC Systems

The subject lot is current with no structures and there are no water heater and HVAC

systems present on the site premise.

3.19 Visual Indication of Spills, Leakage, Staining

REM's site inspection did not reveal any evidence of on-site or off-site spills, leakages, or staining significant enough to pose immediate environmental concern onto the subject property. No significantly stained catch basins, drip pads, or sumps were observed. There were no major spills around surface drains, pipes, gutters, spouts, or tubes, if any, at the time of site investigation.

3.20 Soil Staining or Surface Staining on Unpaved/Natural Lands

No staining or surface staining on the bare soil or unpaved lands were identified during the site investigation.

3.21 Pits, Ponds, Lagoons

No visible evidence of wetlands such as pits, ponds, lagoons, or any other water bodies, other than cement-lined swimming pool/spa and water fountain, was observed within the subject property's boundary lines.

3.22 Herbicides/Pesticides

Based on information presented in Section 2.4, in the 1940's and the 1950's, the site was mainly for agricultural usage. According to REM's past experience with subsurface investigations conducted on land with agricultural usage, typical pesticide concentrations detected in soil samples pose no significant risk, i.e., a risk that results in one excess cancer risk in an exposed population of 1,000,000 for commercial, industrial, and residential exposures.

3.23 Radon

Radon sources can be found from earth and rock beneath building structures, well water, and building materials themselves. Though there is no immediate health effect, it is believed to account for approximately 10% of lung cancer deaths in the United States. Estimated national average is 1.5 picocuries per liter of air, however, levels as high as 200 picocuries per liter in some commercial buildings can be found. USEPA and California Department of Health Services' Radon Survey Interim Results report shows different U.S. regions according to general geological and climate information, where Region 9 includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, Ventura, San Diego, and Santa Barbara

Counties.

According to the California EPA, Los Angeles and Riverside County is classified as a "Zone 2" county having a predicted average screening level between 2-4 picocuries per liter of air. Orange and San Diego County is under Zone 3, having the level less than 2 picocuries/L, and Santa Barbara and Ventura County as Zone 1 has the level greater than 4 picocuries/L.

If a property region reportedly has radon concentration below 4 picocuries per liter of air in 99.5% of homes within the region, then, it is not likely impacted by the presence of radon gas, considering EPA action limit of 4 picocuries per liter of air volume. REM is not contracted to perform the testing of radon level on the subject property, thus the delineation of radon level is beyond the scope of the covered in this report.

4. NEIGHBORING PROPERTIES

4.1 Adjacent/Adjoining Businesses

For the scope of this assessment, properties are defined and categorized based upon their physical proximity to the subject property. An adjoining property is any real estate property whose border is contiguous or partially contiguous with the subject properties, or that would be if the properties were not separated by a roadway, street, public thoroughfare, or stream.

Adjoining properties are as follows:

North: The roughly "U"-shaped subject lot engulfs Nafta Shoes, Inc. (14632 Nelson Avenue; to the west) and San Gabriel Valley Water Company (14650 Nelson Avenue; to the east) to its north; in addition, across Nelson Avenue, to the north of two arms of the roughly "U"-shaped subject lot are church and apartments

East: By BlueLinx Corporation (14710 Nelson Avenue)

South: By Southern Pacific Railroad Track, and then by Valley Blvd

West: By, from north to south, San Gabriel Valley Water Company, Vanode (236 N. Sunset Avenue), office/warehouse (228 N. Sunset Avenue), General Supplies Inc. HVAC & Refrigeration Supplies (220 N. Sunset Avenue), Stougton Printing, Co. (130 N. Sunset Avenue), and Arnel Air Compressor (114-124 N. Sunset Avenue)

4.2 Historical Hazardous Substance Usage in Neighboring Properties

REM's field engineer contacted the following public agencies to find any records of former operation of gasoline UST or any other hazardous substances in the vicinity of the subject premises.

- County of Los Angeles Department of Public Works (CLADPW), Environmental Programs Division
- California Regional Water Quality Control Board – Los Angeles Region
- California Dept. of Toxic Substances Control

The conducted government records search identifies that (Former) Lane-Stanton-Vance Lumber Co. (14710 Nelson Avenue, immediately to the east of the subject property) is listed on State Water Board-compiled Leaking Underground Storage Tank (LUST)/Spills facilities database with a "Case Closed" status. The former UST leakage/spills case at the (Former) Lane-Stanton-Vance Lumber Co. site was apparently satisfactorily treated under the supervision of the lead agency to the degree that no apparently significant environmental concerns for its neighboring areas are likely being induced from remaining untreated UST leakage/spills, if any, at the (Former) Lane-Stanton-Vance Lumber Co. site.

In summary, no locations in the neighborhood within close proximity are considered to pose any environmental threat to the subject property, based upon the data obtained via NETR governmental records database and the conducted government records search.

5. GOVERNMENT RECORDS SEARCH AND POTENTIAL OFF-SITE CONTAMINATION SOURCES

5.1 Historical Background and Scope of Coverage

Since the early 1970s, environmental agencies have been tracking the compliance of many facilities with the various laws that have been promulgated to halt the pollution of air, land and water. More recently, records have been maintained documenting spills of hazardous materials and the locations of known waste sites or regulated waste handling facilities. The following sections summarizes REM's review of database search of available records at the local, state and federal level and highlights the approximate location of such sites with respect to the subject property.

The conducted government record search was performed to aid:

1) Identification of facilities, located within a one-mile radius of the subject property, which might pose a potential threat to the subsurface environment at the subject property; and

2) Identification of any environmental violation notices associated with activities conducted at the subject property itself. The following lists were reviewed for sites within one mile of the property:

5.2 Database Sources

A. Federal Sources

- United States Environmental Protection Agency (U.S. EPA), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
- U.S. EPA, National Priority List (NPL)
- Resource Conservation and Recovery Act (RCRA) Federal TSD Facilities
- Federal Emergency Response Notification System (ERNS)
- CERCLA Site Enforcement Tracking System
- RCRA Violators List (CORRACTS)
- U.S. EPA Federal Enforcement Docket
- Toxic Release Inventory System (TRIS)
- No Further Remedial Action Planned (NFRAP)

The CERCLIS is the EPA compilation of sites for which the EPA has evidence of, or is investigating, a release or threatened release, of hazardous substances which may be subject to review in accordance with the terms and conditions of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund Act). Sites to be included are identified primarily by the reporting requirements of hazardous substances including degreasing solvents, oily waste, acid solutions, alkaline solutions, and heavy metal solutions, Treatment, Storage and Disposal (TSD) facilities and releases larger than specific Reportable Quantities (RQ), established by EPA.

An NPL site is an uncontrolled or abandoned hazardous waste site identified for priority remedial action under Superfund Program. Such prioritized sites with significant risk to human health and the environment receive remedial funding under the Comprehensive Environmental Response Conservation and Liability Act (CERCLA). RCRA generator/TSD list is a compilation of hazardous waste generating facilities which have obtained an identification number from EPA.

ERNS database is a national computer database used to store information on unauthorized release of oil and hazardous substances. The program is a cooperative effort of the Environmental Protection Agency, the Department of Transportation Research and Special Program Administration's National Transportation System Center and the National Response Center. There are primarily five Federal statues that requires release reporting: CERCLA Section 103; the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304; the Clean Water Act of 1972 (CWA) Section 311(b)(3); and the Hazardous Material Transportation Act of 1974 (HMTA) Section 1808 (b).

RCRA Violators List (CORRACTS): The Resource Conservation and Recovery Act of 1976 provides for "Cradle to Grave" regulation of hazardous wastes. RCRA requires regulation of hazardous waste generators, transporters, and TSD sites. Evaluation to potential violations, ranging from manifest requirements to hazardous waste discharges, is typically conducted by the US EPA. This database is also known as Corrective Action Report (CORRACTS).

Toxic Release Inventory System (TRIS): TRIS compiles database for a property having had a release of chemical compound, whose listing reflects permitted air releases rather than a release to soil or groundwater.

B. California State Sources

- State of California Office of Planning and Research (CORTESE), the State of California equivalent of CERCLIS
- Leaking Underground Storage Tanks (LUST)
- Solid Waste Information System (SWIS)
- Annual Work Plan (previously known as Bond Expenditure Plan), the State of California equivalent of NPL
- California Historical Abandoned Site Survey Program (CALSITES)

CALSITES: The Historical Abandoned Site Survey (HASS) Program, formerly the California Abandoned Sites Program Information System – ASPIS, identified certain potential hazardous waste sites. The identification of these sites was generally not made via sampling and site characterization, but as a result of file searches and windshield surveys.

No Further Action sites are also on the CALSITE list which has been marked for no further action by the California Environmental Protection Agency, Department of Toxic Substance Control (DTSC) in accordance with California Health & Safety Code.

CORTESE: This database is a consolidation of information from various sources. It is maintained by the State Office of Planning and Research and lists potential and confirmed hazardous waste or substances sites.

LUST(s): The Leaking Underground Storage Tanks (LUST) Information System is maintained by the State Water Resource Board pursuant to California Health & Safety Code.

SWIS (Solid Waste Information System): As legislated under Solid Waste Management and Resource Recovery Act of 1972, the California Waste Management Board maintains list of certain facilities, i.e. Active solid waste disposal sites, Inactive or Closed solid waste disposal sites and Transfer facilities.

AW (Annual Work Plan previously known as Bond Expenditure Plan): The California Health & Safety code requires the California EPA to develop a site-specific expenditure plan as the basis for an appropriation of California Hazardous Substance Cleanup Bond Act of 1984 funds. The Agency is also required to update annually and report any significant adjustments to the Legislature on an ongoing basis. The plan identifies California hazardous waste sites targeted for cleanup by responsible parties, the California and the Federal Environmental Protection Agency over the next coming years.

C. Regional Sources

- LUST - Regional
- Toxic Releases (NT)
- California Regional Water Resources Control Board, Solid Waste Assessment Test (SWAT)
- Well Investigation Program

NT (Toxic Releases): The California Regional Water Quality Control Boards or local Department of Health & Safety Services keeps track of toxic releases to the environment. These lists are known as Unauthorized Releases, Spill, Leaks, Investigation and Cleanups, Non-Tank Releases, Toxic List or similar, depending on the local agency

SWAT (Solid Waste Assessment Test): This program requires that disposal sites with more than 50,000 cubic yards of waste provide sufficient information to the regional water quality control board to determine whether or not the site has discharged hazardous substances which will impact the environment. Site operators are required to file Solid Waste Assessment Test reports on a staggered basis. Operators submit water quality tests to the Regional Water Quality Control Board, describing surface and groundwater quality and supply; and the geology within 1 mile of the site. Air quality tests are submitted to the local Air Quality Management District or Air Pollution Control District.

D. Other Sources

- RCRA-Generator

- RCRA-TSD Facilities
- SWLF (Solid Waste Landfill)

RCRA-G: The EPA regulates generators of hazardous material through the Resource Conservation and Recovery Act (RCRA). All hazardous waste generators are required to notify EPA of their existence by submitting the Federal Notification of Regulated Waste Activity Form or a State equivalent form. The notification form provides basic identification information and specific waste activities.

RCRA-D: The EPA regulates the treatment, storage and disposal of hazardous material through the Resource Conservation and Recovery Act (RCRA). All hazardous waste TSD facilities are required to notify EPA of their existence by submitting the Federal Notification of Regulated Waste Activity Form or a State equivalent form.

SWLF: The California Waste Information system database consists of both open as well closed and inactive solid waste disposal facilities and transfer stations pursuant to the Solid Waste Management and Resource Recovery Act of 1972. Generally the California Integrated Waste Management Board learns of locations of disposal facilities through permit applications and from local enforcement agencies.

5.3 Case Study References

A. Case-Closure

If sites are listed on the California Leaking Underground Storage Tank (LUST) database with a "case closed (no further remedial actions required)" status, it shall be interpreted as follows. The identified contamination at such sites was mitigated to a degree that the governing agency believed that these sites do not pose apparent concern/threat to the subsurface environment of the neighboring area.

B. Lawrence Livermore National Laboratory Reports on LUFT's

According to Lawrence Livermore National Laboratory / University of California Reports on Leaking Underground Fuel Tanks (LUFT's), approximately ninety percent of dissolved petroleum products are found less than 280 feet in distance from the origination source, and most of these plumes are either stable or decreasing in distance. And seventy percent of the plume is in shallow groundwater less than 25 feet below the ground surface.

C. Groundwater Flow Gradient

Environmentally-concerned sites located not directly at the up-gradient from the subject site can be deleted from anticipated target sites, since contamination from identified sites is unlikely to migrate along the groundwater flow direction to affect the subsurface environment underneath the subject site (Section 2.6 – Hydrogeologic Setting).

5.4 Potential Source of Contamination

Sites identified on referenced agency listing within the one-mile radius from the subject property are tabulated in the Appendix G of this Report. Appendix G shows that there are no open Leaking Underground Storage Tank (LUST)/Spills sites or other sites within the vicinity (< 1/4 mile) of the subject site being identified as of potentially environmental concern.

However, the subject site is situated near the City of Industry area of the San Gabriel Groundwater Basin which has been classified by U.S. EPA as National Priority List (NPL) Cleanup site. Brief discussions of historic background of the San Gabriel Groundwater Basin NPL site are presented below.

In 1983, the California Legislature passed Assembly Bill (AB) 1803, which mandates a program for monitoring organic chemical contamination in wells used by large public water systems. California Department of Health services (CDHS) implemented the program starting in January 1984. More than 300 drinking water wells in the San Gabriel Valley and the San Fernando Valley regions have been tested under the AB 1803 program. These wells were analyzed for volatile organics, trihalomethanes, triazines, semi-volatile organic compounds, lindane, and organochloride pesticides. Contamination of groundwater by trichloroethene (TCE) and tetrachloroethene (PCE) was found in many test wells within the San Gabriel Valley and the San Fernando Valley Groundwater Basins.

TCE and PCE are primarily used in manufacturing processes and as solvents and metal degreasers. Both compounds are suspected carcinogens. After the contamination of groundwater by TCE and PCE in the San Gabriel Valley and the San Fernando Valley Basins was detected, in 1984, Federal EPA placed the San Gabriel Valley and the San Fernando Valley Groundwater Basins on EPA's National Priority List of hazardous waste sites, making them eligible for cleanup funding under the federal Superfund program. Currently, U.S. EPA funds the cleanup of groundwater within these two basins. However, U.S. EPA also funds the California Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA) AB 1803 Follow-Up (or Well Investigation) Program to identify potential responsible parties (PRP's) for the regional groundwater degradation to share financial burden of costly cleanup. Historic site usage information search has been used by the RWQCB-LA Well Investigation Program (WIP) as a tool to identify sites within the San Gabriel Valley and the San Fernando Valley regions with past on-site manufacturing or business operations potentially employing TCE and PCE.

As shown in Appendix F, Custom Mills Inc., Portor Hardwood Lumber Co., Scott-Caudill Lumber Co. (all former subject site occupants; see Section 2.4) were under the investigation

by the RWQCB-LA WIP with respective file No. 102.0189, 102.0198, and 102.0231. However, the status of the said subject site files are "historical" (not "active") indicating the RWQCB-LA WIP has completed investigation on these formerly onsite business and decided activities of these businesses would not significantly contribute to the identified regional groundwater contamination (mainly by PCE and TCE).

5.5 UST, Disposal Sites, and Generators

As also summarized in Appendix G, there are eight sites listed on RCRA hazardous waste generators list and five sites listed on permitted active Underground Storage Tank (UST) database compiled by the State Water Resources Control Board, located within 1/4-mile radius of the subject property. Upon reviewing the information regarding the said facilities obtained via computer search, the conclusion was drawn that the subsurface environment at the subject site is not likely to have been impacted by operations of the said facilities.

6. SUMMARY AND CONCLUSION

- The subject site, 14624 & 14700 Nelson Avenue (APN 8208-006-900, 901, & 902), is a roughly "U"-shaped (with opening of "U" facing north-northeast and two arms of "U" with different widths) bordered by Nelson Avenue to the north and Southern Pacific Railroad to the south within the block between Sunset Avenue to the west and California Avenue to the east in the western portion of the City of Industry, California. The site is currently mainly a fenced unpaved vacant lot with also small paved parking at the northwestern corner of the eastern arm of the roughly "U"-shaped subject lot, and paved driveway occupying the entire western arm of the roughly "U"-shaped subject lot. No pits, ponds, swamps, dry wells, or lagoons were observed on the subject property. No apparently significant surface staining was observed within the entire unpaved/paved out door areas of the site.

  During REM's site inspection on October 26, 2015, the subject site was mainly a fenced unpaved vacant lot with also small paved parking at the northwestern corner of the eastern arm of the roughly "U"-shaped subject lot, and paved driveway occupying the entire western arm of the roughly "U"-shaped subject lot.

- Various historic sources listed in Section 2.4 reveal the following development/ occupancy history for the subject site:

  The 1940's and the 1950's – The site was generally for agricultural usage with farm houses present at the northeastern corner of the site

  The 1960's - The site was generally vacant lot with houses present at the northeastern corner of the site

  The 1970's - The eastern portion of the site was developed for being occupied by Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address); and the western portion of the site remained vacant

  The 1980's - Scott-Caudill Lumber (14624 Nelson Avenue) occupied the western portion of the site; and Custom Mills Inc. and Porter Hardwood Lumber Co. (both with 14700 Nelson Avenue address) occupied the eastern portion of the site

  The 1990's and the 2000's - Scott-Caudill Lumber (14624 Nelson Avenue) was shown as the sole occupant of the site

  2012 – The formerly on-site structures were demolished

- On October 28, 2015, REM staff visited the Co. of LA Dept. of Public Works (CLADPW), Environmental Programs Division, Alhambra office to review/photocopy pertinent site UST removal records (included as Appendix D) for the site. Based on available records, in December 1990, one 6,000-gallon gasoline UST located to the west of office building (see 2012 aerial photo for the site area included in Appendix C for location) for the 14624 Nelson Avenue address and its associated piping/dispenser were removed from the site by H.B Cover, Inc. (HBC). Post-UST removal under removed gasoline UST soil sampling/analysis conducted under the supervision of the CLADPW inspector by Connor Environmental Management, Inc. (Connor) did not reveal significant evidence of soil contamination.

  Activities/findings of the 12/1990 site UST removal were summarized in Connor's 2/9/1991 UST Removal Report (with text/figure included in Appendix D) submitted to the CLADPW for review on 4/22/1991. Upon reviewing the said submittal, the CLADPW issued a 12/31/2011 response letter (copy also included in Appendix D) addressing to Mr. George Caudill (apparently the then site owner) and requiring 1) clarification on the sampling date (7/19/1990; which was apparently wrong as UST was removed in 12/2010) indicated on Table 1 of the report; 2) signature by operator of UST cleaning rinsate receiving facility on the manifest; and 3) put "all site work was done under the direct supervision of the signing professional" statement into the report. Based no records available at the CLADPW, no response to above three CLADPW's requirement has ever been provided to the CLADPW; and, therefore, the site 1990 UST removal case remains with an "open' status.

- List and quantities of the hazardous materials previously or presently used, disposed, treated, stored, or generated at the subject property were searched and assessed. During the site inspection, the use, storage, and generation of significant quantity of hazardous materials was not observed.

  REM staff also searched the State Department of Toxic Substances Control-compiled records website for all documented hazardous wastes disposal activities throughout California in the past at http://hwts.dtsc.ca.gov/report_list.cfm for site addresses and found that (see Appendix E) City of Industry (with 14700 Nelson Ave address) disposed of 2 tons of asbestos-containing wastes (apparently derived from demolition of formerly on-site structures) with no spills or violation records.

- The conducted government records search identifies that (Former) Lane-Stanton-Vance Lumber Co. (14710 Nelson Avenue, immediately to the east of the subject property) is listed on State Water Board-compiled Leaking Underground Storage Tank (LUST)/Spills facilities database with a "Case Closed" status. The former UST leakage/

spills case at the (Former) Lane-Stanton-Vance Lumber Co. site was apparently satisfactorily treated under the supervision of the lead agency to the degree that no apparently significant environmental concerns for its neighboring areas are likely being induced from remaining untreated UST leakage/spills, if any, at the (Former) Lane-Stanton-Vance Lumber Co. site.

In summary, no locations in the neighborhood within close proximity are considered to pose any environmental threat to the subject property, based upon the data obtained via NETR governmental records database and the conducted government records search.

- Based on the conducted government records search, there are no open Leaking Underground Storage Tank (LUST)/Spills sites or other sites identified as exhibiting potentially environmental concerns within the vicinity (< 1/4 mile) of the subject site.

  However, the subject site is situated near the City of Industry area of the San Gabriel Groundwater Basin which has been classified by U.S. EPA as National Priority List (NPL) Cleanup site. Brief discussions of historic background of the San Gabriel Groundwater Basin NPL site are presented below.

  In 1983, the California Legislature passed Assembly Bill (AB) 1803, which mandates a program for monitoring organic chemical contamination in wells used by large public water systems. California Department of Health services (CDHS) implemented the program starting in January 1984. More than 300 drinking water wells in the San Gabriel Valley and the San Fernando Valley regions have been tested under the AB 1803 program. These wells were analyzed for volatile organics, trihalomethanes, triazines, semi-volatile organic compounds, lindane, and organochloride pesticides. Contamination of groundwater by trichloroethene (TCE) and tetrachloroethene (PCE) was found in many test wells within the San Gabriel Valley and the San Fernando Valley Groundwater Basins.

  TCE and PCE are primarily used in manufacturing processes and as solvents and metal degreasers. Both compounds are suspected carcinogens. After the contamination of groundwater by TCE and PCE in the San Gabriel Valley and the San Fernando Valley Basins was detected, in 1984, Federal EPA placed the San Gabriel Valley and the San Fernando Valley Groundwater Basins on EPA's National Priority List of hazardous waste sites, making them eligible for cleanup funding under the federal Superfund program. Currently, U.S. EPA funds the cleanup of groundwater within these two basins. However, U.S. EPA also funds the California Regional Water Quality

Control Board-Los Angeles Region (RWQCB-LA) AB 1803 Follow-Up (or Well Investigation) Program to identify potential responsible parties (PRP's) for the regional groundwater degradation to share financial burden of costly cleanup. Historic site usage information search has been used by the RWQCB-LA Well Investigation Program (WIP) as a tool to identify sites within the San Gabriel Valley and the San Fernando Valley regions with past on-site manufacturing or business operations potentially employing TCE and PCE.

As shown in Appendix F, Custom Mills Inc., Portor Hardwood Lumber Co., Scott-Caudill Lumber Co. (all former subject site occupants; see above) were under the investigation by the RWQCB-LA WIP with respective file No. 102.0189, 102.0198, and 102.0231. However, the status of the said subject site files are "historical" (not "active") indicating the RWQCB-LA WIP has completed investigation on these formerly onsite business and decided activities of these businesses would not significantly contribute to the identified regional groundwater contamination (mainly by PCE and TCE).

- In conclusion, we have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527-13 of 14624 & 14700 Nelson Ave, City of industry, CA (the property). This assessment has identified that the 1990 UST removal case for the 14624 Nelson Avenue address remaining with "open" status due to the responsible party did not respond to a CLADPW's 12/31/1991 letter requiring additional clarification/signature/statement for the UST closure report. Since more than 20 years have lapsed since the letter issuance date, even though original requirements by the CLADPW were just for additional paper works in nature, for the CLADPW to grant closure for the site now, the CLADPW may require additional subsurface investigations around the former site area (see 2012 aerial photo for the site area included in Appendix C for location).

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7. LIMITATIONS AND CERTIFICATION STAMP

The opinion expressed herein is based on the information collected during our study, our present understanding of the site conditions and our professional judgment in light of such information at the time of preparation of this opinion. The report is a professional opinion work, and no warranty is either expressed, implied or made as to the conclusions, advice and recommendations offered in this report.

Our investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable Engineers and Geologists practicing in this or similar localities.

The findings, conclusions and recommendations in this report are considered valid as of the present date. However, changes in the conditions of the property can occur with the passage of time, due to natural process or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standard may occur. REM is not responsible for conditions found at or beneath the subject property or adjacent properties. Accordingly, portions of this report may be invalidated wholly or partially by the changes beyond our control.

This report is prepared for the exclusive use of the client, and opinions/recommendations contained in this report apply only to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated.

Report Prepared by:
ROBIN ENVIRONMENTAL MANAGEMENT

Robin Chang

Robin Chang, Ph.D., P.G.
Project Manager

PROFESSIONAL GEOLOGIST
SHIH-SIN ROBIN CHANG
5333
Expires: 07/31/17
STATE OF CALIFORNIA

8. QUALIFICATION STATEMENT FOR PERSONNEL CONDUCTING THE PHASE I ASSESSMENT

Since Robin Chang, the personnel conducting the Phase I Environmental assessment is a California State Registered Professional Geologist, Robin Chang declares that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Sec. 312.10 of 40 CFR. I have the specific qualifications based on education, training, experience, and license to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

ROBIN ENVIRONMENTAL MANAGEMENT

Robin Chang

Robin Chang, Ph.D., P.G.
Project Manager

APPENDICES

APPENDIX A

FIGURES & PHOTOS

FIGURE 1

SITE PHOTOS

Photo 1
Viewing the site from near its northeastern corner (facing southwest)

Photo 2
Paved driveway occupying the entire western arm of the roughly "U"-shaped subject lot (facing south-southwest)

Photo 3

Paved parking at the northwestern corner of the eastern arm of the roughly "U"-shaped subject lot (facing south)

Photo 4

Church/apartments, across Nelson Avenue, to the north of the eastern main arm of the roughly "U"-shaped subject lot (facing east)

Photos 5 & 6

Nafta Shoes, Inc. (14632 Nelson Avenue; to the west) on the lower photo and San Gabriel Valley Water Company (14650 Nelson Avenue; to the east) on the upper photo engulfed by the roughly "U"-shaped subject lot to its north (with both photos generally facing south-southwest)

Photo 7

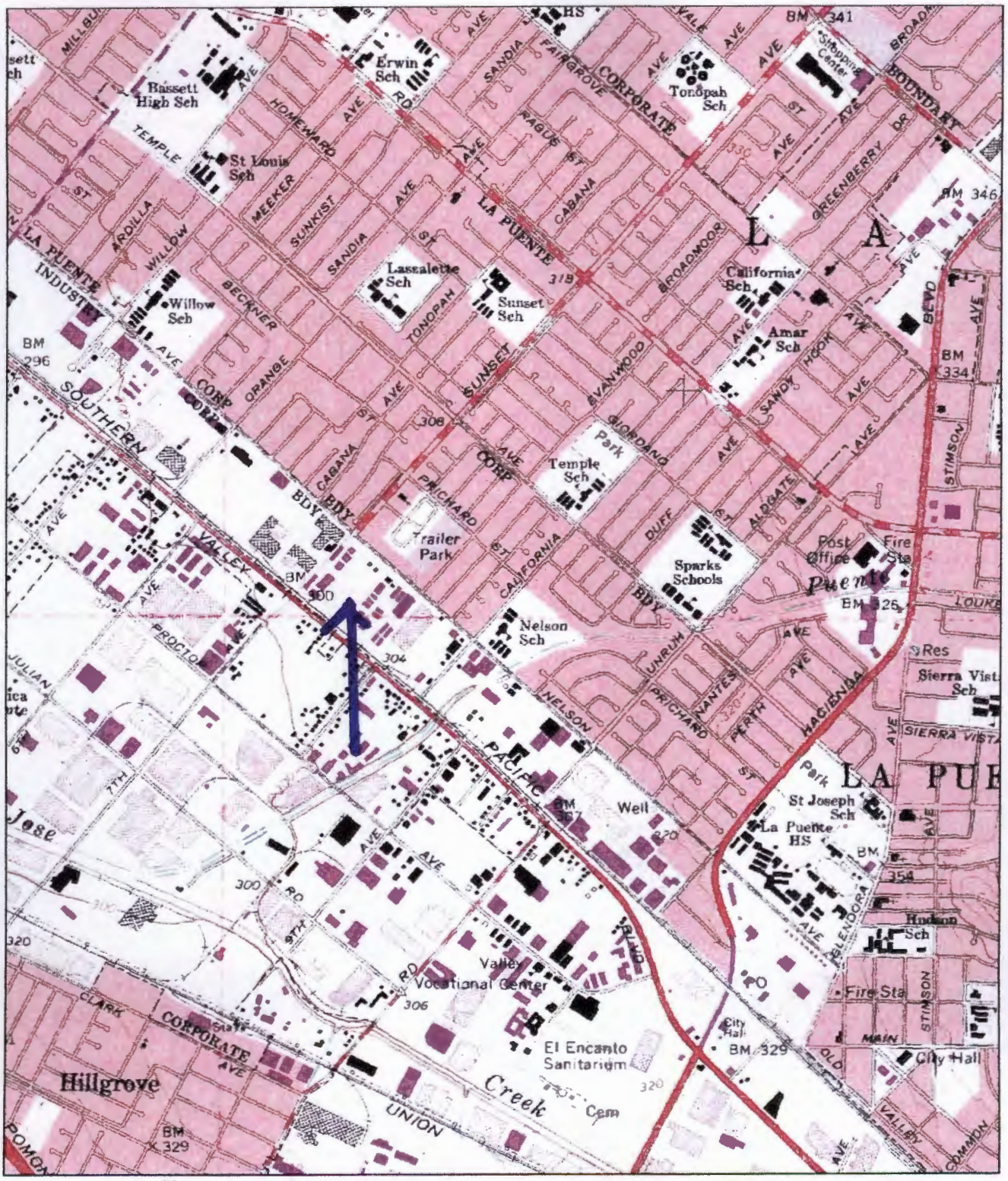
BlueLinx Corporation (14710 Nelson Avenue) to the east of the site (facing southeast)

Photo 8

West side view of various light industrial properties to the west of the site (facing north-northeast)

FIGURE 2

SITE LOCATION MAP



N

0 0.5 Mi

0 2000 Ft

Map provided by MyTopo.com

FIGURE 3

RECENT AERIAL PHOTOGRAPH SHOWING SITE AND ITS VICINITY GENERAL LAYOUT

N Sunset Ave
Nelson Ave
N Sunset Ave
WATER CO.
236
228
220
14632 NELSON
14650 NELSON
14700 NELSON
NELSON
430
424
414
14624 Nelson Ave, City of Industry, CA 91744
E Valley Blvd
© 2016 HERE

N

APPENDIX B

CO. ASSESSORS OFFICE RECORDS SUMMARIES

Parcel Details

- Property records are kept at the East District Office
- How frequently is this site updated? (and other FAQs)

Property Information

Assessor's ID No:	8208-006-900
Address:	14700 NELSON AVE INDUSTRY CA 91744
Property Type:	Commercial / Industrial
Region / Cluster:	27 / 27862
Tax Rate Area (TRA):	04398

- View Assessor Map
- View Index map

Recent Sales Information

Latest Sale Date:
Indicated Sale Price:

Search for Recent Sales

2015 Roll Values

Recording Date:	06/14/2012
Land:	$0
Improvements:	$0
Personal Property:	$0
Fixtures:	$0
Homeowners' Exemption:	$0
Real Estate Exemption:	$0
Personal Property Exemption:	$0
Fixture Exemptions:	$0

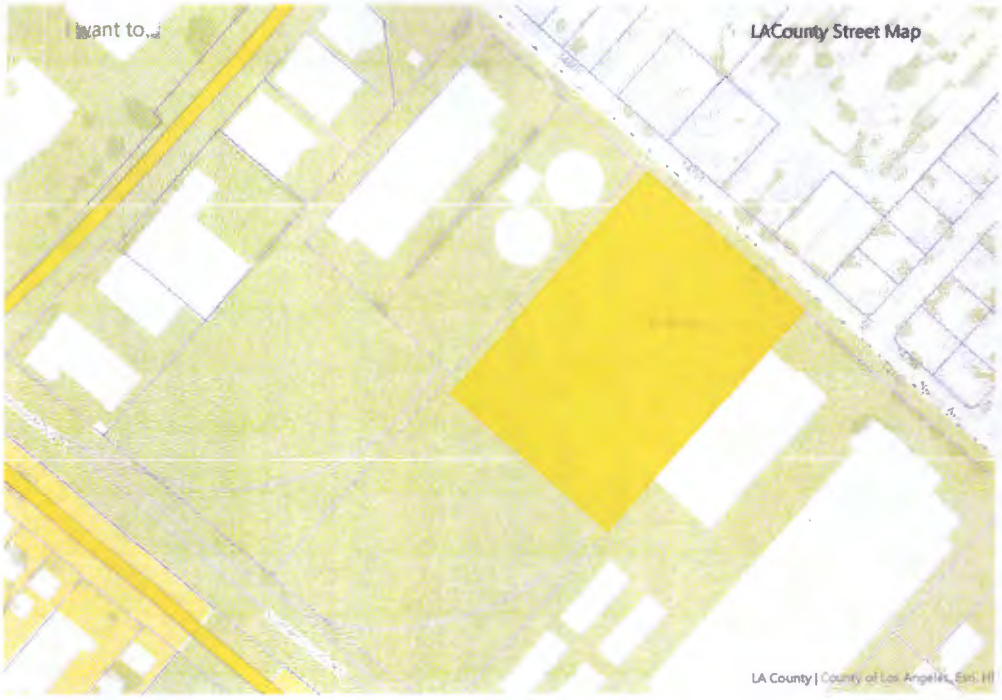
- 2015 Annual taxes
- Property tax payment FAQs
- Estimate supplemental taxes

Property Boundary Description

PM 139-71 LOT 1

Building Description

Building Improvement 1	
Square Footage:	80,000
Year Build / Effective Year Built:	1970 / 1970
Bedrooms / Bathrooms	0 / 0
Units	0
Building Improvement 2	
Square Footage:	6,495
Year Build / Effective Year Built:	1970 / 1971
Bedrooms / Bathrooms	0 / 3
Units	1
Building Improvement 3	
Square Footage:	11,640
Year Build / Effective Year Built:	1970 / 1971
Bedrooms / Bathrooms	0 / 0
Units	0
Building Improvement 4	
Square Footage:	9,000
Year Build / Effective Year Built:	1974 / 1974
Bedrooms / Bathrooms	0 / 0
Units	1
Building Improvement 5	
Square Footage:	0
Year Build / Effective Year Built:	1970 / 1970
Bedrooms / Bathrooms	0 / 0
Units	0



0 100 200ft

Parcel Details

- Property records are kept at the East District Office
- How frequently is this site updated? (and other FAQs)

Property Information

Assessor's ID No:	8208-006-901
Address:	14700 NELSON AVE INDUSTRY CA 91744
Property Type:	Commercial / Industrial
Region / Cluster:	27 / 27862
Tax Rate Area (TRA):	04398

- View Assessor Map
- View Index map

Recent Sales Information

Latest Sale Date:
Indicated Sale Price:

Search for Recent Sales

2015 Roll Values

Recording Date:	06/14/2012
Land:	$0
Improvements:	$0
Personal Property:	$0
Fixtures:	$0
Homeowners' Exemption:	$0
Real Estate Exemption:	$0
Personal Property Exemption:	$0
Fixture Exemptions:	$0

- 2015 Annual taxes
- Property tax payment FAQs
- Estimate supplemental taxes

Property Boundary Description

PM 139-71 LOT 2

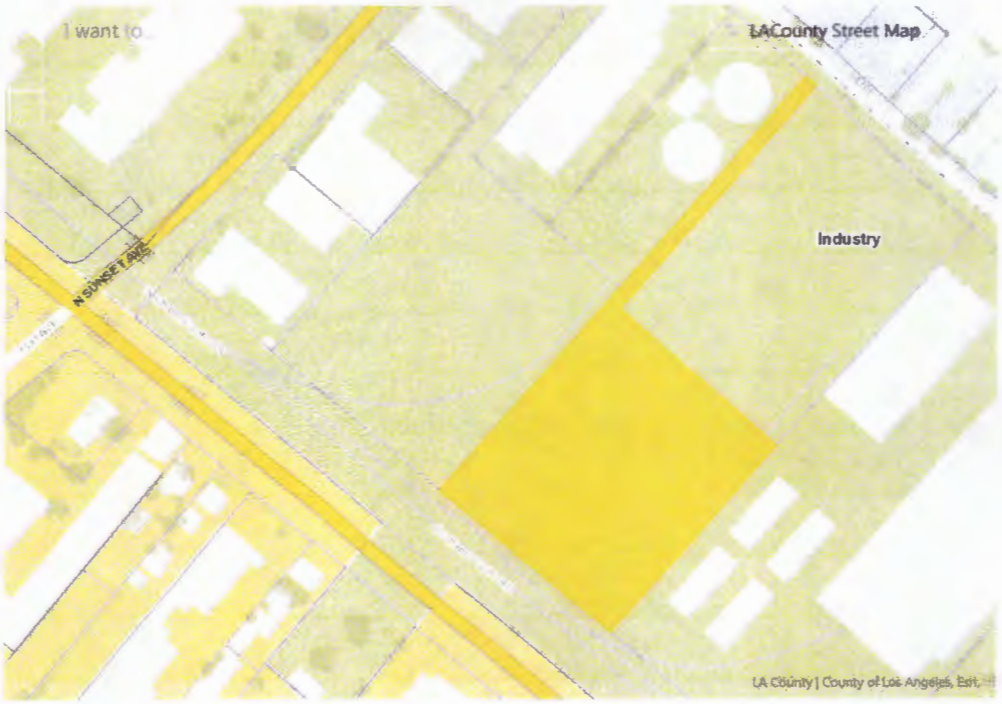
Building Description

Building Improvement 1

Square Footage:	26,657
Year Build / Effective Year Built:	1977 / 1977
Bedrooms / Bathrooms	0 / 0
Units	0

Building Improvement 2

Square Footage:	19,440
Year Build / Effective Year Built:	1970 / 1970
Bedrooms / Bathrooms	0 / 0
Units	0



0 100 200ft

Parcel Details

I want to

- Property records are kept at the Headquarters Office
- How frequently is this site updated? (and other FAQs)

Property Information

Assessor's ID No:	8208-006-902
Address:	14624 NELSON AVE INDUSTRY CA 91744
Property Type:	Commercial / Industrial
Region / Cluster:	22 / 22148
Tax Rate Area (TRA):	04398

- View Assessor Map
- View Index map

Recent Sales Information

Latest Sale Date:
Indicated Sale Price:

Search for Recent Sales

2015 Roll Values

Recording Date:	06/14/2012
Land:	$0
Improvements:	$0
Personal Property:	$0
Fixtures:	$0
Homeowners' Exemption:	$0
Real Estate Exemption:	$0
Personal Property Exemption:	$0
Fixture Exemptions:	$0

- 2015 Annual taxes
- Property tax payment FAQs
- Estimate supplemental taxes

Property Boundary Description

P M 108-16 LOT 2

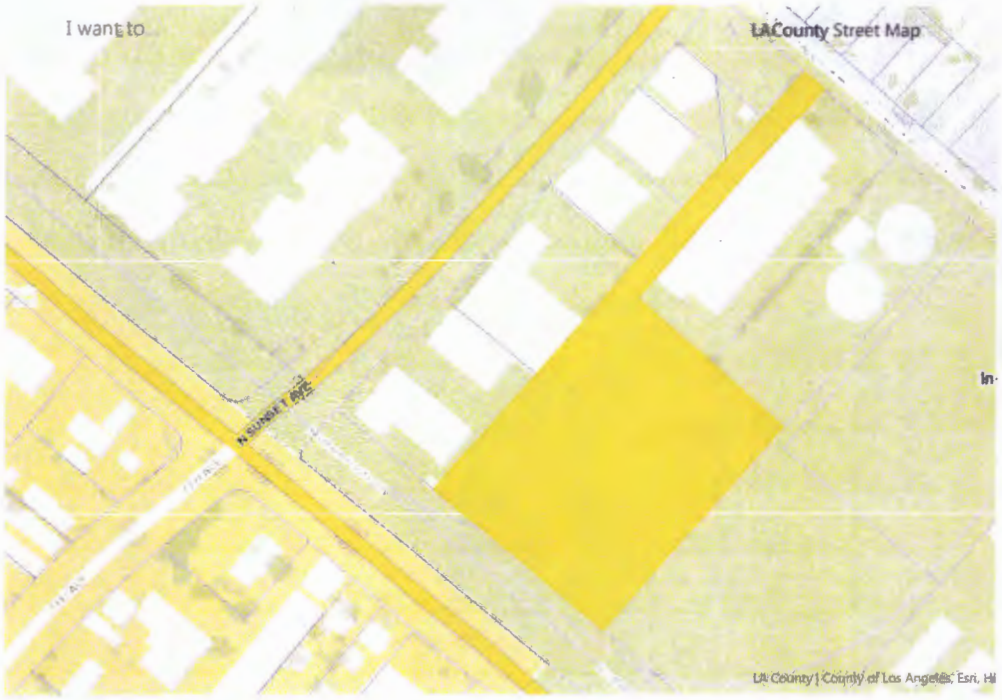
Building Description

Building Improvement 1

Square Footage:	28,480
Year Build / Effective Year Built:	1980 / 1980
Bedrooms / Bathrooms	0 / 0
Units	6

Building Improvement 2

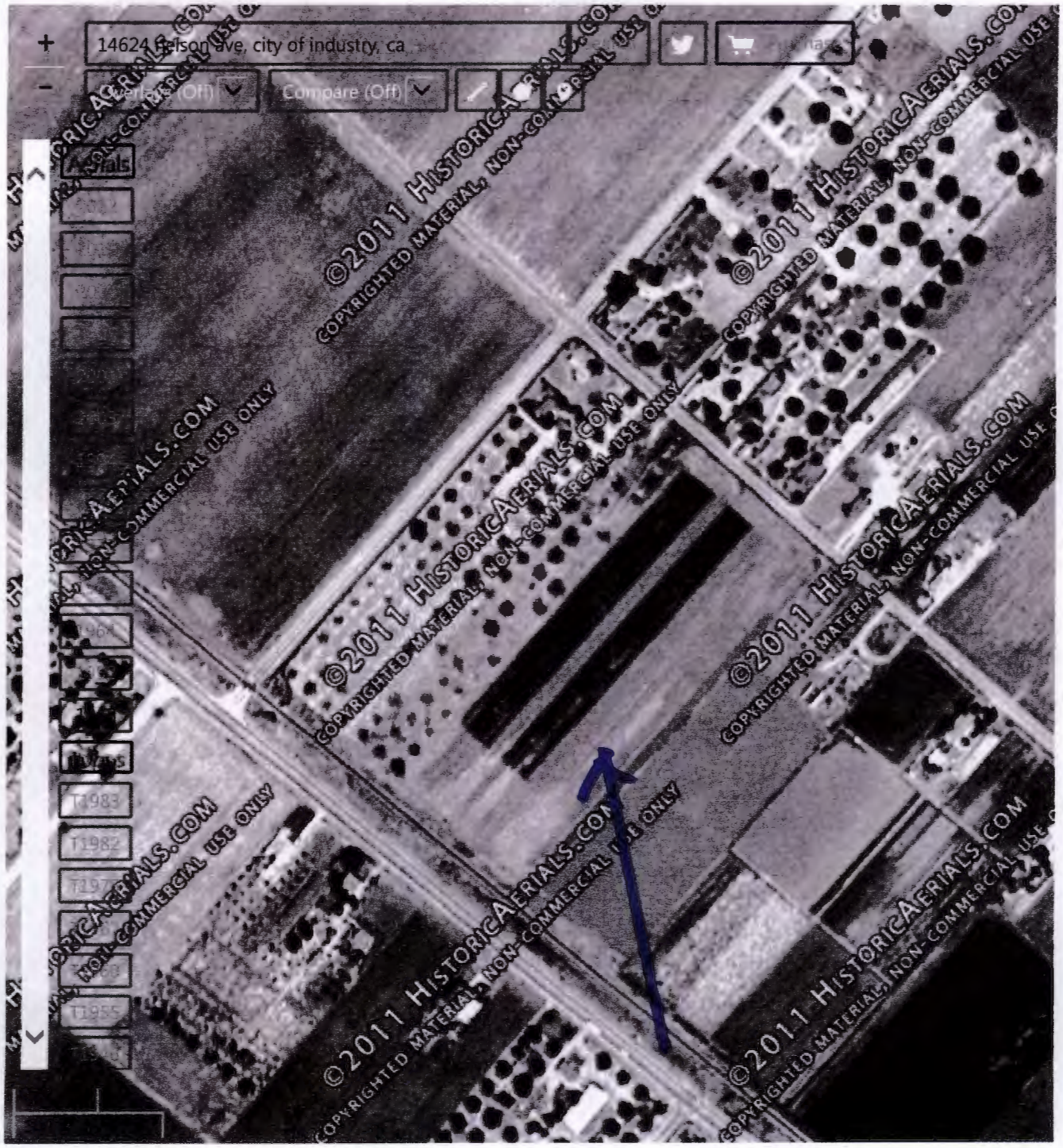
Square Footage:	2,400
Year Build / Effective Year Built:	1983 / 1983
Bedrooms / Bathrooms	0 / 0
Units	0



0 100 200ft

APPENDIX C

HISTORIC AERIAL PHOTO RECORDS



1948

NEW ADDITIONS

- Ottawa, Michigan (1969)
- LaPorte, Indiana (1969)
- Scott, Indiana (1943)
- Warren, Ohio (1964)
- Marion, Ohio (1970)
- Montcalm, Michigan (1969)
- Muskegon, Michigan (1969)
- St. Joseph, Michigan (1969)
- Sullivan, Indiana (1964)
- Licking, Ohio (1970)

DISCUSSIONS

- historicaerials user interface broken
- ETA For Upgrades
- What's happened to the 1952 and 1956 Dallas imagery?
- Old imagery at an angle?
- Recent server issues and Phone messages

NEW ADDITIONS

- Ottawa, Michigan (1969)
- LaPorte, Indiana (1969)
- Scott, Indiana (1943)
- Warren, Ohio (1964)
- Marion, Ohio (1970)
- Montcalm, Michigan (1969)
- Muskegon, Michigan (1969)
- St. Joseph, Michigan (1969)
- Sullivan, Indiana (1964)
- Licking, Ohio (1970)

DISCUSSIONS

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NEW ADDITIONS

- Ottawa, Michigan (1969)
- LaPorte, Indiana (1969)
- Scott, Indiana (1943)
- Warren, Ohio (1964)
- Marion, Ohio (1970)
- Montcalm, Michigan (1969)
- Muskegon, Michigan (1969)
- St. Joseph, Michigan (1969)
- Sullivan, Indiana (1964)
- Licking, Ohio (1970)

DISCUSSIONS

- historicaerials user interface broken
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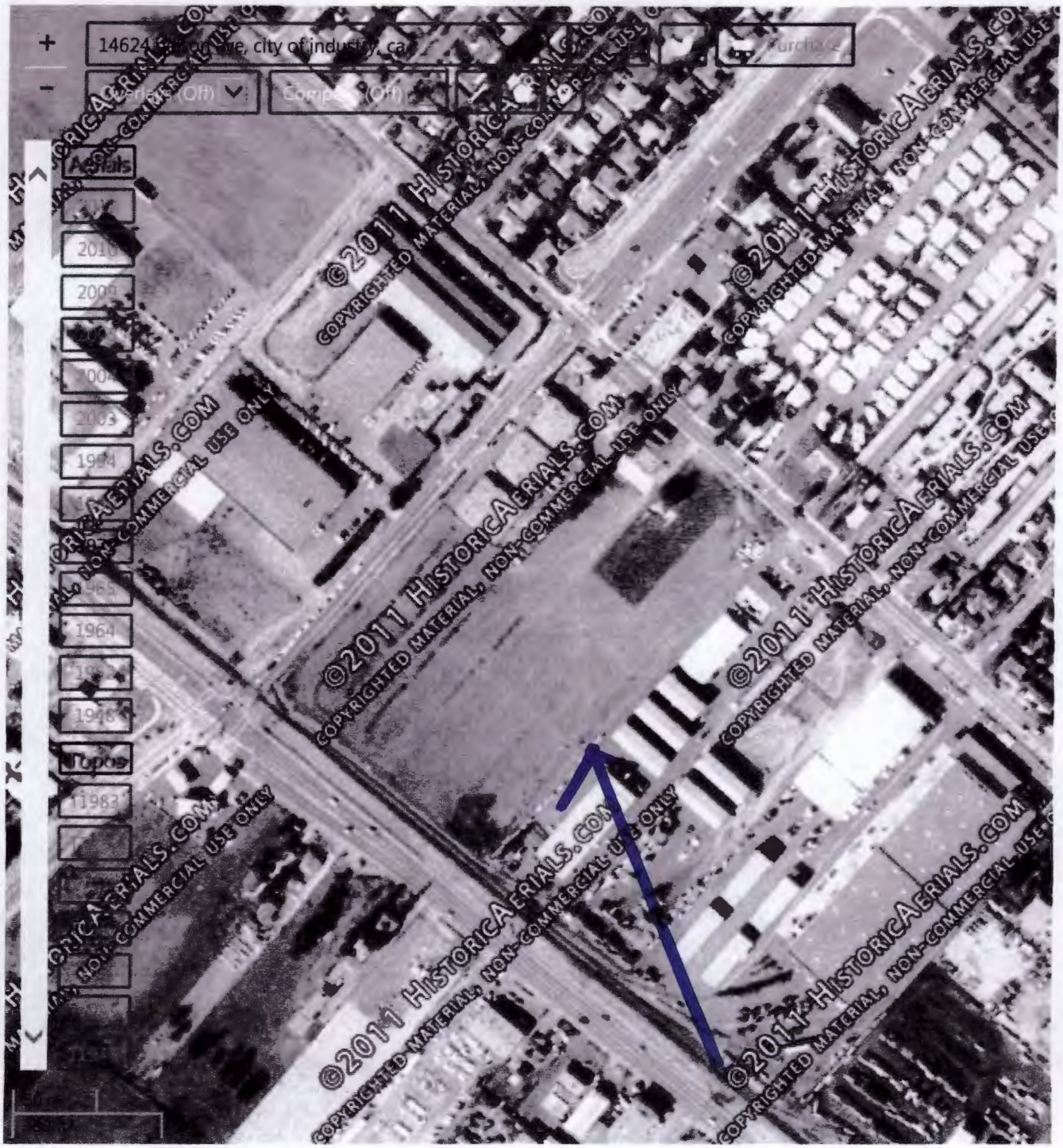
- What's happened to the 1952 and 1956 Dallas imagery?
- Old imagery at an angle?
- Recent server issues and Phone messages



1972

N

NEW ADDITIONS

Ottawa, Michigan (1969)
LaPorte, Indiana (1969)
Scott, Indiana (1943)
Warren, Ohio (1964)
Marion, Ohio (1970)
Montcalm, Michigan (1969)
Muskegon, Michigan (1969)
St. Joseph, Michigan (1969)
Sullivan, Indiana (1964)
Licking, Ohio (1970)

DISCUSSIONS

historicaerials user interface broken
ETA For Upgrades
What's happened to the 1952 and 1956 Dallas imagery?
Old imagery at an angle?
Recent server issues and Phone messages

1980

NEW ADDITIONS

- Ottawa, Michigan (1969)
- LaPorte, Indiana (1969)
- Scott, Indiana (1943)
- Warren, Ohio (1964)
- Marion, Ohio (1970)
- Montcalm, Michigan (1969)
- Muskegon, Michigan (1969)
- St. Joseph, Michigan (1969)
- Sullivan, Indiana (1964)
- Licking, Ohio (1970)

DISCUSSIONS

- historicaerials user interface broken
- ETA For Upgrades
- What's happened to the 1952 and 1956 Dallas imagery?
- Old imagery at an angle?
- Recent server issues and Phone messages

NEW ADDITIONS

- Ottawa, Michigan (1969)
- LaPorte, Indiana (1969)
- Scott, Indiana (1943)
- Warren, Ohio (1964)
- Marion, Ohio (1970)
- Montcalm, Michigan (1969)
- Muskegon, Michigan (1969)
- St. Joseph, Michigan (1969)
- Sullivan, Indiana (1964)
- Licking, Ohio (1970)

DISCUSSIONS

- historicaerials user interface broken
- ETA For Upgrades
- What's happened to the 1952 and 1956 Dallas imagery?
- Old imagery at an angle?
- Recent server issues and Phone messages

APPENDIX D

2/1991 SITE UST REMOVAL REPORT TEXT/FIGURE AND CLADPW'S 12/1991 REPONSE TO THE REPORT

102233

Prepared for:

H.B. COVEY, INC.
350 EAST COMMERCIAL AVENUE
POMONA, CALIFORNIA 91767

REMOVAL REPORT FOR UNDERGROUND TANK LOCATED AT SCOTT CAUDILL LUMBER CO. 14624 E. NELSON AVENUE INDUSTRY, CALIFORNIA CEM PROJECT NO. 31-002

FEBRUARY 19, 1991

Prepared by:

CONNOR ENVIRONMENTAL MANAGEMENT, INC.
17942 SKYPARK CIRCLE, SUITE H
IRVINE, CALIFORNIA 92714

REGISTERED PROFESSIONAL ENGINEER
RICHARD J. CUNNINGHAM
C26736
EXP. 3-31-93
CIVIL
STATE OF CALIFORNIA

WRITTEN BY:

Michael H. Piper
Project Manager

APPROVED BY:

R.J. Cunningham, P.E.

1.0 INTRODUCTION

102233

This document constitutes a report on the removal of an underground storage tank from the Scott Caudill Lumber Company located at 14624 E. Nelson Avenue, Industry, California (hereinafter referred to as "Site"; see Figure 1). The tank is a 6000 gallon steel tank and was used to store unleaded gasoline.

The scope of Connor Environmental Management, Inc. (CEM) services for this investigation consisted of obtaining and delivering two soil samples to the laboratory for analytical testing, interpreting the testing results, and preparing this report.

2.0 FIELD WORK

2.1 Removal of Tank

On December 20, 1990, pursuant to Closure Permit #7673B issued by the Los Angeles County Department of Public Works, Waste Management Division (County), the tank was removed from the Site by H.B. Covey, Inc. (HBC). Appendix A contains a copy of the removal permits issued by the County and by the City of Pomona Fire Department.

HBC reported to CEM that the tank was cleaned, triple rinsed, and the effluent generated during cleaning manifested and properly disposed of under State Manifest #90654907. (See Appendix B.)

Prior to removal, HBC staff placed dry ice in the tank. The tank was then removed upon approval from the on-site City of Pomona Fire Inspectors. The base of the tank was located approximately 10 feet below grade. The tank appeared to be intact and no holes were observed. After removal, the tank was properly manifested, transported, and disposed (see Appendix C).

2.2 Soil Sampling

The removal application required that soil samples be collected from beneath the tank invert, dispenser, and piping. Following the sampling procedures set by Los Angeles County Health Department for underground tank removal (see Appendix A), a total of two soil samples were collected from beneath the tank pit. It was

determined that these two samples would be sufficient to document leaks associated with the tank, dispenser or piping due to the system configuration (Dispenser located above tank, see Figure 2).

Immediately after the tank was removed, a backhoe was used to remove the "sluff" from the excavation, in order to ensure that the samples were obtained from native soil. Soil samples 1A and 2B were obtained at approximately two feet beneath the former location of the tank, or approximately 12 feet below grade. Sample 1A was collected from the east end of the excavation and sample 2B was collected from the west end. No sample was taken from under the fuel dispensing unit, due to its location directly over the tank. The backhoe bucket was used to obtain and bring the soil from each sampling point to the surface. The samples were collected from the teeth of the bucket using a stainless steel trowel and sealed in 8-ounce glass jars with Teflon septa lined lids. The jars were completely filled so that no head space existed between the samples and the lids. The lids were screwed on firmly and the junction between the lids and the jars were sealed with black electrical tape. The samples were labeled with the sample location, date, time, and depth, and placed immediately into an ice chest chilled using frozen blue ice. The samples were logged on a chain of custody record form and kept chilled until delivery to the laboratory for analytical testing (see Appendix D).

The soil removed during excavation activities was stockpiled on the Site. No samples for analytical testing were obtained from the stockpiled soil. After the tank was removed. the stockpiled soil was returned to the pit.

DEPTH TO GROUNDWATER

No groundwater was encountered during excavation and sampling activities. The depth to usable groundwater is approximately 138 feet below surface grade, based on measurements obtained in November, 1989, from well #3026E, located approximately 1000 feet southwest of the Site (personal communication, Dora Herrera, Los Angeles County Department of Public Works - Groundwater Records, January 1991) and considering the elevation of the Site (USGS topographic 7.5 minute quadrangle, Baldwin Park, California).

4.0 ANALYTICAL TESTING

The soil samples were delivered for analytical testing to Weck Laboratories, Inc., of Industry, California certified by the California Department of Health Services to analyze hazardous waste (Certificate #E732). Based on the requirements contained in the County Closure Permit #7673B, the soil samples obtained from beneath the tank were analyzed for total petroleum hydrocarbons (TPH) using modified EPA Method 8015, and for benzene, toluene, xylenes, and ethylbenzene (BTXE) using EPA Method 8020. The results of the testing are shown in Table 1. The laboratory report is contained in Appendix E.

TABLE 1

CONCENTRATION OF TPH AND BTXE IN SOIL SAMPLE OBTAINED ON JULY 19, 1990

Parts per million (ppm)

Sample ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	TPH[1]
1A	ND[2]	0.017	ND	ND	ND
2B	ND	0.034	ND	ND	ND

[1] TPH = Total Petroleum HC as gasoline
[2] ND = Not Detected; see Appendix E for detection limits.

5.0 DISCUSSION

As shown in Table 1, detectable concentrations of toluene were present in the so samples obtained from beneath the tank. However concentrations of Benzene, Tot Xylenes, Ethylbenzene and TPH were not detected.

6.0 CONCLUSION AND RECOMMENDATIONS

Based on the low level of TPH found, no additional assessment activities are recommended at this time. The Site may be compacted, leveled, and resurfaced following proper procedures.

7.0 LIMITATION

Our professional services were performed using at least that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities. This report has been prepared for H.B. Covey, Inc. No other warranty, express or implied, is made as to the professional advice contained in this report.

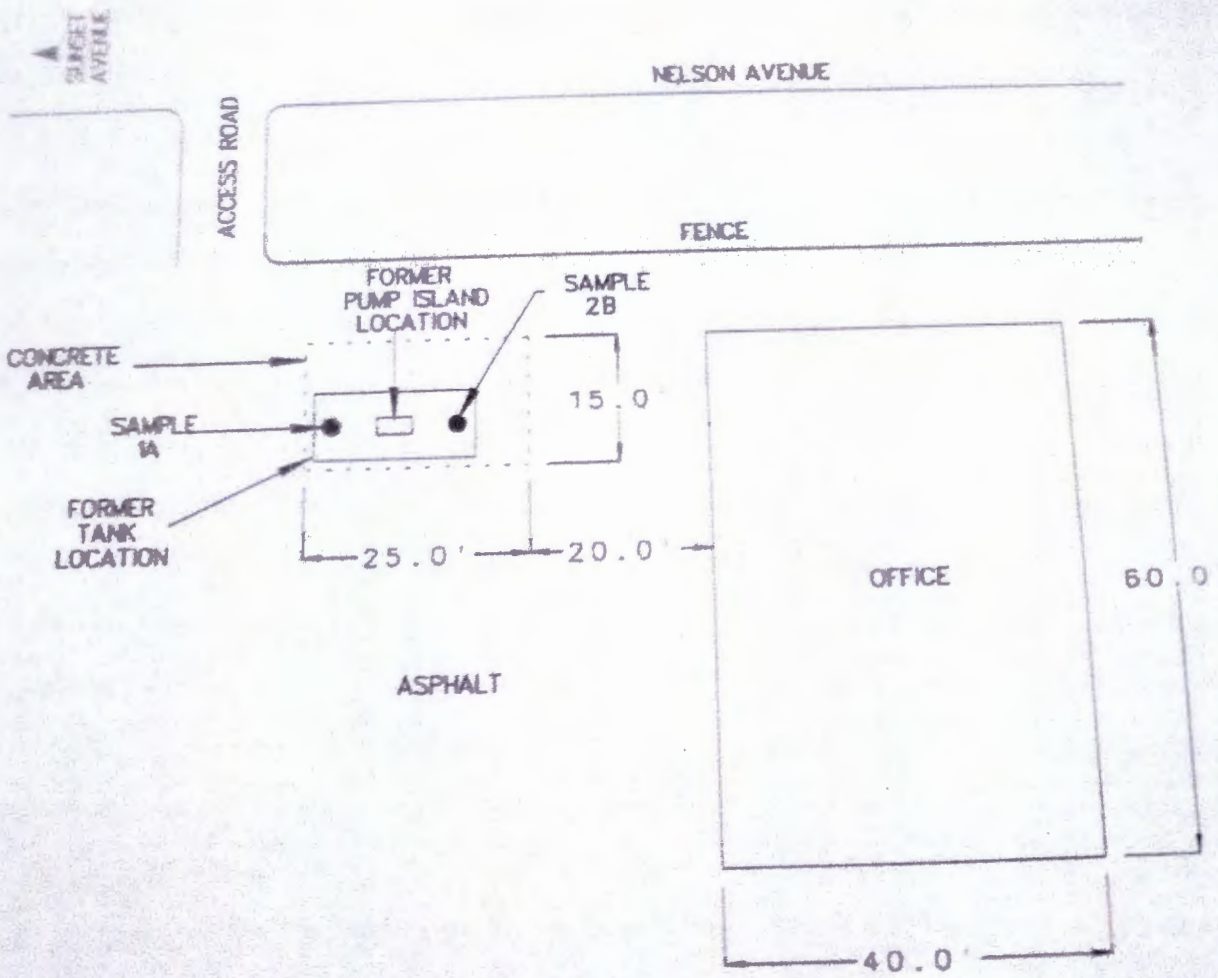


FIGURE 2
SITE PLAN
SCOTT CAUDILL SUMBER CO.
14524 E. NELSON AVENUE
INDUSTRY, CALIFORNIA

	1" : 20'	NORTH	JOB NO. 00-000
BY	M. PIPER	00/00/91	
D BY			

CONNOR ENVIRONMENTAL MGMT.
17942 SKYPARK CIRCLE, SUITE H
IRVINE, CALIFORNIA 92714
(714) 263-1534 FAX (714) 263-1534

DEPARTMENT OF PUBLIC WORKS
900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

THOMAS A. TIDEMANSON, Director

ADDRESS ALL CORRESPONDENCE
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91803

December 31, 1991

IN REPLY PLEASE REFER TO FILE WM-1 I-13029-GP

Mr. George Caudill
14624 E. Nelson Avenue
City of Industry, CA 91744

HAZARDOUS MATERIAL UNDERGROUND STORAGE
CLOSURE/SITE ASSESSMENT REPORT
CLOSURE PERMIT NO. 7673B
FACILITY LOCATION: 14624 EAST NELSON AVENUE, INDUSTRY

This office has reviewed the closure report submitted on April 22, 1991 for the subject facility.

In order to better evaluate the report, the information indicated on the attached Additional Closure Requirements sheet must be submitted to this off by February 10, 1992.

If you have any questions regarding this matter, please contact Karen Powers at (818) 458- 3516.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

By Karen Powers
Waste Management Division

Enc.

cc: H.B.COVEY, INC.

CL207 Rev. 3/88

9102233

ADDITIONAL CLOSURE REQUIREMENTS

The additional information or requirements checked below must be submitted to the Los Angeles County Department of Public Works, Waste Management Division, P.O. Box 1460, Alhambra, CA 91802-1460, in order to complete evaluation of Closure Permit No. 7673S .

[ ] Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.

[ ] Insufficient number of samples were obtained. Additional samples require din accordance with attached Closure Permit Requirements.

[ ] Describe method of obtaining, handling, and/or transporting samples.

[X] Indicate time and date samples were obtained. In table 1, page 3, it is stated that samples were obtained on July 19, 1990. Please clarify.

[ ] Submit logs certified by a CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils for all borings.

[ ] Submit chain-of-custody documentation initiated by person obtaining sample through person at Department of Health Services certified laboratory.

[ ] Disposal destination of tanks and evidence of legal disposal.

[ ] Analysis results by a Sate certified laboratory shall be submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.

[ ] Documentation as to depth of groundwater at facility.

[X] Manifests to document hazardous waste disposal of removed soil/tank rinsate with the signature of the disposal facility owner/operator. Manifest for rinseate needs to be signed by operator of recieving facility.

[ ] Evidence of legal disposal of soils designated as nonhazardous.

[X] Signature on the report is required of CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils. The report must clearly indicate that all soil sampling was done under the supervision of the registered professional. Please state that all site work was done under the direct supervision of the signing professional.

[ ] Define the vertical and lateral extent of contamination.

[ ] Propose a remedial action plan to mitigate contamination.

[ ] Proposed future uses or improvements for the area related to the contamination.

[ ] Other: _____

CL207 Rev. 12/91

APPENDIX E

DTSC SITE HAZARDOUS WASTES DISPOSAL RECORDS SUMMARY

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
1001 I Street
P.O. Box 806
Sacramento, California 95812-0806

Edmund G. Brown Jr.
Governor

EPA ID PROFILE

ID Number: CAC002696487 **Name :** CITY OF INDUSTRY

Status: INACTIVE **Inactive Date:** 09/14/2012 **Record Entered:** 06/15/2012 **Last Updated:** 01/03/2013

County: LOS ANGELES **NAICS:** **SIC:**

	Name	Address	City	State	Zip Code	Phone
Location	CITY OF INDUSTRY	14700 NELSON AVE	CITY OF INDUSTRY	CA	917444327	
Mailing		15625 STAFFORD ST	CITY OF INDUSTRY	CA	917443922	
Owner	CITY OF INDUSTRY	15625 STAFFORD ST	CITY OF INDUSTRY	CA	917443922	6263332211
Operator/ Contact	KEVIN RADECKI	15625 STAFFORD ST	CITY OF INDUSTRY	CA	917443922	6263332211

Based ONLY upon ID Number CAC002696487

Calif. Manifests ?	Non Calif. Manifests ?	Transporter Registration ?
YES	NO	NO

California and Non California Manifest Tonnage Total and Waste Code by Year Matrix by Entity Type (if available) are on the next page

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Calif. Manifest Counts and Total Tonnage

	GENERATOR
2012	1 2.0000

Non California Manifest Total Tonnage

Waste Code By Year By Entity Matrix Report (based on California Manifests only)

Calif.	Generator	Transporter 1	Transporter 2	TSDF	Alt. TSDF
RCRA	Generator	Transporter 1	Transporter 2	TSDF	Alt. TSDF

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
1001 I Street
P.O. Box 806
Sacramento, California 95812-0806

Edmund G. Brown Jr.
Governor

Hazardous Waste Handler(HWH) Summary Report

Selection Criteria :

ID Number :	CAC002696487	Name:	CITY OF INDUSTRY
Entity :	GENERATOR		
Waste Code:	ALL		
Handling code:	ALL		
Start Ship Date:			
End Ship Date :			
Ship Year:	2012		
Sorted by:	Ship Year		

California Manifests:

Ship Year	Manifests	Total Tons
2012	1	2.0000
	Totals	**2.0000**

CA Waste Summary:

Ship Year	Waste Code	Total Tons
2012	151	2.0000
	Totals	**2.0000**

The Department of Toxics Substances Control (DTSC) takes every precaution to ensure the accuracy of data in the Hazardous Waste Tracking System (HWTS). However, because of the large number of manifests handled, inaccuracies in the submitted data, limitations of the manifest system and the technical limitations of the database, DTSC cannot guarantee that the data accurately reflect what was actually transported or produced.

Disposal Method Summary :

Ship Year	Method Code	Total Tons
2012	H132	2.0000
	Totals	**2.0000**

CALIFORNIA WASTE CODES

California Restricted Wastes – Use First , if applicable	
711	Liquids with cyanides ≥ 1000 mg/l
721	Liquids with arsenic ≥ 500 mg/l
722	Liquids with cadmium ≥ 100 mg/l
723	Liquids with chromium (VI) ≥ 500 mg/l
724	Liquids with lead ≥ 500 mg/l
725	Liquids with mercury ≥ 20 mg/l
726	Liquids with nickel ≥ 134 mg/l
727	Liquids with selenium ≥ 100 mg/l
728	Liquids with thallium ≥ 130 mg/l
731	Liquids with polychlorinated biphenyls ≥ 50 mg/l
741	Liquids with halogenated organic compounds ≥ 1000 mg/l
751	Solids or sludge with halogenated organic comp. ≥ 1000 mg/kg
791	Liquids with pH ≤ 2
792	Liquids with pH ≤ 2 with metals
801	Waste potentially containing dioxins
CALIFORNIA NON-RESTRICTED WASTES	
Inorganics	
121	Alkaline solution (pH ≥12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
122	Alkaline solution without metals (pH ≥ 12.5
123	Unspecified alkaline solution
131	Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)
132	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
133	Aqueous solution with 10% or more total organic residues
134	Aqueous solution with <10% total organic residues
135	Unspecified aqueous solution
141	Off-specification, aged, or surplus inorganics
151	Asbestos-containing waste
161	Fluid-cracking catalyst (FCC) waste
162	Other spent catalyst
171	Metal sludge (see 121)
172	Metal dust (see 121) and machining waste
181	Other inorganic solid waste
Organics	
211	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
212	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
213	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
214	Unspecified solvent mixture
221	Waste oil and mixed oil
222	Oil/water separation sludge
223	Unspecified oil-containing waste
231	Pesticide rinse water
232	Pesticides and other waste associated with pesticide production
241	Tank bottom waste
251	Still bottoms with halogenated organics
252	Other still bottom waste
261	Polychlorinated biphenyls and material containing PCB's
271	Organic monomer waste (includes unreacted resins)
272	Polymeric resin waste
281	Adhesives
291	Latex waste
311	Pharmaceutical waste
321	Sewage sludge
322	Biological waste other than sewage sludge
331	Off-specification, aged, or surplus organics
341	Organic liquids (nonsolvents) with halogens
342	Organic liquids with metals (see 121)
343	Unspecified organic liquid mixture
351	Organic solids with halogens
352	Other organic solids

Sludge	
411	Alum and gypsum sludge
421	Lime sludge
431	Phosphate sludge
441	Sulfur sludge
451	Degreasing sludge
461	Paint sludge
471	Paper sludge/pulp
481	Tetraethyl lead sludge
491	Unspecified sludge waste
Miscellaneous	
511	Empty pesticide containers 30 gallons or more
512	Other empty containers 30 gallons or more
513	Empty containers less than 30 gallons
521	Drilling mud
531	Chemical toilet waste
541	Photochemicals / photo processing waste
551	Laboratory waste chemicals
561	Detergent and soap
571	Fly ash, bottom ash, and retort ash
581	Gas scrubber waste
591	Baghouse waste
611	Contaminated soil from site clean-ups
612	Household waste
613	Auto shredder waste
614	Treated wood waste (new in 2007)

HW REPORT MANAGEMENT METHOD CODES	
New Codes	**Descriptions**
H010	Metals recovery including retorting, smelting, chemicals, etc.
H020	Solvents recovery
H039	Other recovery or reclamation for reuse including acid regeneration, organics recovery, etc
H050	Energy recovery at this site -- use as fuel (includes on-site fuel blending)
H061	Fuel blending prior to energy recovery at another site
H040	Incineration--thermal destruction other than use as a fuel
H071	Chemical reduction with or without precipitation
H073	Cyanide destruction with or without precipitation
H075	Chemical oxidation
H076	Wet air oxidation
H077	Other chemical precipitation with or without pre-treatment
H081	Biological treatment with or without precipitation
H082	Adsorption
H083	Air or steam stripping
H101	Sludge treatment and/or dewatering
H103	Absorption
H111	Stabilization or chemical fixation prior to disposal at another site
H112	Macro-encapsulation prior to disposal at another site
H121	Neutralization only
H122	Evaporation
H123	Settling or clarification
H124	Phase separation
H129	Other treatment
H131	Land treatment or application (to include on-site treatment and/or stabilization)
H132	Landfill or surface impoundment that will be closed as landfill (to include on-site treatment and/or stabilization)
H134	Deepwell or underground injection (with or without treatment)
H135	Discharge to sewer/POTW or NPDES (with prior storage--with or without treatment)
H141	Storage, bulking, and/or transfer off site--no treatment/recovery (H010-H129), fuel blending (H061), or disposal (H131-H135) at this site

APPENDIX F

PAGES OF RWQCB-LA WIP MASTER FACILITIES LISTING SHOWING STATUS OF SITE FILES

File No	Facility	Street No	Street Dir	Street Name	Street Suffix	Suite	City	ZIP	Status	STAFF
102.0156	AJLENITE BUILDING SERVICE	629	S	Sixth	Ave		INDUSTRY	91746		UNIDENTIFIED
102.0157	HENRY'S BUILDING PRODUCTS	14274	E	Valley	Blvd		INDUSTRY	91749	Historical	WS
102.0158	WILSEY FOODS, INC.	14970	E	Don Julian	Rd		INDUSTRY	91746	Historical	UNIDENTIFIED
102.0159	PERFORMANCE AUTO	14840	E	Nelson	Ave		INDUSTRY	91746		UNIDENTIFIED
102.0160	PUENTE READY MIX	209	N	California	Ave		INDUSTRY	91744	Historical	RWANG
102.0161	WOLSEY CO.	15110	E	Nelson	Ave		INDUSTRY	91744	Historical	UNIDENTIFIED
102.0163	ACCENT FENCE CO., INC.	180	N	California	Ave		INDUSTRY	91744	Historical	SY
102.0164	TURBO AIR	14843	E	Proctor	Ave	Unit A	INDUSTRY	91746	Historical	DRASMUSS
102.0165	INC	15200		Don Julian	Rd		INDUSTRY	1098	Historical	JCL
102.0166	A-1 ORNAMENTAL IRON, INC	15019		Salt Lake	Ave		INDUSTRY	91745	Active	AHSU
102.0167	SAFETY	13938	E	Valley	Blvd		INDUSTRY	91745	Historical	DRADULES
102.0170	TREASURE CHEST	15343		Stafford	St		INDUSTRY	91744	Historical	DRASMUSS
102.0171	BURTON JAMES	428		Canyon	Rd		INDUSTRY	91745	Historical	SY
102.0172	AMERICAN OLEAN TILE CO.INC.	295	N	Willow	Ave		INDUSTRY	91746	Historical	UNIDENTIFIED
102.0175	APPLIED SOLAR ENERGY CORP	15251	E	E. Don Julian	Rd		INDUSTRY	91745	Historical	JCL
102.0176	ARNEL COMPRESSOR COMPANY	114	N	Sunset	Ave		INDUSTRY	91744	Historical	RWANG
102.0178	BARR LUMBER CO	127	N	California	Ave		INDUSTRY	91744	Historical	RWANG
102.0179	BERLIN TIRE CENTER, INC.	14250		Valley	Blvd		LA PUENTE	91746	Historical	DRASMUSS
102.0180	BLAKE MANUFACTURING CO	15310		Proctor	Ave		INDUSTRY	91745	Historical	RWANG
102.0181	BORDEN, INC	14557	E	Bonelli	St		INDUSTRY	91745	Historical	SY
102.0182	BOUTWELL TRUCKING CO	14351	E	Bonelli	St		INDUSTRY	91744	Historical	JCL
102.0183	BUTLER PAPER CO	15450	E	Salt Lake	Ave		INDUSTRY	91744	Historical	SY
102.0184	CACIQUE CHEESE CO	14940	E	Proctor	Ave		INDUSTRY	91744	Historical	JCL
102.0185	CAM CENTERLESS GRINDIN	15322	E	Proctor	Ave		INDUSTRY	91744	Historical	SY
102.0187	ZAKAROFF SERVICES	15045	E	Salt Lake	Ave		INDUSTRY	91749	Historical	DRASMUSS
102.0189	CUSTOMS MILLS INC.	14700	E	Nelson	Ave		INDUSTRY	91744	Historical	JCL
102.0190	DO & ABLE PRODUCTS	15320	E	Salt Lake	Ave		INDUSTRY	91744	Historical	SY
102.0191	DURNIL DISTRIBUTION SYST M, I	14525		Clark	Ave		INDUSTRY	91744	Historical	SY
102.0193	HADDICK'S STOWING, INC.	15120	E	Valley	Blvd		INDUSTRY	91744	Historical	JCL
102.0195	FIBRE CONTAINERS CO.	15250		Don Julian	Rd		INDUSTRY	91745	Historical	SY
102.0196	INC.(FORMER PREP DEPT.)	15437		Proctor	Ave		INDUSTRY	91749	Historical	UNIDENTIFIED
102.0196	FORMER THE PREP DEPT. I	15439		Proctor	Ave		INDUSTRY	91749	Historical	UNIDENTIFIED
102.0197	GLOVERS MILLS COMPANY	15255		Don Julian	Rd		INDUSTRY	91744		UNIDENTIFIED
102.0198	PORTOR HARDWOOD LUMB R CC	14700		Nelson	Ave		INDUSTRY	91744	Historical	SY
102.0199	INC	242	N	Hacienda	Blvd		INDUSTRY	91744	Historical	RWANG
102.0201	HARBOR INDUSTRIES	14424	E	Bonelli	St		INDUSTRY	91744	Historical	RWANG
102.0202	ANVIL CASES	15650		Salt Lake	Ave		INDUSTRY	91745	Historical	RWANG
102.0203	ROY L. HOTCHKISS LIGHTIN	153		Puente	Ave		INDUSTRY	91746	Historical	RGN
102.0204	MAINTEX	14819	E	Salt Lake	Ave		INDUSTRY	91746	Historical	DRASMUSS
102.0205	MEDIA SHUTTLE	15358	E	Valley	Blvd		INDUSTRY	91746	Historical	DRASMUSS
102.0206	KEENAN SUPPLY	14200		Nelson	Ave		(CORPORATE	91746	Historical	UNIDENTIFIED
102.0210	CO	14710	E	Nelson	Ave		INDUSTRY	91744	Historical	JCL
102.0211	LA VICTORIA FOODS INC	240	S	Sixth	Ave		INDUSTRY	91746	Historical	SY
102.0212	M&J DESK AND SEATING MF . CO	14440		Don Julian	Rd		INDUSTRY	91746	Historical	JCL
102.0213	MAGIC CHEF	245	N	Vineland	Ave		INDUSTRY	91746	Historical	DRASMUSS

File No	Facility	Street No	Street Dir	Street Name	Street Suffix	Suite	City	ZIP	Status	STAFF
102.0214	MANSION INDUSTRIES, INC	14711	E	Clark	Ave		INDUSTRY	91745	Historical	JCL
102.0215	JC BLINDS MFG, INC.	422		Canyon	Rd		INDUSTRY	91746	Historical	SY
102.0217	SUNRIDER	320	S	Sixth	Ave		INDUSTRY	91746	Historical	AHEATH
102.0220	CIRCUIT CITY STORES, INC.	13890	E	Nelson	Ave		INDUSTRY	91748	Historical	SY
102.0221	MACH	15222	E	Valley	Blvd		INDUSTRY	91745	Historical	RSK
102.0223	PEERY BROS. LUMBER CO. INC.	140	N	Willow	Ave		INDUSTRY	91746	Historical	SY
102.0224	PHYSICIANS FORMULA COSMETIC	230	S	Ninth	Ave		INDUSTRY	91749	Active	AHSU
102.0225	MANVILLE SALE CORP.	14313		Bonelli	St		INDUSTRY	91744	Historical	UNIDENTIFIED
102.0227	PROPAK CALIFORNIA CORP	211	N	Willow	Ave		INDUSTRY	91746	Historical	UNIDENTIFIED
102.0228	R & D TOOL CORP	15455	E	Proctor	Ave		INDUSTRY	91745	Historical	SY
102.0229	TECHNOLOGIES	15947		Kaplan	Ave		INDUSTRY	91174	Historical	JCL
102.0231	SCOTT-CAUDILL LUMBER CO., INC.	14624	E	Nelson	Ave		INDUSTRY	91744	Historical	SY
102.0232	GEORGIA-PACIFIC CORPORATION	14750	E	Nelson	Ave		INDUSTRY	91749	Historical	RWANG
102.0233	STAFFORD MILLING CO	0		P.O. Box 3016			INDUSTRY	91744		AHEATH
102.0235	STERILITE CORPORATION	14421	E	Bonelli	St		INDUSTRY	91744	Historical	SY
102.0238	STOUGHTON PRINTING CO	130	N	Sunset	Ave		INDUSTRY	91744	Historical	RWANG
102.0239	FUHRIMAN PROPERTY	14760	E	Valley	Blvd		INDUSTRY	91744	Historical	DRASMUSS
102.0240	F. D. TITUS AND SON, INC	13731	E	Proctor	Ave		INDUSTRY	91746	Historical	SY
102.0242	TRIO METAL STAMPING INC	15318	E	Proctor	Ave		INDUSTRY	91745	Active	ACASTANE
102.0243	TROY LIGHTING, INC.	14625	E	Clark	Ave		INDUSTRY	91746	Historical	JCL
102.0244	TURNHAM CORP	15312		Proctor	Ave		INDUSTRY	91744	Historical	SY
102.0246	UNITED ARTIST CABLE	15255	E	Salt Lake	Ave		INDUSTRY	91744	Historical	SY
102.0247	TRI DIM FILTER CORP.	14551	E	Bonelli	St		INDUSTRY	91746	Historical	SY
102.0248	VLASIC FOODS INC	125	N	Orange	Ave		INDUSTRY	91744	Active	ACASTANE
102.0249	LOUISVILLE	14321	E	Bonelli	St		INDUSTRY	91749	Historical	SY
102.0250	WESTPOINT PEPPERELL INC	14550	E	Bonelli	St		INDUSTRY	91749	Historical	SY
102.0251	WHITESTONE PRODUCTS	14850		Don Julian	Rd		INDUSTRY	91746	Historical	RWANG
102.0252	INC.	727		South Ninth	Ave		INDUSTRY	91745	Active	AHSU
102.0253	RAPID RACK INDUSTRIES, INC.	14266	E	Valley	Blvd		INDUSTRY	91746	Historical	WS
102.0254	LACDPW-MWD/CALIF. FREIGHT	14854	E	Valley	Blvd		INDUSTRY	91746	Historical	JCL
102.0256	CABIN CRAFT CARPETS	14528	E	Bonelli	St		INDUSTRY	91744	Historical	SY
102.0257	METHOD	14441	E	Bonelli	St		INDUSTRY	91744	Historical	SY
102.0258	MAC MARKETING, INC.	14322	E	Bonelli	St		INDUSTRY	91744	Historical	SY
102.0259	MANSION INDUSTRIES, INC.	14425		Clark	Ave		INDUSTRY	91744	Historical	SY
102.0260	CONSTAR PLASTICS, INC.	14515		Don Julian	Rd		INDUSTRY	91744	Active	AHSU
102.0261	SAFETY AUTO PARTS CORP	275	S	Third	Ave	2	INDUSTRY	91746	Historical	SY
102.0262	PARAGON MOULDING	241	S	Third	Ave		INDUSTRY	91746	Historical	SY
102.0264	CORP	275	S	Third	Ave	3	INDUSTRY	91746	Historical	SY
102.0265	GOODHOPE BAGS IND. INC.	275	S	Third	Ave	1	INDUSTRY	91746	Historical	SY
102.0266	CENTERLESS SUPPLY INC.	275	S	Third	Ave	4	INDUSTRY	91746	Historical	RWANG
102.0267	G & C FURNITURE FRAMES	14258	E	Valley	Blvd		INDUSTRY	91746	Active	ACASTANE
102.0268	R & J ENTERPRISES	14258	E	Valley	Blvd		INDUSTRY	91746	Historical	RGN
102.0269	P & D FOREIGN CAR SERV	14254	E	Valley	Blvd		INDUSTRY	91746	Historical	SY
102.0270	GMC-RV	14254	E	Valley	Blvd	A	INDUSTRY	91746	Historical	RWANG
102.0272	SYMONS CORP	722	S	Parriott	Pl		INDUSTRY	91745	Historical	UNIDENTIFIED

APPENDIX G

GOVERNMENT RECORDS SEARCH DATABASE

Appendix E: Noise

Noise Emissions-
Roadway Construction Noise
Model Output Files

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Site Preparation	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		60.0	0.0
Scraper	No	40		83.6	80.0	0.0
Tractor	No	40	84.0		100.0	0.0

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		83.4	79.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		78.0	74.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	83.4	81.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Grading	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		60.0	0.0
Grader	No	40	85.0		80.0	0.0
Dozer	No	40		81.7	100.0	0.0
Dozer	No	40		81.7	120.0	0.0
Tractor	No	40	84.0		140.0	0.0
Tractor	No	40	84.0		160.0	0.0
Tractor	No	40	84.0		180.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	83.4	79.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	80.9	76.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	75.6	71.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	74.1	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	75.1	71.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	73.9	69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	72.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.4	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Construction	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	120.0	0.0
Tractor	No	40	84.0		140.0	0.0
Welder / Torch	No	40		74.0	160.0	0.0
Welder / Torch	No	40		74.0	180.0	0.0
Welder / Torch	No	40		74.0	200.0	0.0
Welder / Torch	No	40		74.0	220.0	0.0
Gradall	No	40		83.4	100.0	0.0
Gradall	No	40		83.4	80.0	0.0
Gradall	No	40		83.4	60.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	72.9	65.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	75.1	71.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	63.9	59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62.9	58.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62.0	58.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	61.1	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	77.4	73.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	79.3	75.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	81.8	77.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.8	81.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Construction	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Generator	No	50		80.6	60.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator	79.0	76.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.0	76.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	60.0	0.0
Paver	No	50		77.2	80.0	0.0
Pavement Scarafier	No	20		89.5	100.0	0.0
Pavement Scarafier	No	20		89.5	120.0	0.0
Roller	No	20		80.0	140.0	0.0
Roller	No	20		80.0	160.0	0.0
Tractor	No	40	84.0		180.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	75.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	73.1	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	83.5	76.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	81.9	74.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	71.1	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	69.9	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	72.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.5	80.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	60.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	77.2	73.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.2	73.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	60.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	76.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	76.1	72.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Site Preparation	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		60.0	8.0
Scraper	No	40		83.6	80.0	8.0
Tractor	No	40	84.0		100.0	8.0

Results

		Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
				Day		Evening		Night		Day		Evening		Night	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper		71.5	67.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		70.0	66.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	75.4	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Grading	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		60.0	8.0
Grader	No	40	85.0		80.0	8.0
Dozer	No	40		81.7	100.0	8.0
Dozer	No	40		81.7	120.0	8.0
Tractor	No	40	84.0		140.0	8.0
Tractor	No	40	84.0		160.0	8.0
Tractor	No	40	84.0		180.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	75.4	71.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	72.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	67.6	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	66.1	62.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.9	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	75.4	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Construction	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	120.0	8.0
Tractor	No	40	84.0		140.0	8.0
Welder / Torch	No	40		74.0	160.0	8.0
Welder / Torch	No	40		74.0	180.0	8.0
Welder / Torch	No	40		74.0	200.0	8.0
Welder / Torch	No	40		74.0	220.0	8.0
Gradall	No	40		83.4	100.0	8.0
Gradall	No	40		83.4	80.0	8.0
Gradall	No	40		83.4	60.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	64.9	57.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	55.9	51.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.0	50.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	53.1	49.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	69.4	65.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	71.3	67.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gradall	73.8	69.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	73.8	73.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Construction	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Generator	No	50		80.6	200.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Generator	60.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.6	57.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	60.0	8.0
Paver	No	50		77.2	80.0	8.0
Pavement Scarafier	No	20		89.5	100.0	8.0
Pavement Scarafier	No	20		89.5	120.0	8.0
Roller	No	20		80.0	140.0	8.0
Roller	No	20		80.0	160.0	8.0
Tractor	No	40	84.0		180.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	67.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.1	62.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	75.5	68.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	73.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	63.1	56.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.9	60.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	75.5	72.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Paving	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	200.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	58.8	54.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.8	54.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 09/15/2016
Case Description: Nelson Ave- Mitigated

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	200.0	8.0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	57.6	53.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Noise Emissions-
Highway Noise Prediction Model
Output Files

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Existing Conditions

Project Number: 1A
Project Name: Nelson Avenue Warehouse Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Michael Baker International (2016)
Community Noise Descriptor: L_{dn}: _____ CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	CNEL at 100 Feet	Distance from Centerline of Roadway: Distance to Contour 70 CNEL	65 CNEL	60 CNEL	55 CNEL
Sunset Avenue/ 7th Avenue												
north of Temple Avenue	6	13	15,021	45	0.5	8.1%	12.3%	69.4	92	198	426	917
Temple Avenue to Nelson Avenue	6	13	23,832	45	0.5	8.1%	12.3%	71.4	125	269	579	1,247
Nelson Avenue to Valley Boulevard	6	13	24,093	45	0.5	8.1%	12.3%	71.5	126	271	583	1,257
Valley Boulevard to Proctor Avenue	4	13	17,838	35	0.5	8.1%	12.3%	68.4	78	169	364	785
south of Proctor Avenue	4	13	8,262	35	0.5	8.1%	12.3%	65.0	-	101	218	470
Nelson Avenue												
west of Sunset Avenue	2	0	1,908	35	0.5	8.1%	12.3%	58.4	-	37	80	172
Sunset Avenue to Driveway #1	2	0	4,410	35	0.5	8.1%	12.3%	61.9	-	65	139	300
Driveway #1 to Driveway #2	2	0	4,536	35	0.5	8.1%	12.3%	62.2	-	66	142	306
Driveway #2 to Driveway #3	2	0	4,536	35	0.5	8.1%	12.3%	61.9	-	66	142	306
Driveway #3 to Driveway #4	2	0	4,536	35	0.5	8.1%	12.3%	61.8	-	66	142	306
Driveway #4 to California Avenue	2	0	11,655	35	0.5	8.1%	12.3%	66.4	57	124	266	574
east of California Avenue	2	0	15,732	35	0.5	8.1%	12.3%	67.7	70	151	325	701
Valley Boulevard												
west of Orange Avenue	6	13	11,331	40	0.5	8.1%	12.3%	67.5	68	147	316	680
Orange Avenue to Sunset Avenue	6	13	25,542	40	0.5	8.1%	12.3%	70.9	117	252	542	1,168
Sunset Avenue to California Avenue	6	13	26,262	40	0.5	8.1%	12.3%	71.0	119	256	551	1,188
east of California Avenue	6	13	17,298	40	0.5	8.1%	12.3%	69.0	90	193	416	896
California Avenue												
north of Nelson Avenue	2	13	6,345	25	0.5	8.1%	12.3%	63.1	-	76	164	352
Nelson Avenue to Valley Boulevard	2	13	180	35	0.5	8.1%	12.3%	48.0	-	-	-	-

TRAFFIC NOISE LEVELS AND NOISE CONTOURS

Existing Plus Project Conditions

Project Number: 1B
Project Name: Nelson Avenue Warehouse Project

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Source of Traffic Volumes: Michael Baker International (2016)
Community Noise Descriptor: L_{dn}: _____ CNEL: x

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Analysis Condition Roadway, Segment	Lanes	Median Width	ADT Volume	Design Speed (mph)	Alpha Factor	Vehicle Mix Medium Trucks	Heavy Trucks	Distance from Centerline of Roadway CNEL at 100 Feet	Distance to Contour 70 CNEL	65 CNEL	60 CNEL	55 CNEL
Sunset Avenue/ 7th Avenue												
north of Temple Avenue	6	13	15,885	45	0.5	8.1%	12.3%	69.7	95	205	442	952
Temple Avenue to Nelson Avenue	6	13	25,101	45	0.5	8.1%	12.3%	71.7	129	278	599	1,291
Nelson Avenue to Valley Boulevard	6	13	25,956	45	0.5	8.1%	12.3%	71.8	132	285	613	1,321
Valley Boulevard to Proctor Avenue	4	13	19,737	35	0.5	8.1%	12.3%	68.9	84	181	390	840
south of Proctor Avenue	4	13	9,540	35	0.5	8.1%	12.3%	65.6	52	111	240	517
Nelson Avenue												
west of Sunset Avenue	2	0	1,980	35	0.5	8.1%	12.3%	58.6	-	38	82	176
Sunset Avenue to Driveway #1	2	0	5,859	35	0.5	8.1%	12.3%	63.1	36	78	168	363
Driveway #1 to Driveway #2	2	0	5,652	35	0.5	8.1%	12.3%	63.2	35	76	164	354
Driveway #2 to Driveway #3	2	0	5,454	35	0.5	8.1%	12.3%	62.7	35	75	161	346
Driveway #3 to Driveway #4	2	0	5,328	35	0.5	8.1%	12.3%	62.5	34	73	158	341
Driveway #4 to California Avenue	2	0	12,825	35	0.5	8.1%	12.3%	66.8	61	132	284	612
east of California Avenue	2	0	16,641	35	0.5	8.1%	12.3%	67.9	73	157	338	728
Valley Boulevard												
west of Orange Avenue	6	13	12,330	40	0.5	8.1%	12.3%	67.9	72	155	334	720
Orange Avenue to Sunset Avenue	6	13	27,063	40	0.5	8.1%	12.3%	71.2	121	262	563	1,214
Sunset Avenue to California Avenue	6	13	27,972	40	0.5	8.1%	12.3%	71.3	124	267	575	1,239
east of California Avenue	6	13	18,000	40	0.5	8.1%	12.3%	69.1	92	198	427	920
California Avenue												
north of Nelson Avenue	2	13	6,534	25	0.5	8.1%	12.3%	63.2	-	77	167	359
Nelson Avenue to Valley Boulevard	2	13	180	35	0.5	8.1%	12.3%	48.0	-	-	-	-

Appendix F: TIA

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NELSON BUSINESS PARK WAREHOUSE PROJECT AT 14700 NELSON AVENUE TRAFFIC IMPACT ANALYSIS

City of Industry, California

August 11, 2016

Prepared for
City of Industry
15625 East Stafford Street #100
City of Industry, California 91744

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TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Proposed Project 2
1.2 Study Area 3
1.3 Analysis Scenarios 4
1.4 Analysis Time Period 4

2.0 ANALYSIS METHODOLOGY 5
2.1 Intersection Analysis Methodology 5
2.1.1 Intersection Capacity Utilization (ICU) Method for Signalized Intersection 5
2.1.2 Highway Capacity Manual (HCM) Method for Unsignalized Intersection 6
2.2 Traffic Impact Criteria and Thresholds 6

3.0 EXISTING CONDITIONS 7
3.1 Roadway Description 7
3.2 Existing Conditions Traffic Volumes 9
3.3 Existing Conditions Intersection Analysis 13

4.0 PROJECT TRAFFIC 15
4.1 Project Traffic Generation 15
4.2 Project Trip Distribution 15
4.3 Project Traffic Assignment 15

5.0 FUTURE TRAFFIC FORECAST 23
5.1 Ambient Growth Rate 23
5.2 Cumulative Development Traffic 23
5.3 Existing Plus Project Traffic 23
5.4 Opening Year 2018 Without Project Traffic 23
5.5 Opening Year 2018 With Project Traffic 31

6.0 FUTURE CONDITIONS INTERSECTION ANALYSIS 34
6.1 Existing Plus Project Intersection Analysis 34
6.2 Opening Year 2018 Without Project Intersection Analysis 37
6.3 Opening Year 2018 With Project Intersection Analysis 37

7.0 FREEWAY OFF-RAMP QUEUING ANALYSIS 41

8.0 CONGESTION MANAGEMENT PROGRAM (CMP) ANALYSIS 42
8.1 CMP Impact Review 42
8.1.1 CMP Intersection Impact 42
8.1.2 CMP Freeway Impact 42
8.2 Transit Impact Review 42

9.0 CONCLUSIONS 44
9.1 Intersection Analysis Results 44
9.2 Freeway Off-Ramp Queuing Analysis Results 45
9.3 CMP Traffic Impact 45

LIST OF TABLES

Table 1 – Level of Service for Signalized Intersection 5
Table 2 – Level of Service for Un-Signalized Intersections 6
Table 3 – Existing 2016 Conditions Intersection Analysis Summary 14
Table 4 – Trip Generation Rates 16
Table 5 – Project Traffic Generation Summary 16
Table 6 – Cumulative Development Traffic Generation 24
Table 7 – Existing Plus Project Conditions Intersection Analysis Summary 35
Table 8 – Opening Year 2018 With Project Conditions Intersection Analysis Summary 38
Table 9 – Freeway Off-Ramp Queuing Analysis Summary 41
Table 10 – Project Transit Trip Calculation 43

LIST OF EXHIBITS

Exhibit 1 – Regional Study Area 1
Exhibit 2 – Project Site Plan 2
Exhibit 3 – Project Study Area 3
Exhibit 4 – Existing Intersection Geometry 8
Exhibit 5 – Existing Intersection Volumes 11
Exhibit 6 – Project Passenger Car Outbound Trip Distribution 17
Exhibit 7 – Project Passenger Car Inbound Trip Distribution 18
Exhibit 8 – Project Truck Outbound Trip Distribution 19
Exhibit 9 – Project Truck Inbound Trip Distribution 20
Exhibit 10 – Project-Only Intersection Volumes 21
Exhibit 11 – Cumulative Development Intersection Volumes 25
Exhibit 12 – Existing Plus Project (EP) Intersection Volumes 27
Exhibit 13 – Opening Year 2018 Without Project (2018nP) Intersection Volumes 29
Exhibit 14 – Opening Year 2018 With Project (2018wP) Intersection Volumes 32

APPENDICES

Appendix A – Grade Separation Project on Puente Avenue/Workman Mill Road at Valley Boulevard ..... A
Appendix B – Traffic Count Data Sheets ..... B
Appendix C – Season Adjustment Factors and Historic Traffic Data Comparisons C
Appendix D – Existing 2016 Conditions Intersection Analysis Worksheets ..... D
Appendix E – Cumulative Development Traffic Generation and Trip Distribution ..... E
Appendix F – Existing Plus Project Conditions Intersection Analysis Worksheets ..... F
Appendix G – Opening Year 2018 Without Project Conditions Intersection Analysis Worksheets ..... G
Appendix H – Opening Year 2018 With Project Conditions Intersection Analysis Worksheets ..... H
Appendix I – Freeway Off-Ramp Queuing Analysis Worksheets I
Appendix J – Transit Service ..... J

1.0 INTRODUCTION

This traffic impact analysis report addresses the potential traffic impact and circulation needs associated with the proposed Nelson Business Park Warehouse project located at 14700 Nelson Avenue in the City of Industry. The project site is located south of Nelson Avenue and east of Sunset Avenue. Exhibit 1 shows the regional location of the project site.

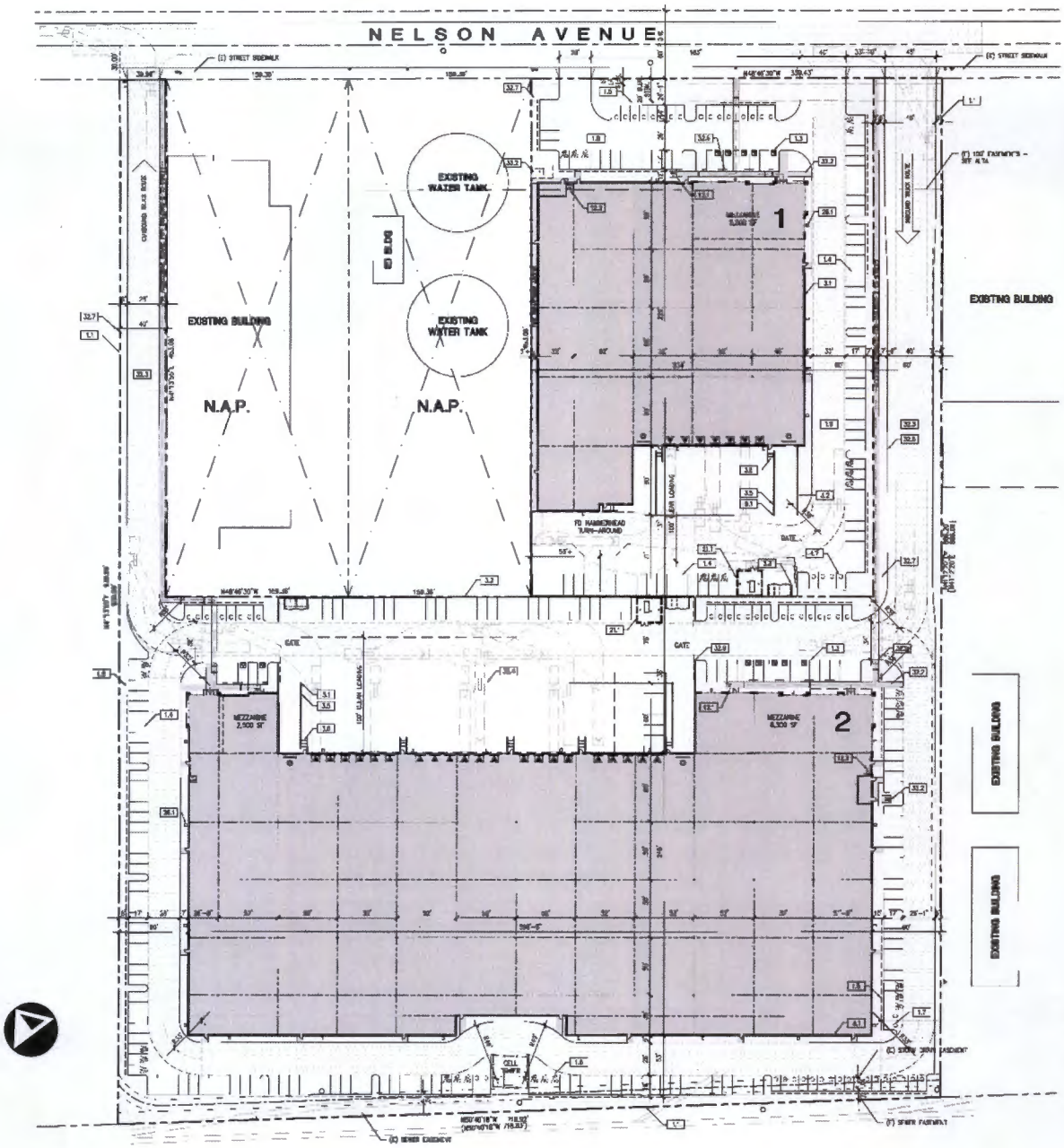
Exhibit 1 – Regional Study Area

This traffic impact analysis report is prepared based on the traffic study requirements of the City of Industry and is consistent with the Congestion Management Program (CMP) for Los Angeles County. This traffic study analyzes weekday AM and PM peak hour conditions for existing and Opening Year 2018 conditions without and with the proposed project. The Opening Year 2018 conditions is forecasted based on annual growth rate of 1% as well as adding traffic generated by other cumulative developments in the study area.

1.1 Proposed Project

The 11.49-acre project site is currently vacant. The project proposes to construct two warehouse buildings with a total of 231,210 square feet. Building 1 is 63,240 square feet and it is located north of the project site. Building 2 is 167,970 square and it is located south of the project site. Exhibit 2 shows the project site plan.

Exhibit 2 – Project Site Plan



Each building has its own separate parking lot. Building 1 has 101 parking spaces and Building 2 has 218 parking spaces for a total of 319 parking spaces. Each building has two stop-controlled full access driveways on Nelson Avenue for a total of 4 vehicular access points for the project site. As shown in Exhibit 3 and the site plan, Building 1 has Driveways #2 and #3; Building 2 has Driveways #1 and #4.

The proposed project is anticipated to be completed and operational in year 2018.

1.2 Study Area

Exhibit 3 shows the study area that includes 21 intersections located within City of Industry.

Exhibit 3 – Project Study Area

As shown in Exhibit 3, the study area includes the following 21 intersections:

1. Sunset Avenue at Temple Avenue (signalized);
2. Sunset Avenue at Nelson Avenue (signalized);
3. Sunset Avenue/7th Avenue at Valley Boulevard (signalized);
4. 7th Avenue at Don Julian Road (signalized);
5. 7th Avenue at Proctor Avenue (signalized);
6. 7th Avenue at Clark Avenue (signalized);
7. 7th Avenue at SR-60 Westbound On-Ramp/Gale Avenue (signalized);
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp (un-signalized);
9. 7th Avenue at SR-60 Eastbound Ramps (un-signalized);
10. SR-60 Westbound Off-Ramp at Gale Avenue (signalized);
11. California Avenue at Nelson Avenue (signalized);
12. California Avenue at Valley Boulevard (signalized);
13. Puente Avenue/Workman Hill Road at Valley Boulevard (signalized);
14. California Avenue at Valley Boulevard (signalized);
15. Vineland Avenue/2nd Avenue at Valley Boulevard (signalized);
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard (signalized);
17. I-605 Southbound Ramps at Valley Boulevard (un-signalized);
18. Driveway 1 at Nelson Avenue (un-signalized, future);
19. Driveway 2 at Nelson Avenue (un-signalized, future);
20. Driveway 3 at Nelson Avenue (un-signalized, future); and
21. Driveway 4 at Nelson Avenue (un-signalized, future).

1.3 Analysis Scenarios

The study intersections are analyzed for the following study scenarios:

- Existing 2016 Conditions;
- Existing plus Project (EP) conditions
- Opening Year 2018 without Project (2018nP) Conditions; and
- Opening Year 2018 with Project (2018wP) Conditions.

1.4 Analysis Time Period

The study area intersections are analyzed for the following time periods:

- Weekday AM Peak Hour – Peak hour within 7:00 PM and 9:00 PM
- Weekday PM Peak Hour – Peak hour within 4:00 PM and 6:00 PM

2.0 ANALYSIS METHODOLOGY

This section describes the intersection analysis, performance criteria, thresholds of significance, and traffic volume forecast methodologies utilized in this traffic analysis.

2.1 Intersection Analysis Methodology

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis methodology is utilized to determine the operating LOS of the signalized intersections. For un-signalized intersections, the Highway Capacity Manual (HCM) analysis methodology is utilized to determine the operating LOS.

2.1.1 Intersection Capacity Utilization (ICU) Method for Signalized Intersection

The signalized intersections are analyzed using the Intersection Capacity Utilization (ICU) method. The ICU technique estimates the volume-to-capacity (V/C) ratio for an intersection based on the individual V/C ratios for the conflicting traffic movements. The ICU value represents the percent signal green time or capacity of the intersection movements. It should be noted that the ICU method assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

The ICU value translates to a LOS estimate, which is a relative measure of the intersection performance. The grade scales of LOS have been defined with the corresponding ICU value range as shown in Table 1. The ICU value is the sum of the critical volume-to-capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

Table 1 – Level of Service for Signalized Intersection

Level of Service	Intersection Capacity Utilization (ICU)	
	Volume/Capacity (V/C)	Description
A	≤ 0.600	Excellent
B	> 0.601 ≤ 0.700	Very Good
C	> 0.700 to ≤ 0.800	Good
D	> 0.800 to ≤ 0.900	Fair
E	> 0.900 to ≤ 1.000	Poor
F	> 1.000	Failure

ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through and right-turn lanes, and a dual left-turn capacity of 2,880 vph. A 10% clearance interval is included in the analysis calculations based on City of Industry requirements.

2.1.2 Highway Capacity Manual (HCM) Method for Unsignalized Intersection

The 2010 HCM analysis methodology describes the operation of an unsignalized intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding ranges of stopped delay experienced per vehicle for unsignalized intersections shown in Table 2.

Table 2 – Level of Service for Un-Signalized Intersections

Level of Service	Highway Capacity Manual (HCM)	
	Delay (seconds/vehicle)	Description
A	≤ 10.0	Little or no delay
B	> 10.0 to ≤ 15.0	Short traffic delay
C	> 15.0 to ≤ 25.0	Average traffic delay
D	> 25.0 to ≤ 35.0	Long traffic delay
E	> 35.0 to ≤ 50.0	Very long traffic delay
F	> 50.0	Severe congestion

Source: *2010 Highway Capacity Manual (HCM)*

Level of service is based on the average stopped delay per vehicle for all movements of all-way stop-controlled intersections; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled approach. The HCM analysis utilize an ideal flow value of 1,900 vehicles per land per hour for all lanes, and a lost time of four (4) seconds per phase was utilized.

2.2 Traffic Impact Criteria and Thresholds

Relative impact of the added Project traffic volumes was evaluated based on the existing and Opening Year 2018 conditions. The significance of the potential impacts of the Project was evaluated using the City's LOS standards and impact criteria. The following thresholds of significance is used to determine if project-related traffic will cause an impact at the study area intersections:

- For non-CMP signalized intersections: the Intersection Capacity Utilization (ICU) value under "with project" conditions is 0.901 or greater (LOS E or F) and the ICU increase attributable to the project is 0.020 or greater.

- For CMP signalized intersections: the ICU value or Intersection Capacity Utilization Value (V/C) under "with project" conditions is 1.001 or greater (LOS F) and the ICU or V/C increase attributable to the project is 0.020 or greater.

- For non-CMP un-signalized intersections: the intersection operates at LOS E or F.

- For CMP un-signalized intersections: the intersection operates at LOS F.

The impacted intersections should be mitigated to offset the ICU or V/C increment attributable to the project, and bring the LOS to pre-project conditions.

3.0 EXISTING CONDITIONS

This section describes the existing conditions of the study area including the existing roadway description, intersection geometry and traffic volumes.

3.1 Roadway Description

Exhibit 4 illustrates the existing intersection controls and lane geometry for the study area. The characteristics of the roadway system in the vicinity of the project site are described below.

Sunset Avenue is a six-lane divided roadway, north of Valley Boulevard, traversing in a north-south direction. It has a raised median between Valley Boulevard and Nelson Avenue, and it has a two-way left turn lane north of Nelson Avenue. The posted speed limit along Sunset Avenue is 45 miles per hour (mph) in the vicinity of the project site. On-street parking is only permitted along both sides of Sunset Avenue north of Prichard Street. Sunset Avenue becomes 7th Avenue south of Valley Boulevard.

7th Avenue is a 4-lane divided roadway with a two-way left-turn lane, south of Valley Boulevard, traversing in a north-south direction and provides access to the SR-60 freeway from the project site. The posted speed limit along 7th Avenue is 35 mph. On-street parking is not permitted along 7th Avenue. 7th Avenue becomes Sunset Avenue north of Valley Boulevard.

Valley Boulevard is a six-lane divided roadway with raised median trending in an east-west direction. Valley Boulevard provides access to the I-405 freeway. The posted speed limit along Valley Blvd is 40 mph. On-street parking is not permitted along Valley Boulevard.

Nelson Avenue is a two-lane undivided roadway trending in an east-west direction that provides primary access to the project site. The speed limit along Nelson Avenue is 35 mph. On-street parking is generally not permitted on Nelson Avenue, except in front of a few residential buildings.

Temple Avenue is a four-lane undivided roadway with a double yellow centerline stripe trending in an east-west direction. Temple Avenue curves into a north-south direction near the I-605 Freeway, and it intersects Valley Boulevard directly opposite the I-605 northbound off-ramp. The posted speed limit along Temple Avenue is 40 mph. On-street parking is not permitted along Temple Avenue.

Proctor Avenue is a two-lane divided roadway with a two-way left-turn lane trending in an east-west direction. The posted speed limit is 35 mph. On-street parking is not permitted.

Don Julian Road is a two-lane undivided roadway with a double yellow centerline stripe trending in an east-west direction. The posted speed limit is 35 mph. On-street parking is not permitted.

Clark Avenue is a two-lane undivided roadway with a double yellow centerline stripe trending in an east-west direction. The posted speed limit is 35 mph. On-street parking is permitted west of 7th Avenue.

Gale Avenue is a four-lane undivided roadway with a double yellow centerline stripe trending in an east-west direction. Gale Avenue provides access for the SR-60 westbound ramps. The posted speed limit is 35 mph. On-street parking is not permitted.

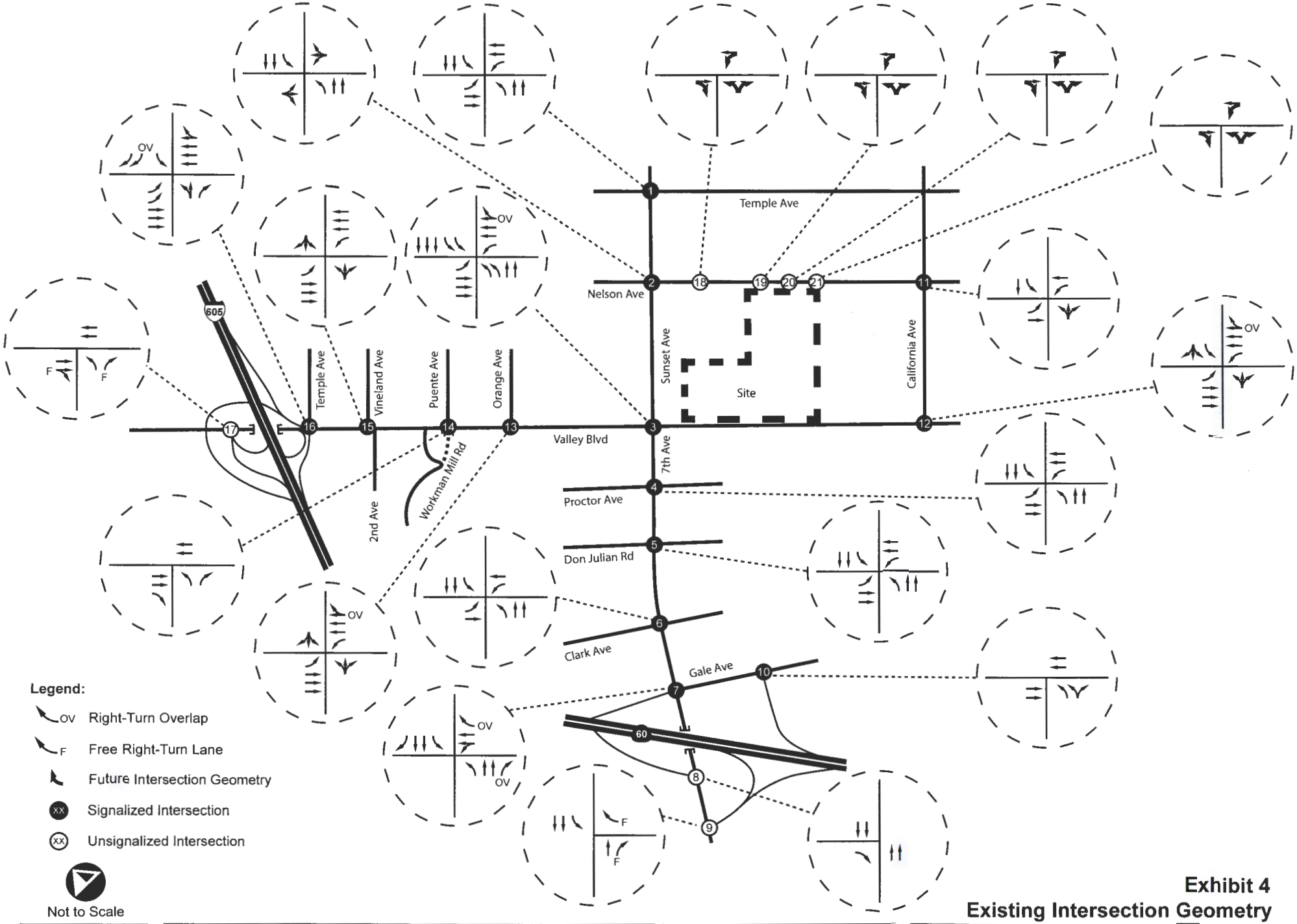


Exhibit 4
Existing Intersection Geometry

Michael Baker INTERNATIONAL

H:\pdata\152815\14700_Nelson\Exhibits

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

California Avenue is a two-lane roadway trends in a north-south direction. It has a double yellow centerline stripe with a posted speed limit of 25 mph north of Nelson Avenue. It has a two-way left-turn lane with a posted speed limit of 35 mph south of Nelson Avenue. On-street parking is permitted on California Avenue north of Nelson Avenue. On-street parking is not permitted south of Nelson Street.

Orange Avenue is a two-lane undivided roadway with a double yellow centerline stripe trending in a north-south direction. The posted speed limit is 35 mph. On-street parking is not permitted.

Vineland Avenue and 2nd Avenue intersect Valley Boulevard at a signalized offset intersection at an offset distance of approximately 100 feet. Vineland Avenue, north of Valley Boulevard, is a two-lane undivided roadway with a double yellow centerline stripe trending in a north-south direction. 2nd Avenue is a two-lane undivided residential street south of Valley Boulevard. The posted speed limit on Vineland Avenue is 35 mph. On-street parking is not permitted on Vineland Avenue. On-street parking is permitted on 2nd Avenue.

Workman Mill Road, south of Valley Boulevard, is a four-lane divided roadway with a raised median trending in a north-south direction. The posted speed limit is 45 mph. On-street parking is not permitted on Workman Mill Road. The Puente Avenue-Workman Mill Road/Valley Boulevard grade separation project is currently under construction. Appendix A shows the concept plans for the Puente Avenue-Workman Mill Road/Valley Boulevard grade separation project. The southerly connector of Workman Mill Road to Valley Boulevard has recently been completed, and it intersects Valley Boulevard as a "T" intersection as shown in the grade separation concept plan.

Puente Avenue is a four-lane divided roadway with a two-way left-turn lane trending in a north-south direction. The posted speed limit is 45 mph. On-street parking is not permitted on Puente Avenue. Due to the ongoing construction of the grade separation project, Puente Avenue currently ends just north of Valley Boulevard and it does not have direct access to Valley Boulevard.

3.2 Existing Conditions Traffic Volumes

To determine the existing operation of the study intersections, AM and PM peak hour intersection movement counts were collected in June 30, 2016. AM peak period intersection counts were collected from 7:00 AM to 9:00 AM, and PM peak period intersection counts were collected from 4:00 PM to 6:00 PM. The counts used in this analysis were taken from the highest hour within the peak period counted. Traffic count data sheets are included in Appendix B of this report. 24-hour roadway segment counts were also collected on Sunset Avenue and Nelson Avenue in July 5, 2016.

Due to the high level of truck traffic in the study area, axle-classified counts were collected differentiating vehicle types including passenger cars and trucks with different number of axles. An axle classification adjustment factor was then used to convert truck traffic into passenger car equivalent (PCE) traffic to account for the impact of the heavy trucks because a large truck occupies more space on the roadway than a typical passenger vehicle.

The PCE factors used for this project are based on the County of San Bernardino standards and are listed as follows:

Vehicle Type	PCE Factor
Passenger Cars	1.0
2 Axle Trucks	1.5
3 Axle Trucks	2.0
4+ Axle Trucks	3.0

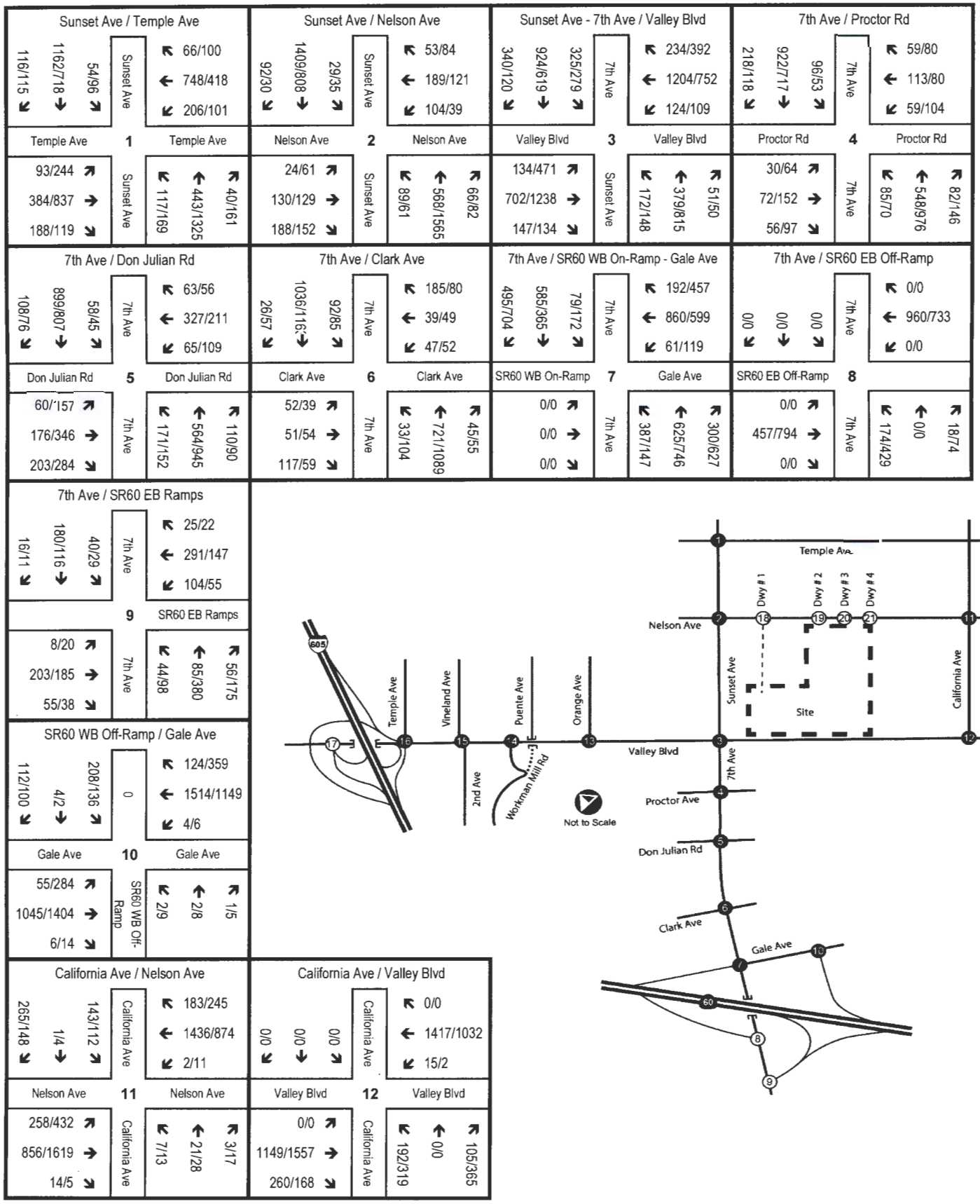
Since the traffic counts were collected in June and July 2016 during the summer while the school was not in session, the summer traffic count volumes are anticipated to be lower than other seasons because there are several schools located in close proximity to the study area. To account for the school traffic, seasonal adjustment factors have been applied to the 2016 summer counts based comparisons of historic (January 2016 and May 2011) count data that are available in the study area. City staff has provided the historic traffic data at the following locations:

A. Temple Avenue, between Baldwin Park Boulevard and Valley Boulevard;
B. Nelson Avenue, between Orange Avenue and Sunset Avenue;
C. Sunset Avenue, between Valley Boulevard and Nelson Avenue;
D. 7th Avenue, between Proctor Avenue and city boundary;
E. 7th Avenue, between Don Julian Road and Proctor Avenue;
F. 7th Avenue, between Salt Lake Avenue and Clark Avenue;
G. Proctor Avenue, between 7th Avenue and 9th Avenue;
H. Proctor Avenue, between 6th Avenue and 7th Avenue;
I. Don Julian Road, between 6th Avenue and 7th Avenue; and
J. Valley Boulevard, between Workman Mill Road and Orange Avenue.

Appendix C compares the historic (January 2016 and May 2011) data to the new June and July 2016 summer counts. For locations where the historic data are lower than the 2016 summer counts, there will be no adjustments (0%) to the 2016 summer counts. For locations where the historic data are higher than the 2016 summer counts, the adjustment to the 2016 summer counts is the calculated percent difference. For location J (Valley Boulevard between Orange Avenue and Workman Mill Road/Puente Avenue), the AM peak hour adjustment includes the calculated 3.0% difference and an annual 1% ambient traffic growth rate (a 5 year growth of 5.1%) from the May 2011 data.

Exhibits A and B in Appendix C show the AM and PM peak hour adjustment factor for the June/July 2016 summer counts for the intersection approaches at various roadway segments. Instead of an overall adjustment factor for the entire study area, it is more appropriate to have different adjustment factors for different corridors and areas. There are some locations that have no adjustments. Additional manual adjustments have been made to the through movements to achieve reasonable flow conservation on the roadway segments between adjacent intersections.

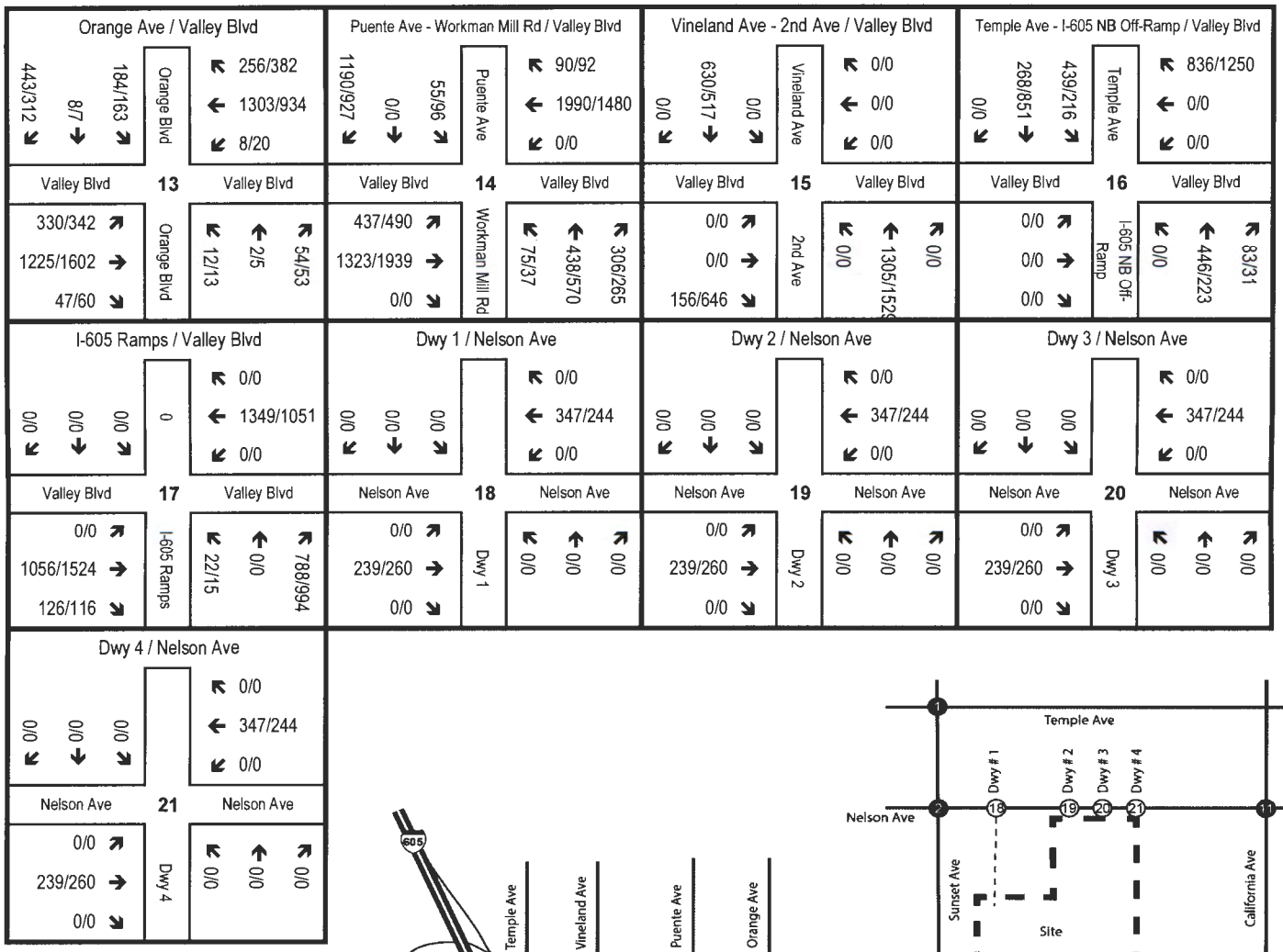
Based on the PCE adjustment factors and the seasonal adjustment factors, Exhibit 5 shows the adjusted existing 2016 intersection traffic volumes.

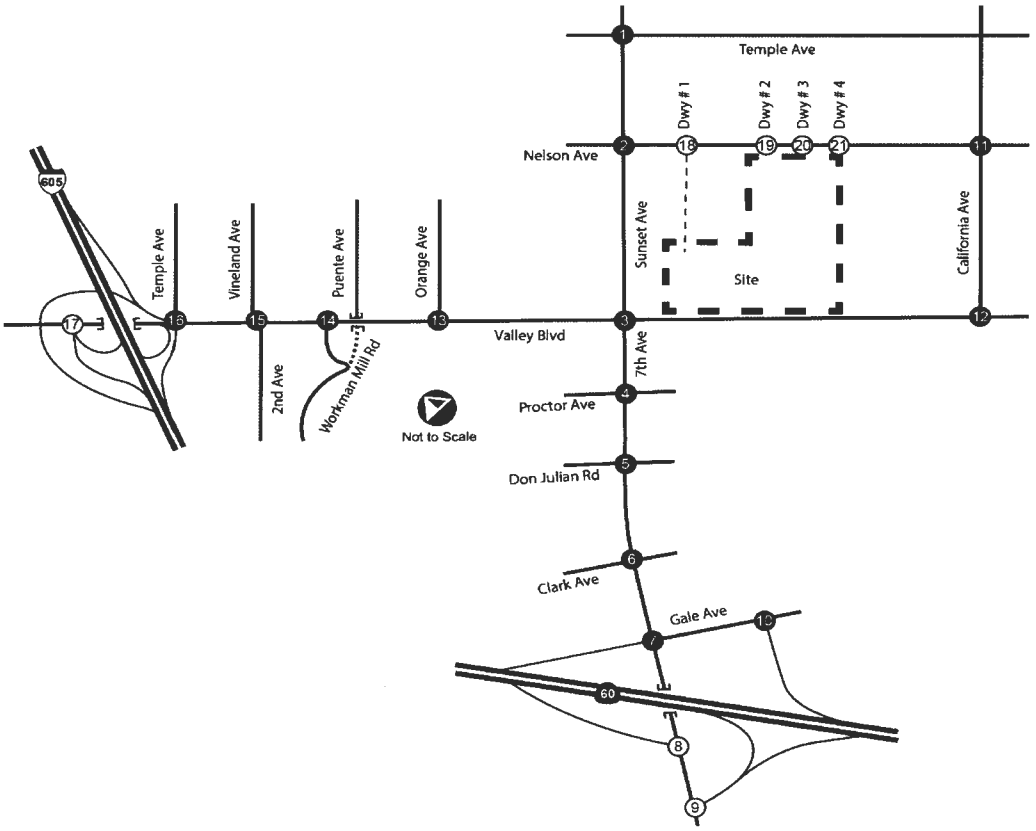


XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 5 (1 of 2)

Existing Intersection Volumes





XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 5 (2 of 2)

Existing Intersection Volumes

3.3 Existing Conditions Intersection Analysis

Table 3 summarizes the intersection analysis results for existing AM and PM peak hour conditions. Appendix D includes the existing conditions intersection analysis worksheets. As shown in Table 3, all existing study intersections are operating at acceptable LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM and PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp – LOS E (PM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard – LOS E (AM), LOS F (PM)
17. I-605 Southbound Ramps at Valley Boulevard – LOS F (AM and PM)

Table 3

Existing 2016 Conditions Intersection Analysis Summary

Intersection			Existing 2016 Conditions			
			AM		PM	
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS
1	Sunset Ave / Temple Ave	TS	0.940	E	1.007	F
2	Sunset Ave / Nelson Ave	TS	0.945	E	0.909	E
3	Sunset Ave - 7th Ave / Valley Blvd	TS	0.845	D	1.030	F
4	7th Ave / Proctor Ave	TS	0.623	B	0.655	B
5	7th Ave / Don Julian Rd	TS	0.697	B	0.794	C
6	7th Ave / Clark Ave	TS	0.666	B	0.670	B
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.846	D	0.761	C
	• HCM Analysis	TS	29.8	C	20.6	C
8	7th Ave / SR60 EB Off-Ramp • HCM Analysis	CSS	12.2	B	43.4	E
9	7th Ave / SR60 EB Ramps • HCM Analysis	UNC	11.5	B	8.3	A
10	SR60 WB Off-Ramp / Gale Ave	TS	0.493	A	0.529	A
	• HCM Analysis	TS	5.7	A	8.5	A
11	California Ave / Nelson Ave	TS	0.664	B	0.851	D
12	California Ave / Valley Blvd	TS	0.622	B	0.721	C
13	Orange Ave / Valley Blvd	TS	0.898	D	0.816	D
14	Workman Mill Rd / Valley Blvd	TS	0.738	C	0.832	D
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.070	F	0.934	E
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	0.984	E	1.010	F
	• HCM Analysis	TS	42.5	D	33.3	C
17	I-605 Ramps / Valley Blvd • HCM Analysis	CSS	100.7	F	139.8	F

Note

* Intersection Type: TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[1] Signalized Intersections: Intersection Capacity Utilization (ICU) Analysis Method, Volume/Capacity (V/C) Ratio; Unsignalized Intersections: Highway Capacity Manual (HCM) Analysis Method, Average Delay (seconds per vehicle).

4.0 PROJECT TRAFFIC

This section presents the methodology behind the project traffic generation, distribution and assignment.

The 11.49-acre project site is currently vacant. The project proposes to construct two warehouse buildings with a total of 231,210 square feet. Building 1 is 63,240 square feet and it is located north of the project site. Building 2 is 167,970 square and it is located south of the project site. Each building has its own separate parking lot. Building 1 has 101 parking spaces and Building 2 has 218 parking spaces for a total of 319 parking spaces. Each building has two stop-controlled full access driveways on Nelson Avenue for a total of 4 vehicular access points for the project site. The proposed project is anticipated to be completed and operational in year 2018.

4.1 Project Traffic Generation

To calculate trips forecast to be generated by the proposed project, trip generation rates published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012)* are used to calculate the number of trips that will be generated by the project. Since the project is a warehouse that generates significant amount of truck trips, the City of Fontana *Truck Trip Generation Study, August 2003*, was used to estimate the vehicle mix for "heavy warehouse" use. The number of vehicle trips are converted to passenger care equivalent (PCE) trips based on the County of San Bernardino standards and the PCE listed below:

Vehicle Type	PCE Factor
Passenger Cars	1.0
2 Axle Trucks	1.5
3 Axle Trucks	2.0
4+ Axle Trucks	3.0

Table 4 summarizes trip rates and Table 5 summarizes the project traffic generation. As shown in Table 5, the project is anticipated to generate 1,078 daily PCE trips with 91 AM peak hour PCE trips and 98 PM peak hour PCE trips.

4.2 Project Trip Distribution

Project trip distribution patterns are estimated based on a review of adjacent land uses. Exhibits 6 through 9 illustrate the project outbound and inbound trip distribution patterns for passenger cars and trucks.

4.3 Project Traffic Assignment

Exhibit 10 shows the corresponding assignment of project-only AM and PM peak hour intersection traffic volumes assuming the trip percent distribution shown in Exhibits 6 through 9.

Table 4
Trip Generation Rates

Trip Rates										
Project				Daily	AM Peak			PM Peak		
No.	Land Use	Code*	Unit**		Total	In%	Out%	Total	In%	Out%
1	Warehousing	ITE 150	TSF	***3.560***	***0.300***	*79.0%*	*21.0%*	***0.320***	*25.0%*	*75.0%*
2	79.57% Passenger Cars (PCE[1] = 1.0)	79.57%	1.0	***2.833***	***0.239***	*79.0%*	*21.0%*	***0.255***	*25.0%*	*75.0%*
3	3.46% 2-Axle Trucks (PCE[1] = 1.5)	3.46%	1.5	***0.185***	***0.016***	*79.0%*	*21.0%*	***0.017***	*25.0%*	*75.0%*
4	4.64% 3-Axle Trucks (PCE[1] = 2.0)	4.64%	2.0	***0.330***	***0.028***	*79.0%*	*21.0%*	***0.030***	*25.0%*	*75.0%*
5	12.33% 4-Axle Trucks (PCE[1] = 3.0)	12.33%	3.0	***1.317***	***0.111***	*79.0%*	*21.0%*	***0.118***	*25.0%*	*75.0%*

Note

* City of Fontana, Truck Trip Generation Study, April 2003. Heavy Warehouse

Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition, 2012. Warehousing.

** TSF = Thousand Square Feet

[1] Passenger Car Equivalence (PCE) rate per SANBAG guidelines.

Table 5
Project Traffic Generation Summary

Traffic Generation									
Bldg No.	Project		Daily	AM Peak			PM Peak		
	Land Use	Quantity**		Total	In	Out	Total	In	Out
1	Warehousing	63.240 TSF							
	79.57% Passenger Cars (PCE[1] = 1.0)		**179**	**15**	12	3	**16**	4	12
	3.46% 2-Axle Trucks (PCE[1] = 1.5)		**12**	**1**	1	-	**1**	-	1
	4.64% 3-Axle Trucks (PCE[1] = 2.0)		**21**	**1**	1	-	**2**	1	1
	12.33% 4-Axle Trucks (PCE[1] = 3.0)		**83**	**7**	6	1	**8**	2	6
	Subtotal Trips - Building 1	*63.240 TSF*	***295***	***24***	*20*	*4*	***27***	*7*	*20*
2	Warehousing	167.970 TSF							
	79.57% Passenger Cars (PCE[1] = 1.0)		**476**	**40**	32	8	**43**	11	32
	3.46% 2-Axle Trucks (PCE[1] = 1.5)		**31**	**3**	2	1	**3**	1	2
	4.64% 3-Axle Trucks (PCE[1] = 2.0)		**55**	**5**	4	1	**5**	1	4
	12.33% 4-Axle Trucks (PCE[1] = 3.0)		**221**	**19**	15	4	**20**	5	15
	Subtotal Trips - Building 2	*167.970 TSF*	***783***	***67***	*53*	*14*	***71***	*18*	*53*
Passenger Car Trips			**655**	**55**	44	11	**59**	15	44
Truck Trips			**423**	**36**	29	7	**39**	10	29
Total Project Trips		231.210 TSF	**1,078**	**91**	73	18	**98**	25	73

Note

** TSF = Thousand Square Feet

[1] Passenger Car Equivalence (PCE) rate per SANBAG guidelines.

Exhibit 6 – Project Passenger Car Outbound Trip Distribution

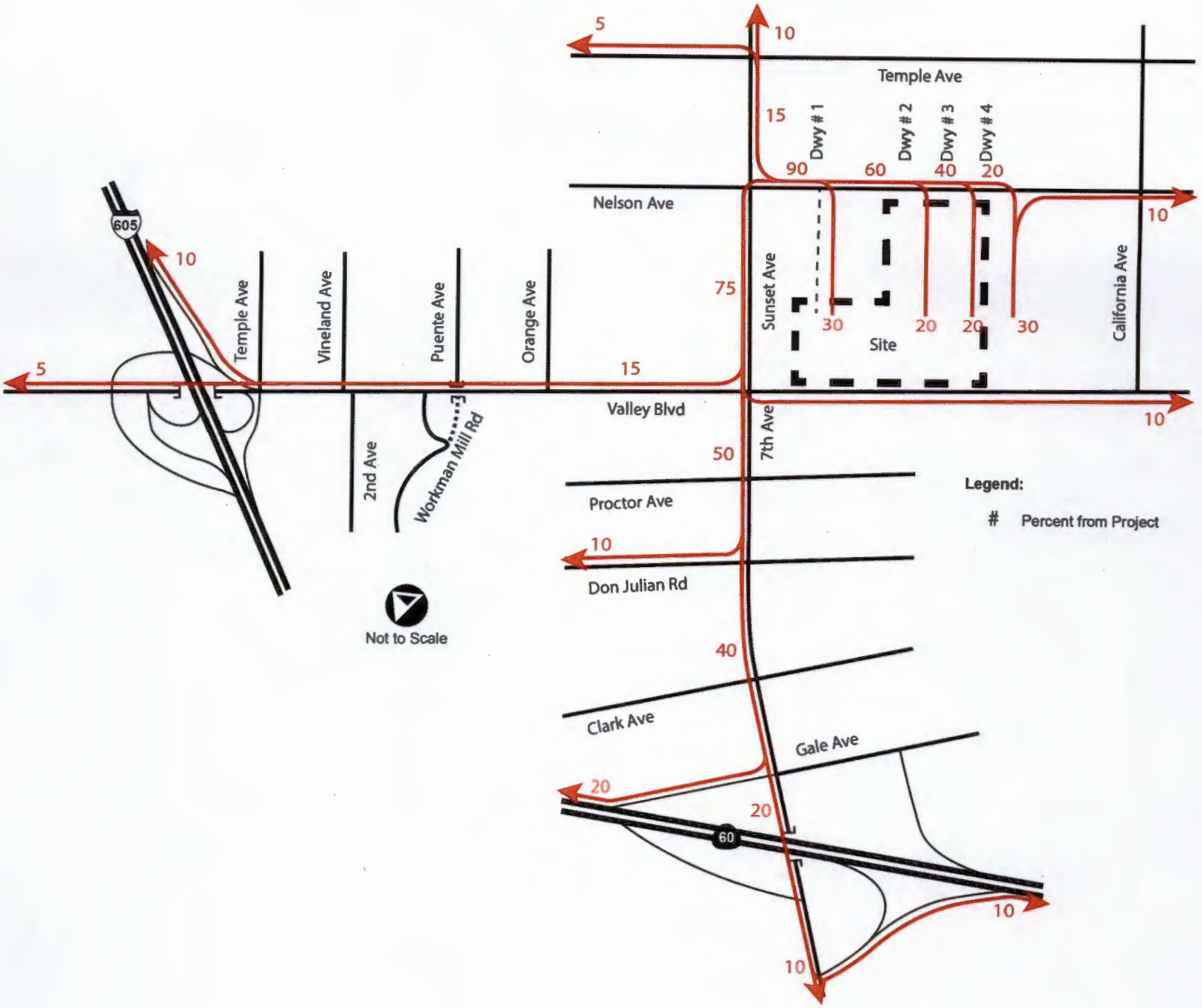


Exhibit 7 – Project Passenger Car Inbound Trip Distribution

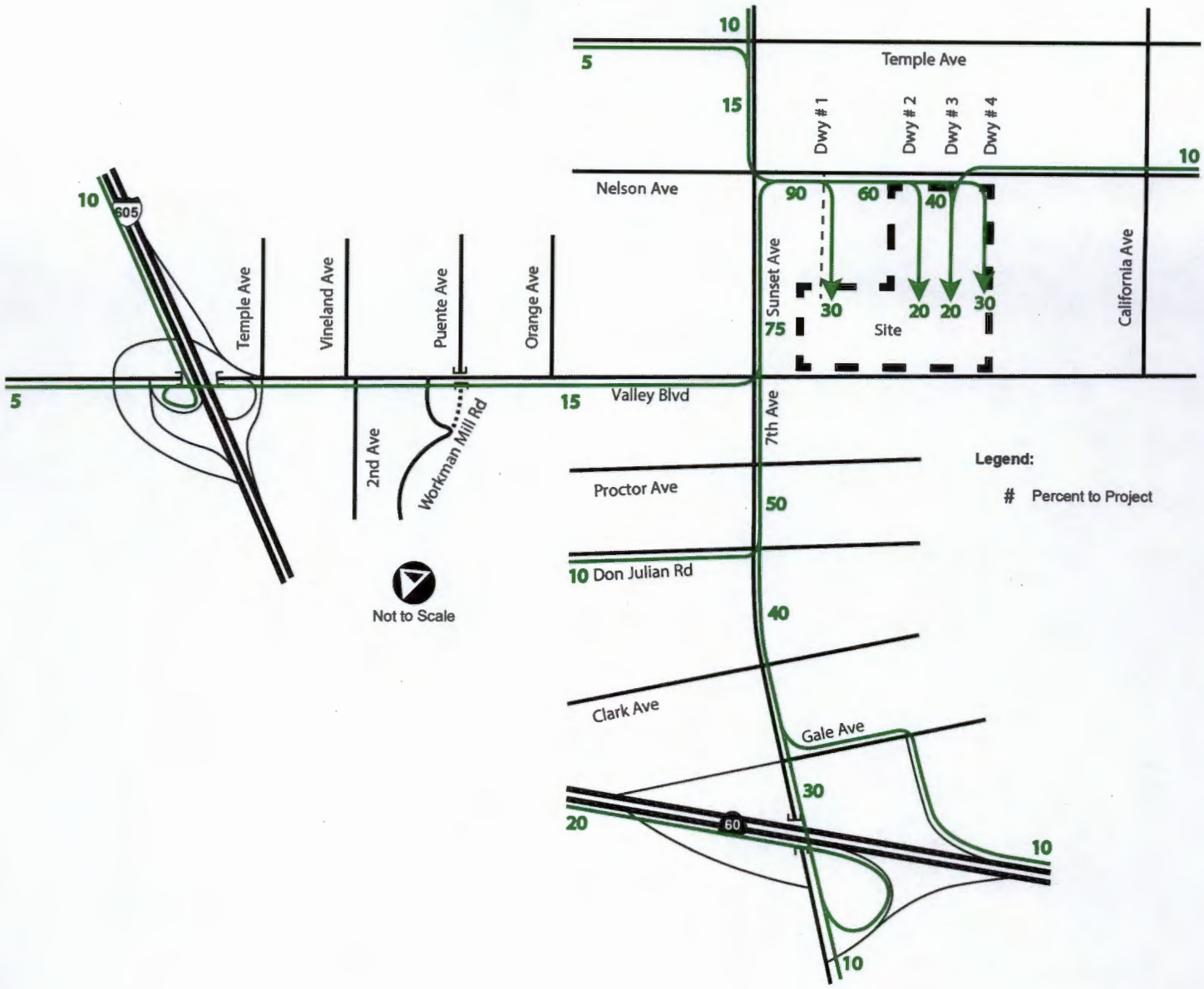


Exhibit 8 – Project Truck Outbound Trip Distribution

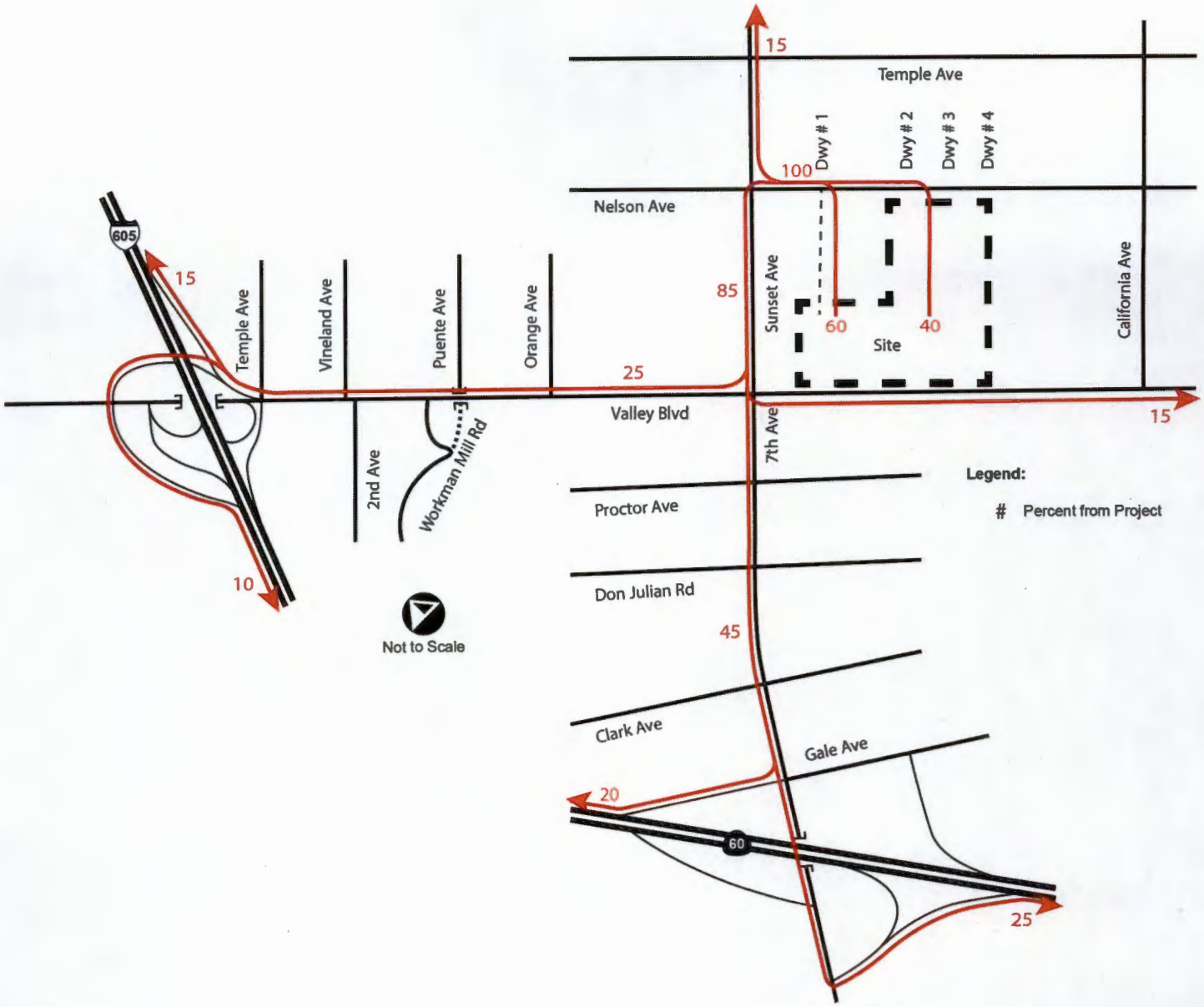
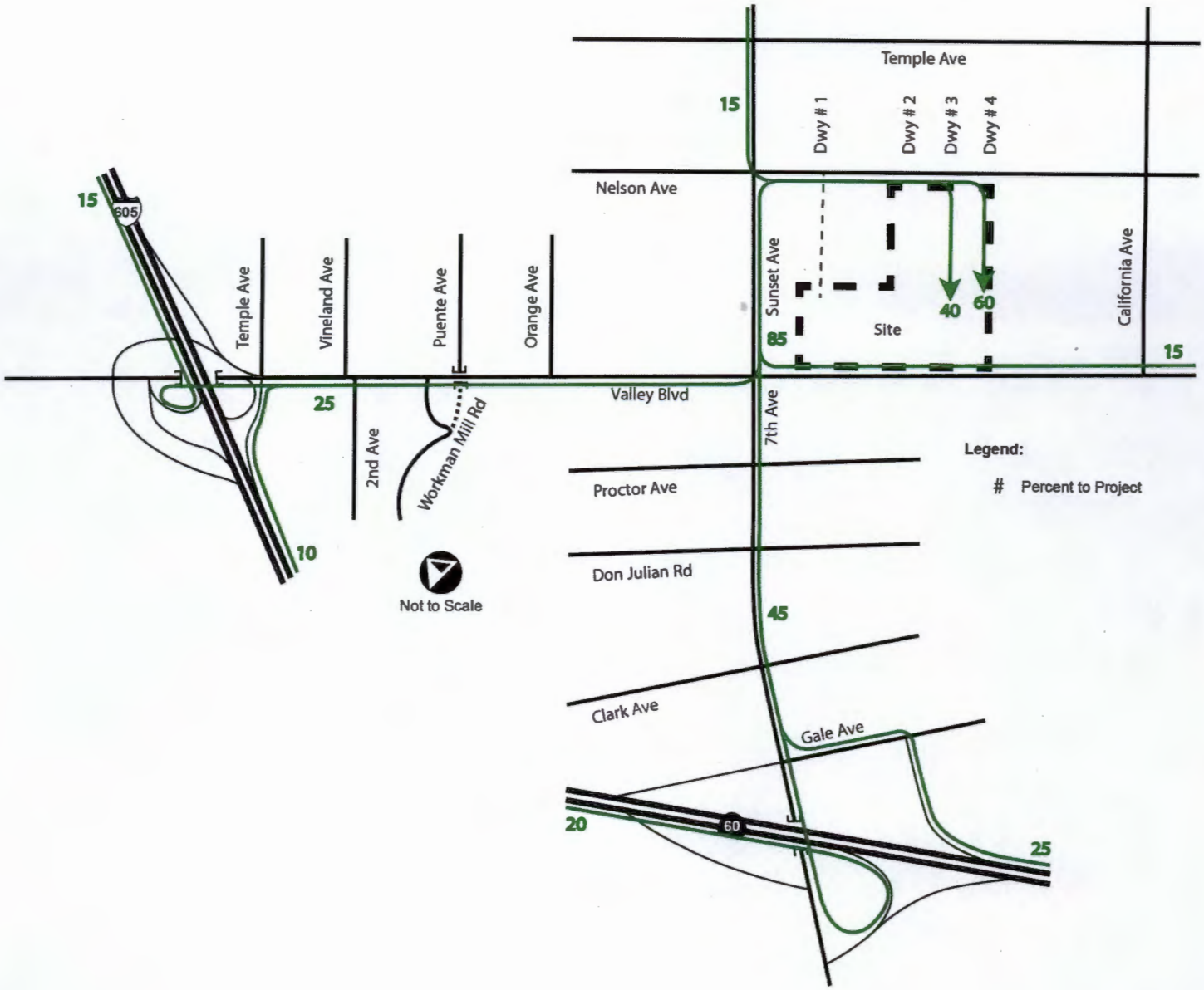
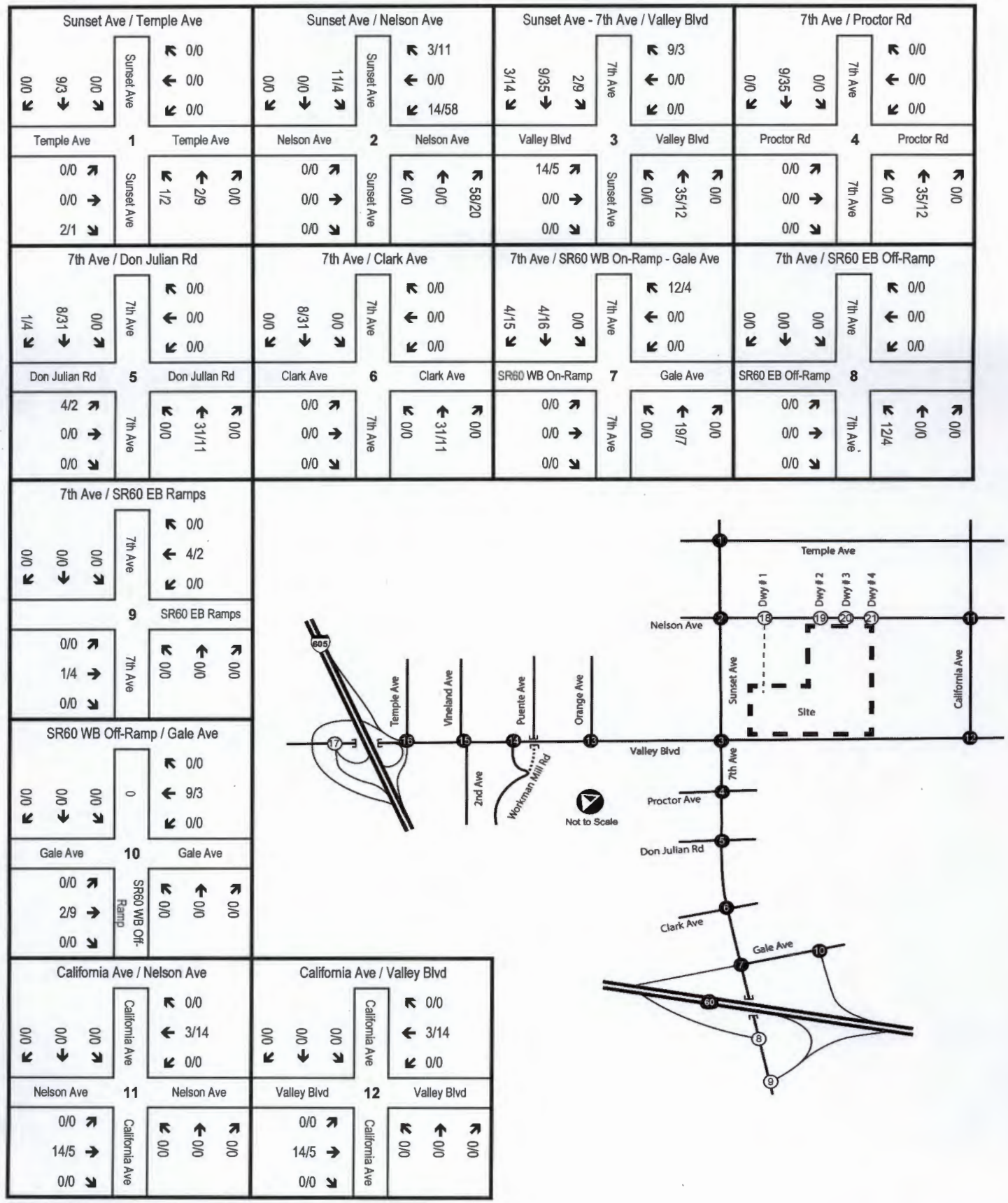


Exhibit 9 – Project Truck Inbound Trip Distribution

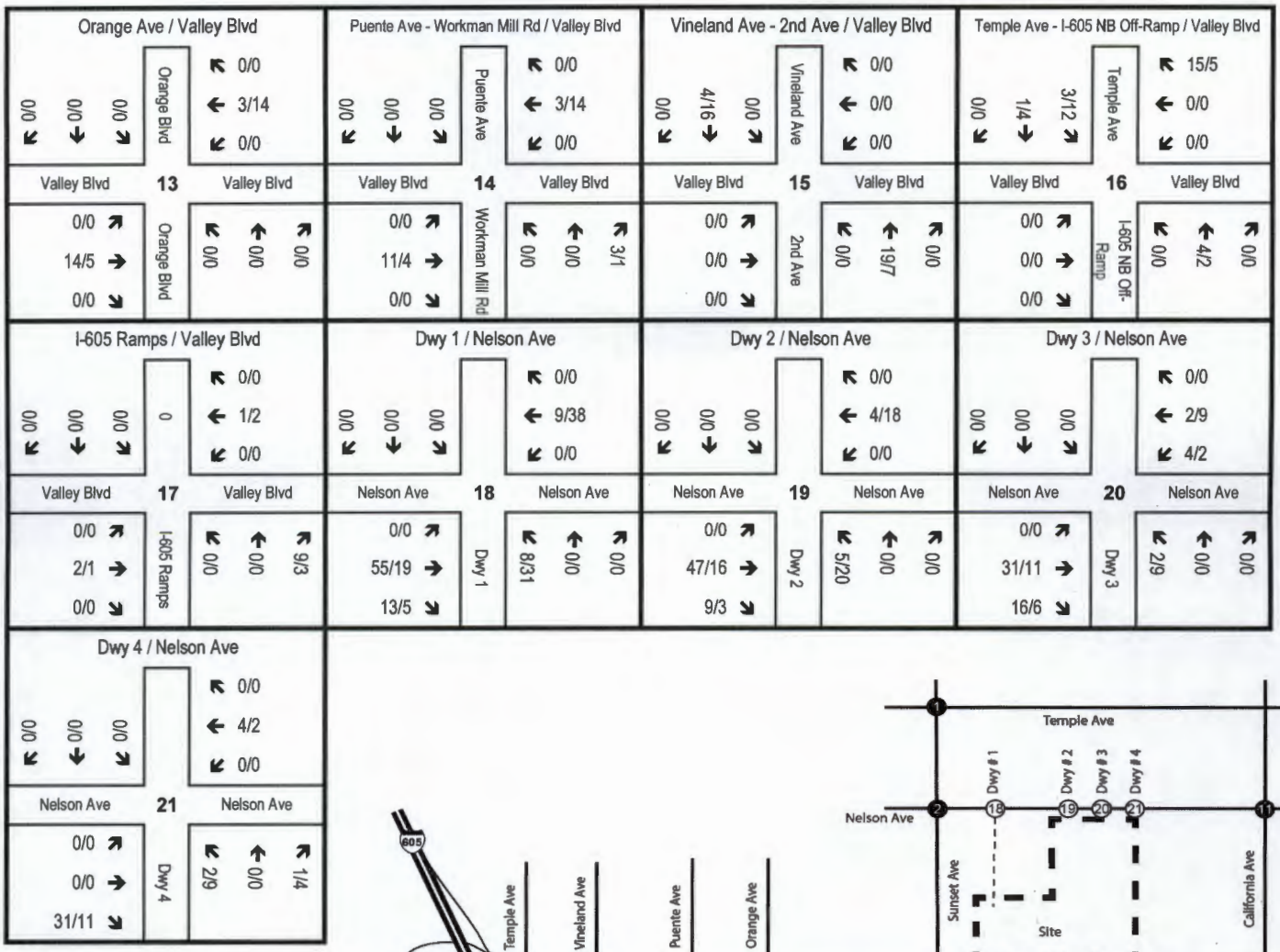


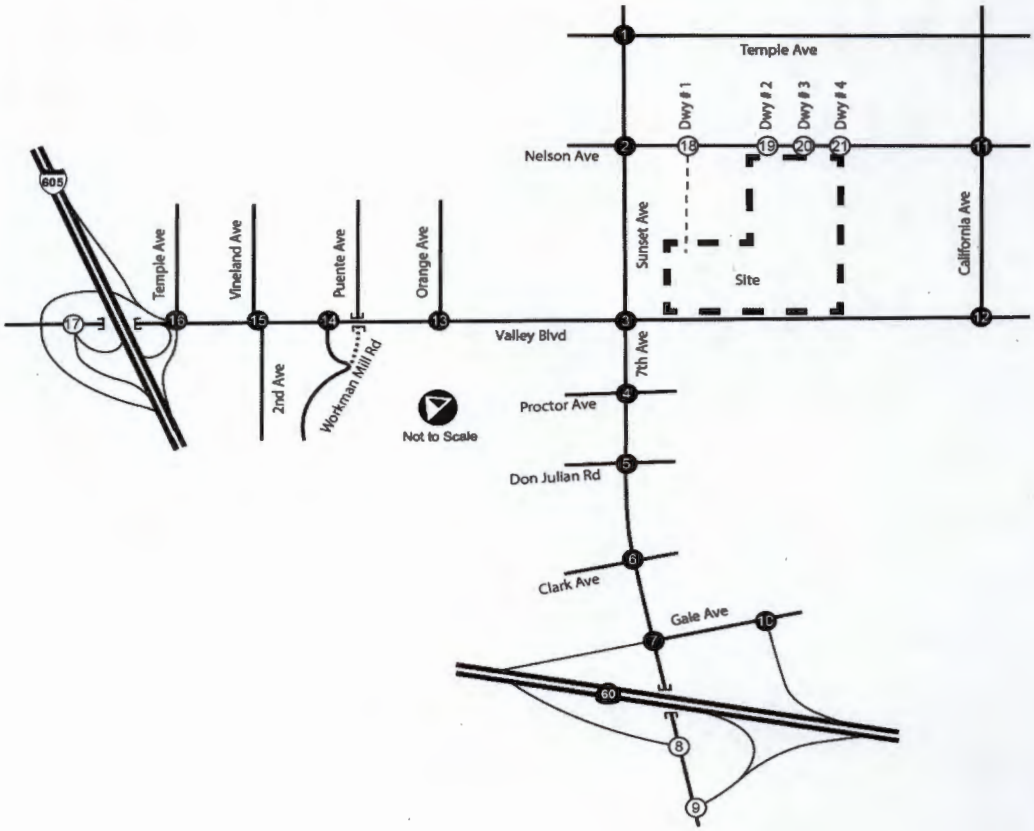


XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 10 (1 of 2)

Project-Only Intersection Volumes





XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 10 (2 of 2)

Project-Only Intersection Volumes

5.0 FUTURE TRAFFIC FORECAST

This section presents the future traffic forecast with the addition of trips generated by the proposed project on the existing conditions. Future Opening Year 2018 conditions including the background ambient growth with other cumulative developments are also considered. The following future conditions are presented:

- Existing plus Project (EP) conditions
- Opening Year 2018 without Project (2018nP) Conditions; and
- Opening Year 2018 with Project (2018wP) Conditions.

5.1 Ambient Growth Rate

An annual ambient growth rate of 1% has been applied to the adjusted 2016 intersection traffic volumes for 2 years to calculate the Year 2018 conditions. The 1% growth factor is a conservative assumption because the Los Angeles Congestion Management Plan (CMP) growth rate for the area is less than half a percent. In the CMP, the West Covina area is expected to grow 8.3% from 2015 to 2035, which is 0.4% per year.

5.2 Cumulative Development Traffic

Based on the development status information provided by the City of Industry and other adjacent jurisdictions that included La Puente, West Covina and the Hacienda Heights neighborhood within County of Los Angeles, there are 22 cumulative developments in the study area within a 3-mile radius of the project site. The general locations of the cumulative developments are shown in Appendix E.

Table 6 summarizes the cumulative development trip generation summary. Trip rates published in the *Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition, 2012)* are used to calculate the number of trips that will be generated by the cumulative developments. Appendix E shows the detailed calculations of the cumulative development trips. As summarized in Table 6, the cumulative developments will generate approximately 11,128 daily trips with 1,081 AM peak hour trips and 1,292 PM peak hour trips.

Appendix E shows the trip distribution patterns for the cumulative developments. Exhibit 11 shows the cumulative development AM and PM peak hour intersection traffic volumes.

5.3 Existing Plus Project Traffic

Exhibit 12 shows Existing plus Project (EP) conditions AM and PM peak hour intersection traffic volumes.

5.4 Opening Year 2018 Without Project Traffic

Exhibit 13 shows Opening Year 2018 without Project (2018nP) conditions AM and PM peak hour intersection traffic volumes.

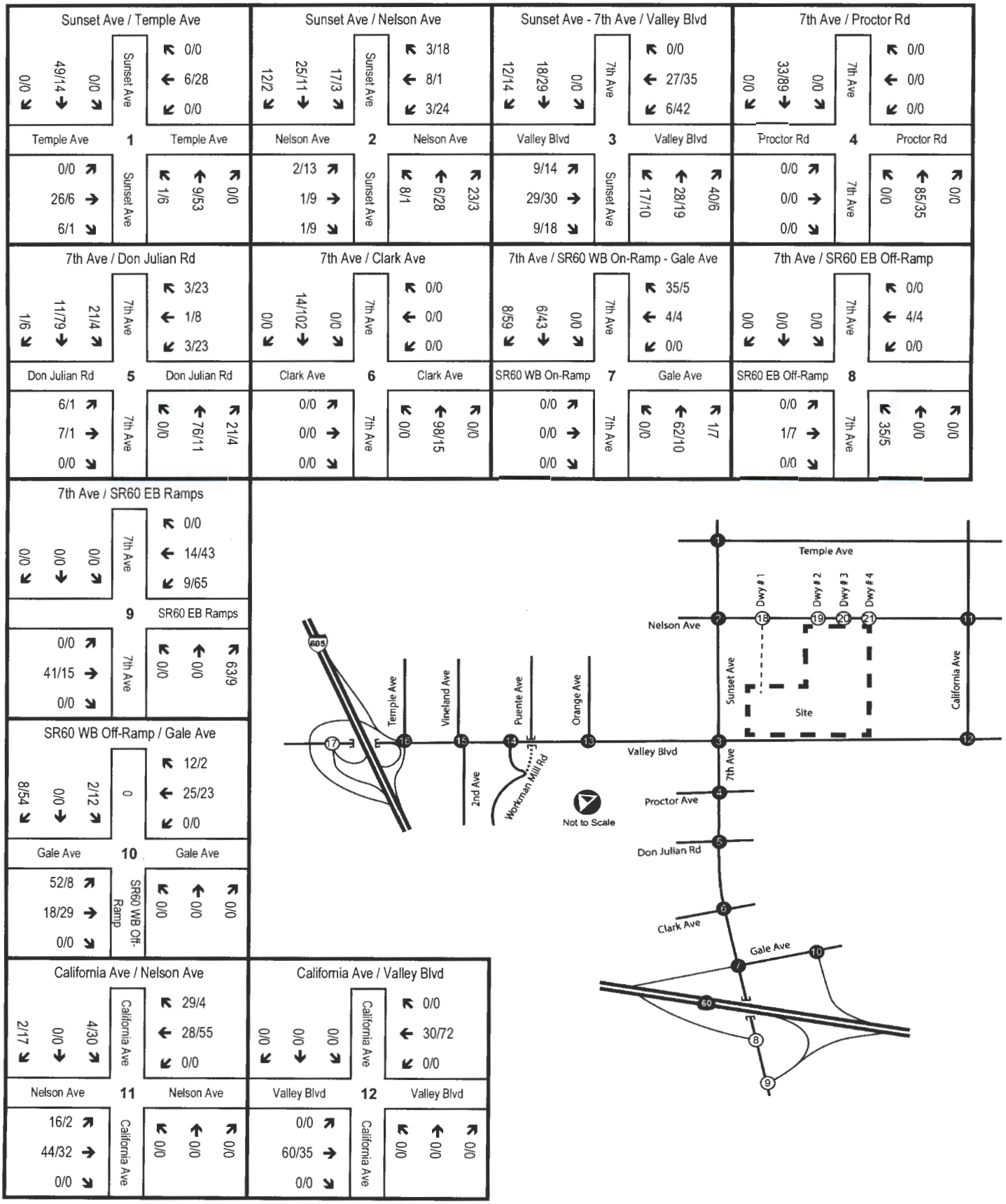
Table 6
Cumulative Development Traffic Generation Summary

Traffic Generation									
Cumulative Project			2-Way Daily	AM Peak			PM Peak		
No.	Address	Land Use[1]		Total	In	Out	Total	In	Out
1	751 Echelon Ave	246,373 SF Industrial	**2,179**	**288**	254	34	**302**	35	267
2	16801 Gale Ave	39,150 SF Industrial	**494**	**59**	49	10	**61**	12	49
3	15619 Valley Blvd	Remodel of Existing Retail	-	-	-	-	-	-	-
4	15051 Don Julian Rd	22,775 SF Warehouse Expansion	**107**	**9**	7	2	**9**	2	7
5	125 Orange Ave	80,000 SF Industrial	**708**	**93**	82	11	**98**	12	86
6	15458 Valley Blvd	1,573 SF Retail (salon)	**67**	**2**	1	1	**6**	3	3
7	17225 Arenth Ave	6,760 SF Maintenance building	**41**	**6**	5	1	**5**	2	3
8	13131 Crossroads Pkwy	Expand hours of operation and alcohol service	-	-	-	-	-	-	-
9	15000 Nelson Ave	125,344 SF Industrial	**1,109**	**147**	129	18	**153**	18	135
10	15130 Nelson Ave	14,680 SF Industrial Building Reduction	***-129***	***-15***	*-14*	*-1*	***-17***	*-1*	*-16*
11	489 & 499 Parriott Pl	84,660 SF & 45,510 SF Industrial Buildings	***1,152***	***152***	*134*	*18*	***160***	*19*	*141*
12	301 S Glendroa Ave	20,660 SF Retail & 450 DU Condo	***3,469***	***218***	*44*	*174*	***310***	*194*	*116*
13	1030 S Glendora Ave	2,000 SF Retail	***85***	***2***	*1*	*1*	***8***	*4*	*4*
14	NW Corner of Lark Ellen and Garvey	77,142 SF Self-Storage	***193***	***11***	*6*	*5*	***20***	*10*	*10*
15	520 S Lark Ellen Ave	Single-Family Residential 45 DU	***428***	***34***	*9*	*25*	***45***	*28*	*17*
16	424 S Lark Ellen Ave	Single-Family Residential 21 DU	***200***	***16***	*4*	*12*	***21***	*13*	*8*
17	444 S Vincent Ave	6,695 SF Tire Store	***286***	***6***	*4*	*2*	***25***	*12*	*13*
18	747 Del Valle Ave	Single-Family Detached 45 DU	***428***	***34***	*9*	*25*	***45***	*28*	*17*
19	1431 Dunswell Ave	Single-Family Detached 4 DU	***38***	***3***	*1*	*2*	***4***	*3*	*1*
20	15710 Newton St	Residential Condos - Detached 21 DU	***122***	***9***	*1*	*8*	***11***	*7*	*4*
21	15835 Gale Ave	Commercial Swimming Pool/School	***71***	***1***	*1*	-	***18***	*12*	*6*
22	1117 Turnbull Canyon Road	Apartments 12 DU	***80***	***6***	*1*	*5*	***8***	*5*	*3*
Total Cumulative Trips			**11,128**	**1,081**	**728**	**353**	**1,292**	**418**	**874**

Note

[1] SF = square feet; DU = dwelling unit

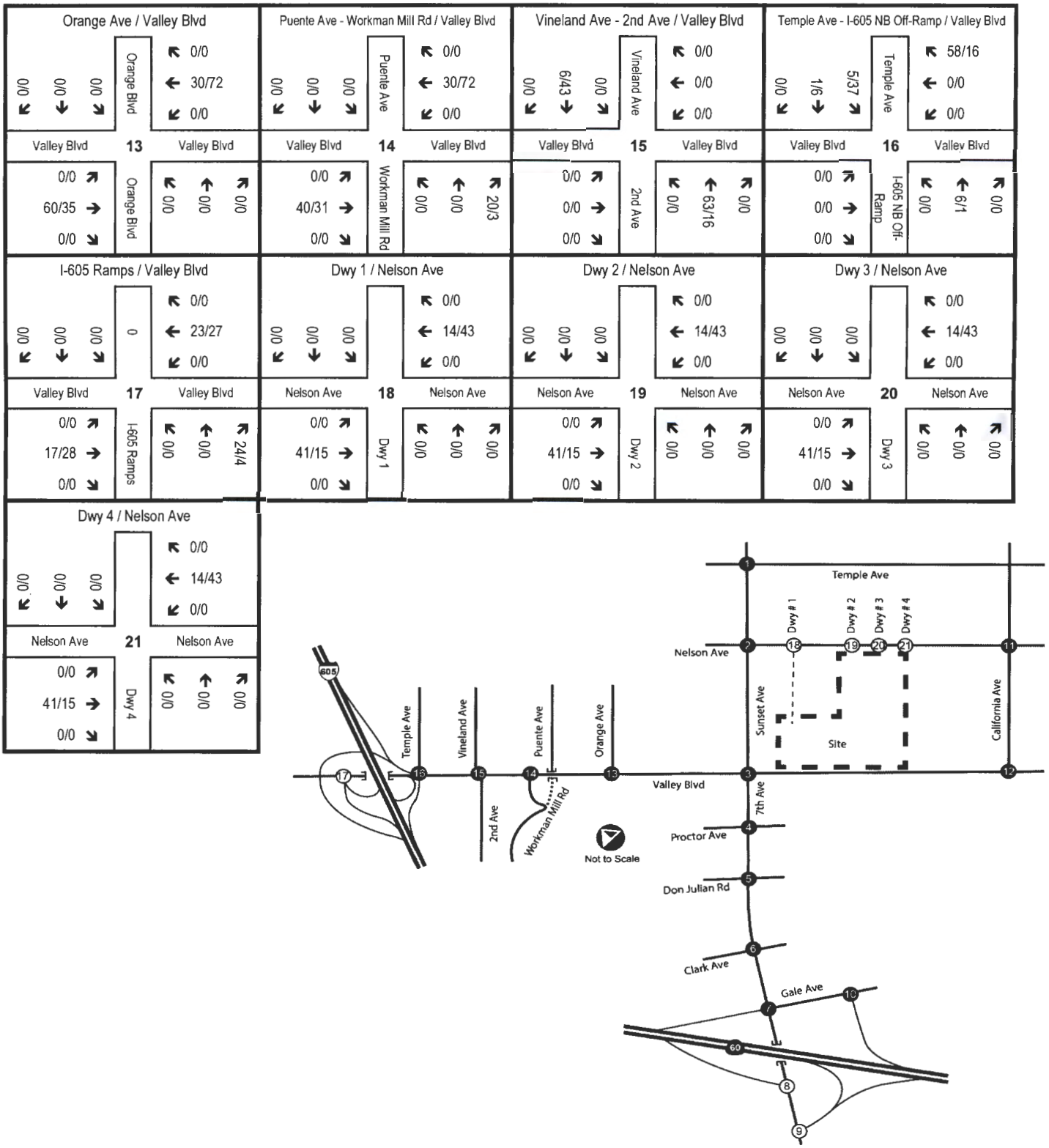
See Appendix F for detailed traffic generation calculations.



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 11 (1 of 2)

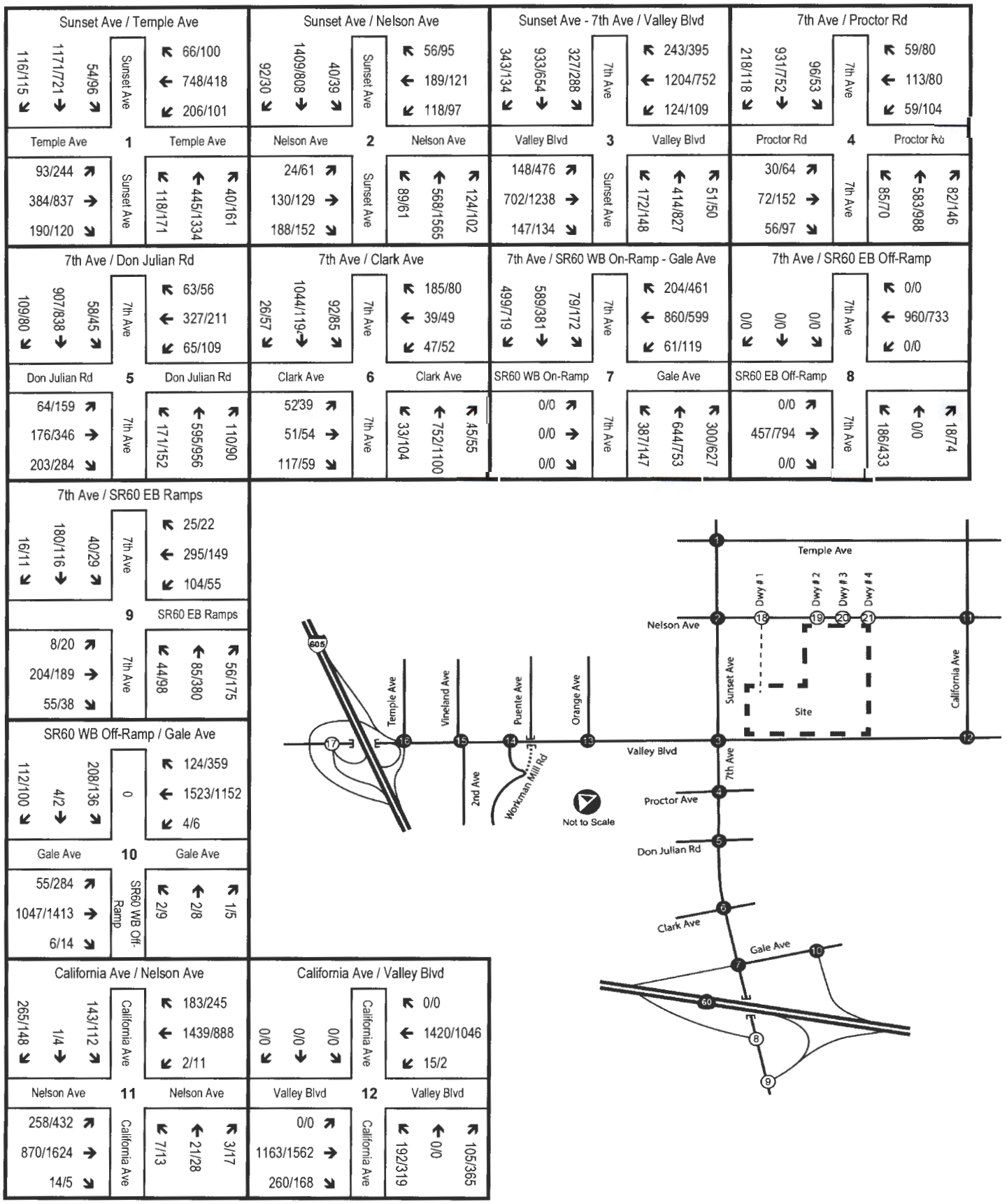
Cumulative Development Intersection Volumes



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 11 (2 of 2)

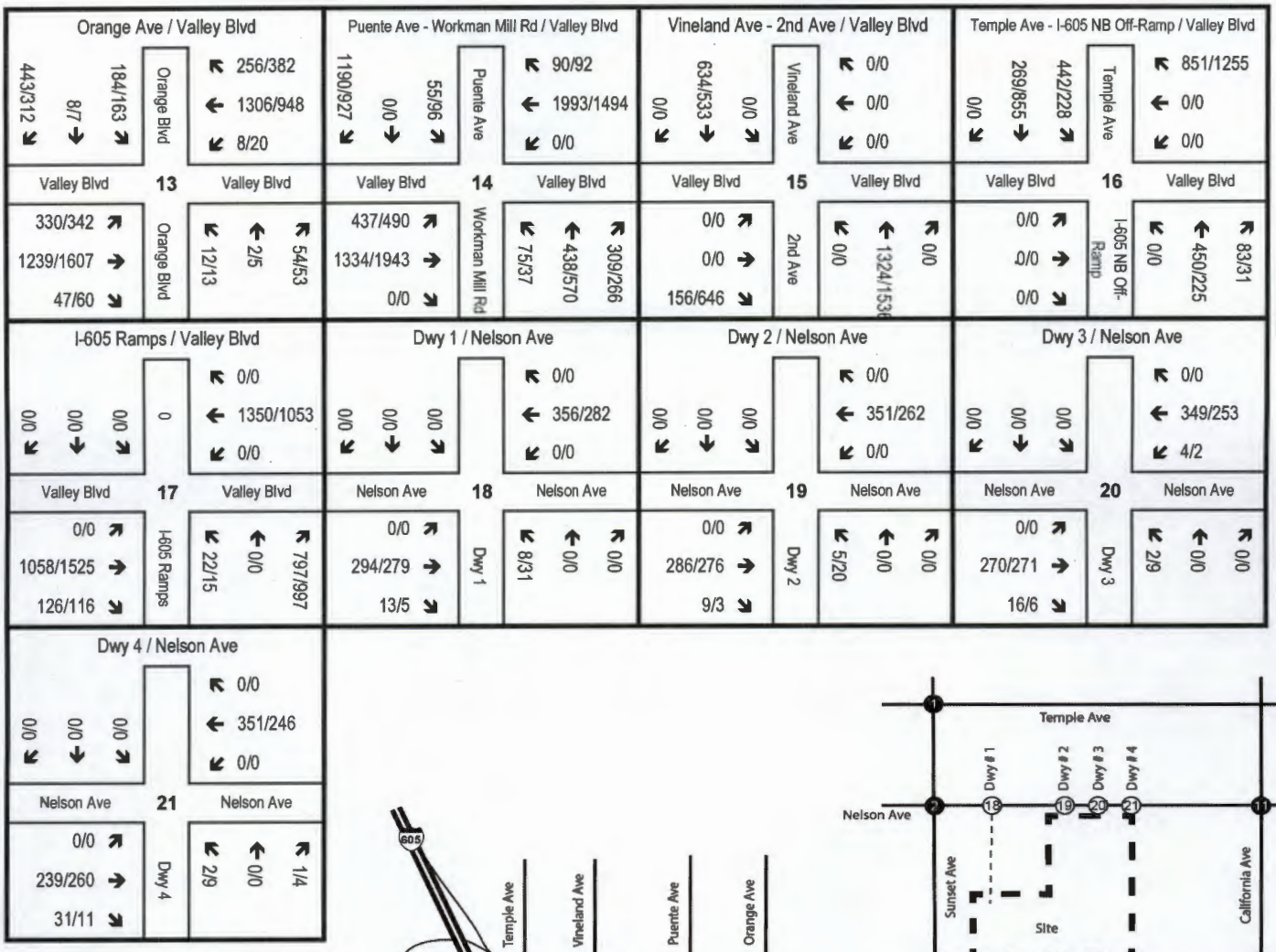
Cumulative Development Intersection Volumes



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 12 (1 of 2)

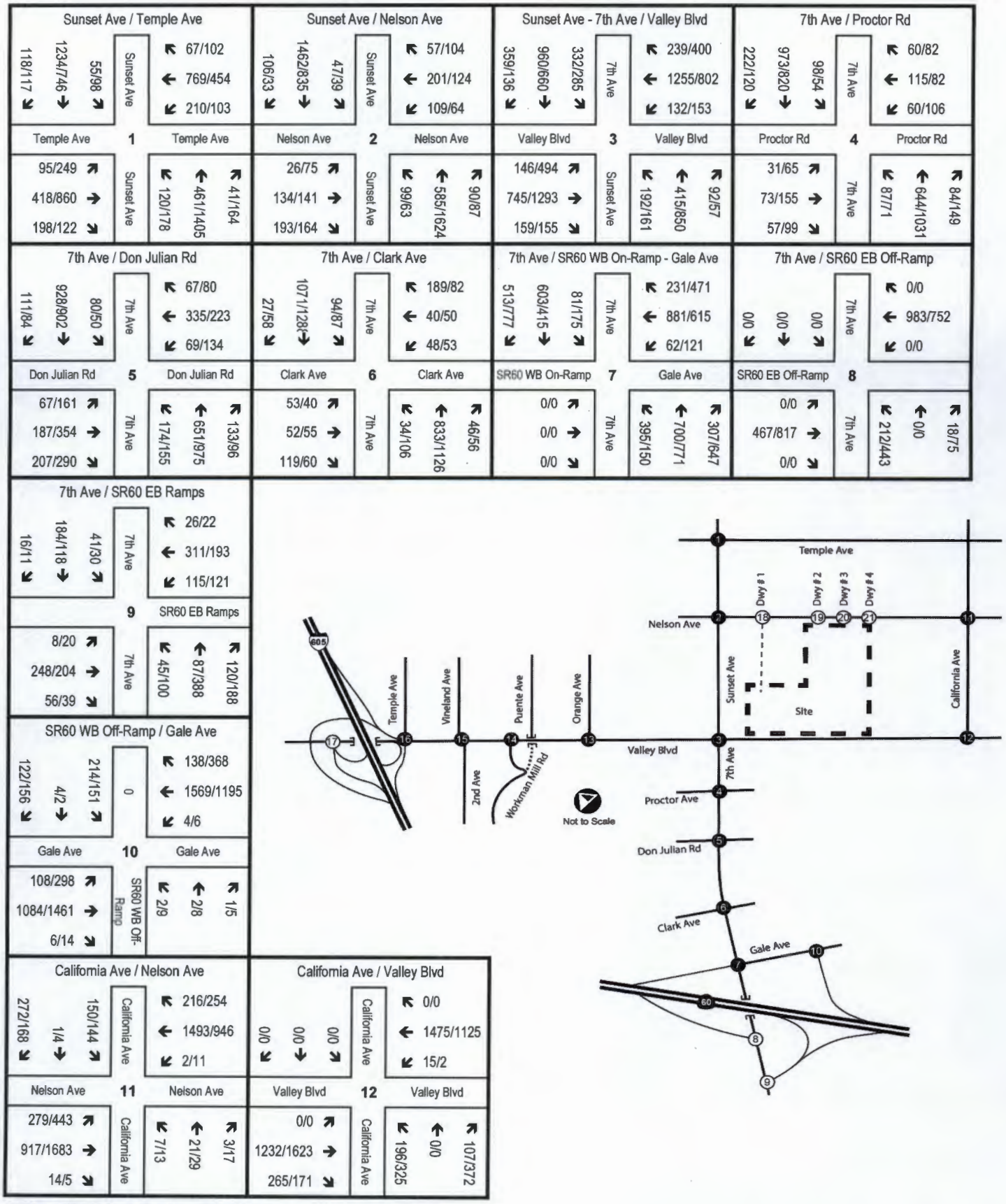
Existing Plus Project (EP) Intersection Volumes



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 12 (2 of 2)

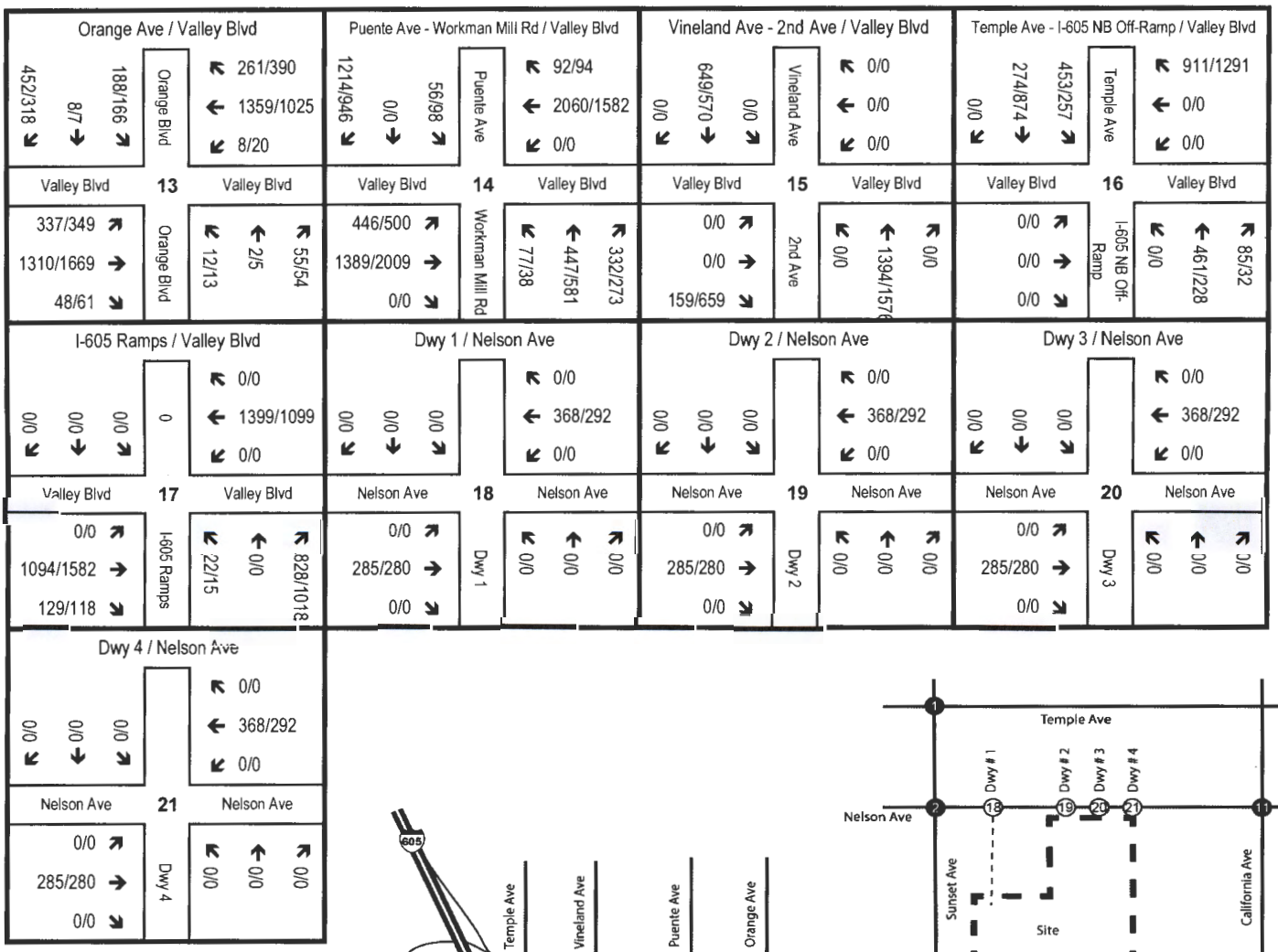
Existing Plus Project (EP) Intersection Volumes



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 13 (1 of 2)

Opening Year 2018 Without Project (2018nP) Intersection Volumes



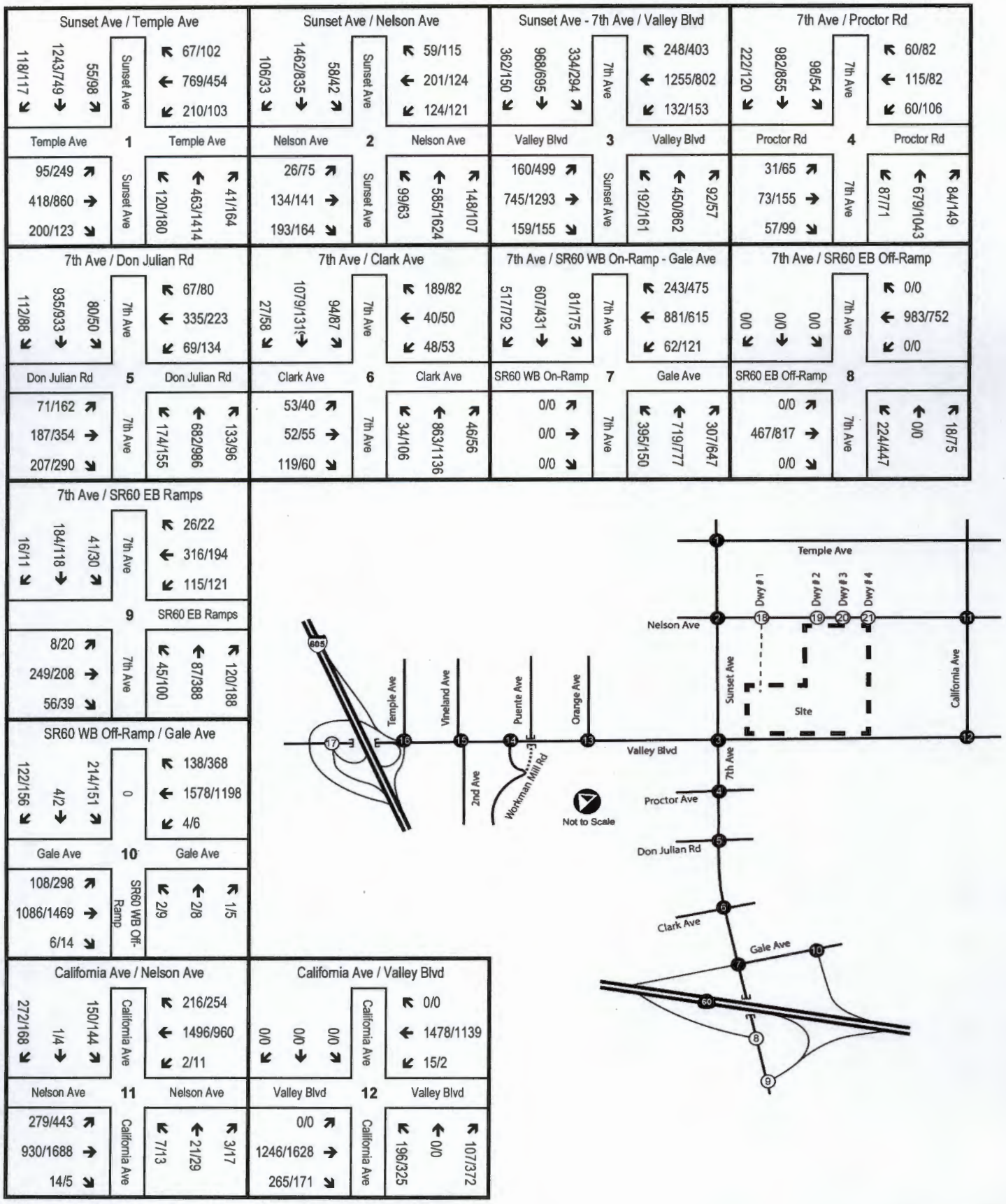
XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 13 (2 of 2)

Opening Year 2018 Without Project (2018nP) Intersection Volumes

5.5 Opening Year 2018 With Project Traffic

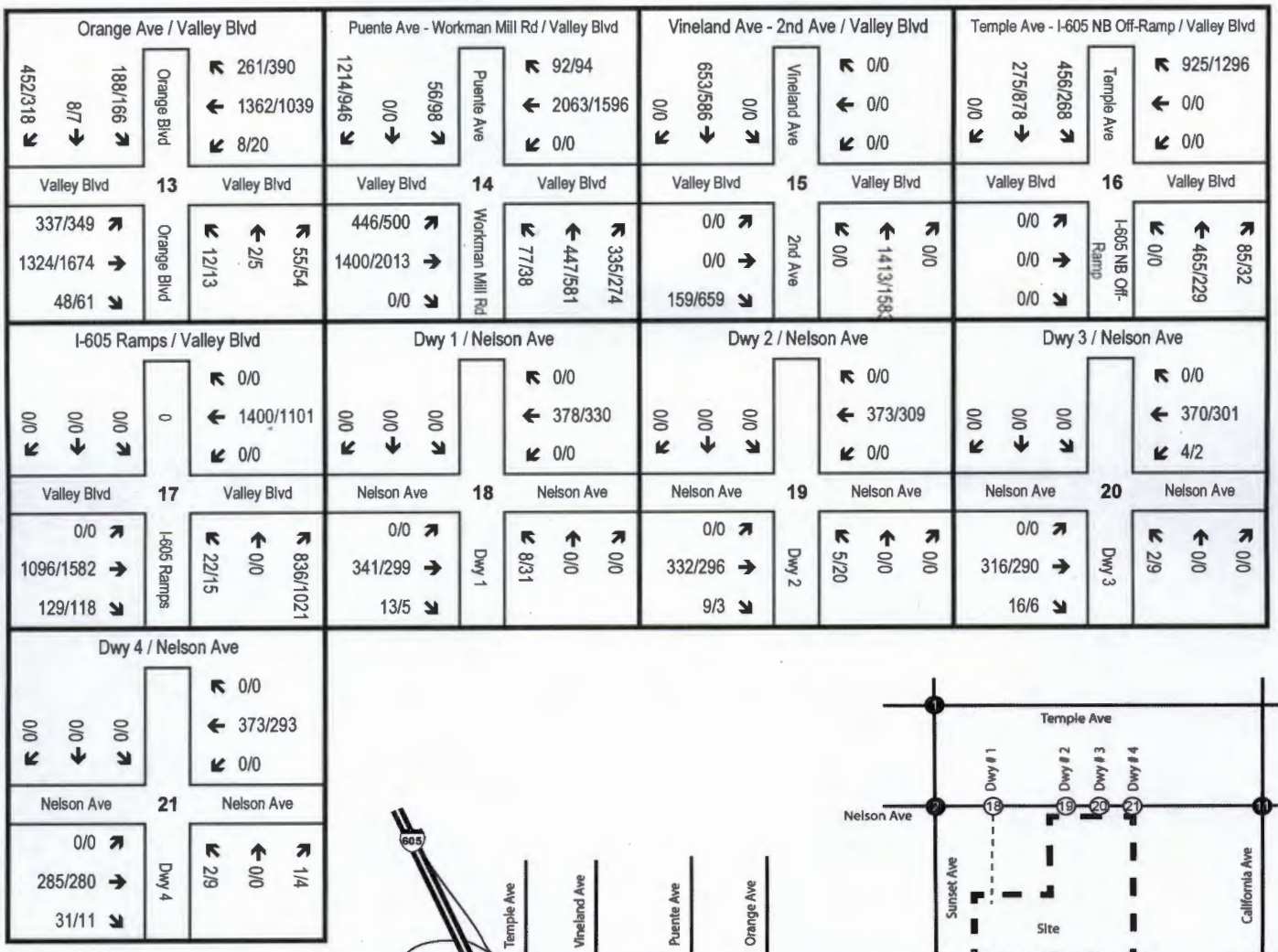
Exhibit 14 shows Opening Year 2018 with Project (2018wP) conditions AM and PM peak hour intersection traffic volumes.



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 14 (1 of 2)

Opening Year 2018 With Project (2018wP) Intersection Volumes



XX/XX = AM / PM Peak Hour Intersection Volumes

Exhibit 14 (2 of 2)

Opening Year 2018 With Project (2018wP) Intersection Volumes

6.0 FUTURE CONDITIONS INTERSECTION ANALYSIS

This section presents the intersection operations analysis for the following future traffic scenarios, based on existing and proposed geometry:

- Existing plus Project (EP) conditions;
- Opening Year 2018 without Project (2018nP) Conditions; and
- Opening Year 2018 with Project (2018wP) Conditions.

6.1 Existing Plus Project Intersection Analysis

Table 7 summarizes the AM and PM peak hour intersection operations analysis results for Existing plus Project (EP) conditions, based on existing and initial geometry. Appendix F includes the EP conditions intersection operations analysis worksheets, with existing and initial geometry. As shown in Table 7, all study intersections are projected to operate at LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM and PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp – LOS E (PM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard – LOS E (AM), LOS F (PM)
17. I-605 Southbound Ramps at Valley Boulevard – LOS F (AM and PM)

Table 7 shows that the project will contribute to a significant project impact at one study intersection for Existing plus Project (EP) conditions based on City's threshold criteria. Off-site roadway improvements are recommended at the following intersection to mitigate the traffic impact:

2. Sunset Avenue at Nelson Avenue
   - Add eastbound and westbound left turn lanes

The following on-site improvements are also needed to accommodate the four (4) project driveways:

18. Driveway 1 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

19. Driveway 2 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

20. Driveway 3 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

Table 7 (1 of 2)

Existing Plus Project Conditions Intersection Analysis Summary

Intersection			(1) Existing 2016 Conditions				(2) Existing Plus Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
1	Sunset Ave / Temple Ave	TS	0.940	E	1.007	F	0.944	E	1.010	F	0.004	0.003	No
2	Sunset Ave / Nelson Ave	TS	0.945	E	0.909	E	0.954	E	0.956	E	0.009	0.047	Yes
	• Add EB/WB Left Turn						***0.938***	***E***	***0.916***	***E***	***-0.007***	***0.007***	***No***
3	Sunset Ave - 7th Ave / Valley Blvd	TS	0.845	D	1.030	F	0.859	D	1.042	F	0.014	0.012	No
4	7th Ave / Proctor Ave	TS	0.623	B	0.655	B	0.626	B	0.659	B	0.003	0.004	No
5	7th Ave / Don Julian Rd	TS	0.697	B	0.794	C	0.700	B	0.806	D	0.003	0.012	No
6	7th Ave / Clark Ave	TS	0.666	B	0.670	B	0.669	B	0.680	B	0.003	0.010	No
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.846	D	0.761	C	0.847	D	0.766	C	0.001	0.005	No
	• HCM Analysis	TS	29.8	C	20.6	C	30.2	C	20.7	C	0.4	0.1	No
8	7th Ave / SR60 EB Off-Ramp												
	• HCM Analysis	CSS	12.2	B	43.4	E	12.2	B	43.4	E	0.0	0.0	No
9	7th Ave / SR60 EB Ramps												
	• HCM Analysis	UNC	11.5	B	8.3	A	11.6	B	8.3	A	0.1	0.0	No
10	SR60 WB Off-Ramp / Gale Ave	TS	0.493	A	0.529	A	0.498	A	0.530	A	0.005	0.001	No
	• HCM Analysis	TS	5.7	A	8.5	A	5.9	A	8.5	A	0.2	0.0	No
11	California Ave / Nelson Ave	TS	0.664	B	0.851	D	0.665	B	0.853	D	0.001	0.002	No
12	California Ave / Valley Blvd	TS	0.622	B	0.721	C	0.624	B	0.721	C	0.002	0.000	No
13	Orange Ave / Valley Blvd	TS	0.898	D	0.816	D	0.898	D	0.819	D	0.000	0.003	No
14	Workman Mill Rd / Valley Blvd	TS	0.738	C	0.832	D	0.739	C	0.834	D	0.001	0.002	No
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.070	F	0.934	E	1.071	F	0.936	E	0.001	0.002	No
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	0.984	E	1.010	F	0.984	E	1.012	F	0.000	0.002	No
	• HCM Analysis	TS	42.5	D	33.3	C	42.6	D	34.7	C	0.1	1.4	No
17	I-605 Ramps / Valley Blvd												
	• HCM Analysis	CSS	100.7	F	139.8	F	100.7	F	139.8	F	0.0	0.0	No

Table 7 (2 of 2)

Existing Plus Project Conditions Intersection Analysis Summary

Intersection			(1) Existing 2016 Conditions				(2) Existing Plus Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
18	Dwy 1 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	14.2	B	13.5	B	14.2	13.5	No
19	Dwy 2 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	14.0	B	13.0	B	14.0	13.0	No
20	Dwy 3 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	13.8	B	12.7	B	13.8	12.7	No
21	Dwy 4 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	12.2	B	11.7	B	12.2	11.7	No

Note

* Intersection Type: TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[1] Signalized Intersections: Intersection Capacity Utilization (ICU) Analysis Method, Volume/Capacity (V/C) Ratio;
Unsignalized Intersections: Highway Capacity Manual (HCM) Analysis Method, Average Delay (seconds per vehicle).

[2] Impacts at intersections are considered to be significant when the following changes in the volume-to-capacity (V/C) ratios occurs between the "without project" and the "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	> 0.02

21. Driveway 4 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

6.2 Opening Year 2018 Without Project Intersection Analysis

Table 8 summarizes the AM and PM peak hour intersection operations analysis results for Opening Year 2018 without Project (2018nP) conditions, based on existing intersection geometry. Appendix G includes the 2018nP conditions intersection operations analysis worksheets, with existing geometry. As shown in Table 8, all study intersections are projected to operate at LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM and PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp – LOS F (PM)
11. California Avenue at Nelson Avenue – LOS E (PM)
13. Orange Avenue at Valley Boulevard – LOS E (AM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard – LOS F (AM and PM)
17. I-605 Southbound Ramps at Valley Boulevard – LOS F (AM and PM)

6.3 Opening Year 2018 With Project Intersection Analysis

Table 8 summarizes the AM and PM peak hour intersection operations analysis results for Opening Year 2018 with Project (2018wP) conditions, based on existing and initial geometry. Appendix H includes the 2018wP conditions intersection operations analysis worksheets, with existing and initial geometry. As shown in Table 8, all study intersections are projected to operate at LOS D or better, except for the following intersections:

1. Sunset Avenue at Temple Avenue – LOS E (AM), LOS F (PM)
2. Sunset Avenue at Nelson Avenue – LOS E (AM), LOS F (PM)
3. Sunset Avenue/7th Avenue at Valley Boulevard – LOS F (PM)
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp – LOS F (PM)
11. California Avenue at Nelson Avenue – LOS E (PM)
13. Orange Avenue at Valley Boulevard – LOS E (AM)
15. Vineland Avenue/2nd Avenue at Valley Boulevard – LOS F (AM), LOS E (PM)
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard – LOS F (AM and PM)
17. I-605 Southbound Ramps at Valley Boulevard – LOS F (AM and PM)

Table 8 shows that the project will contribute to a significant project impact at one study intersections for Opening Year 2018 with Project conditions based on City's threshold criteria. Off-site roadway improvements are recommended at the following intersection to mitigate the traffic impact (same as EP conditions):

2. Sunset Avenue at Nelson Avenue
    - Add eastbound and westbound left turn lanes (same as EP conditions)

Table 8 (1 of 2)

Opening Year 2018 With Project Conditions Intersection Analysis Summary

Intersection			(1) Opening Year 2018 Without Project Conditions				(2) Opening Year 2018 With Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
1	Sunset Ave / Temple Ave	TS	0.984	E	1.044	F	0.988	E	1.048	F	0.004	0.004	No
2	Sunset Ave / Nelson Ave	TS	0.984	E	0.973	E	0.994	E	1.018	F	0.010	0.045	Yes
	• Add EB/WB Left Turn						***0.976***	***E***	***0.969***	***E***	***-0.008***	***-0.004***	***No***
3	Sunset Ave - 7th Ave / Valley Blvd	TS	0.885	D	1.066	F	0.898	D	1.076	F	0.013	0.010	No
4	7th Ave / Proctor Ave	TS	0.644	B	0.678	B	0.647	B	0.682	B	0.003	0.004	No
5	7th Ave / Don Julian Rd	TS	0.709	C	0.853	D	0.714	C	0.865	D	0.005	0.012	No
6	7th Ave / Clark Ave	TS	0.682	B	0.714	C	0.685	B	0.724	C	0.003	0.010	No
7	7th Ave / SR60 WB On-Ramp - Gale Ave	TS	0.864	D	0.780	C	0.866	D	0.785	C	0.002	0.005	No
	• HCM Analysis	TS	31.8	C	21.6	C	31.9	C	23.1	C	0.1	1.5	No
8	7th Ave / SR60 EB Off-Ramp												
	• HCM Analysis	CSS	12.4	B	54.0	F	12.4	B	54.0	F	0.0	0.0	No
9	7th Ave / SR60 EB Ramps												
	• HCM Analysis	UNC	11.8	B	8.4	A	11.9	B	8.5	A	0.1	0.1	No
10	SR60 WB Off-Ramp / Gale Ave	TS	0.515	A	0.541	A	0.519	A	0.543	A	0.004	0.002	No
	• HCM Analysis	TS	6.1	A	8.6	A	7.1	A	8.6	A	1.0	0.0	No
11	California Ave / Nelson Ave	TS	0.761	C	0.929	E	0.762	C	0.932	E	0.001	0.003	No
12	California Ave / Valley Blvd	TS	0.679	B	0.769	C	0.681	B	0.769	C	0.002	0.000	No
13	Orange Ave / Valley Blvd	TS	0.941	E	0.875	D	0.941	E	0.878	D	0.000	0.003	No
14	Workman Mill Rd / Valley Blvd	TS	0.761	C	0.858	D	0.762	C	0.859	D	0.001	0.001	No
15	Vineland Ave - 2nd Ave / Valley Blvd	TS	1.096	F	0.965	E	1.097	F	0.968	E	0.001	0.003	No
16	Temple Ave - I-605 NB Ramps / Valley Blvd	TS	1.007	F	1.040	F	1.007	F	1.042	F	0.000	0.002	No
	• HCM Analysis	TS	46.3	D	36.8	D	46.5	D	37.2	D	0.2	0.4	No
17	I-605 Ramps / Valley Blvd												
	• HCM Analysis	CSS	117.3	F	167.6	F	117.3	F	167.6	F	0.0	0.0	No

Table 8 (2 of 2)

Opening Year 2018 With Project Conditions Intersection Analysis Summary

Intersection			(1) Opening Year 2018 Without Project Conditions				(2) Opening Year 2018 With Project Conditions				(3) Significant Project Impact		
			AM		PM		AM		PM		Increase		Project Impact[2]
No.	Name	Type*	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	V/C[1]	LOS	AM	PM	
18	Dwy 1 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	15.3	C	14.5	B	15.3	14.5	No
19	Dwy 2 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	14.9	B	13.8	B	14.9	13.8	No
20	Dwy 3 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	14.8	B	13.5	B	14.8	13.5	No
21	Dwy 4 / Nelson Ave												
	• HCM Analysis	CSS	0.000	A	0.000	A	12.9	B	12.3	B	12.9	12.3	No

Note

* Intersection Type: TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[1] Signalized Intersections: Intersection Capacity Utilization (ICU) Analysis Method, Volume/Capacity (V/C) Ratio;
Unsignalized Intersections: Highway Capacity Manual (HCM) Analysis Method, Average Delay (seconds per vehicle).

[2] Impacts at intersections are considered to be significant when the following changes in the volume-to-capacity (V/C) ratios occurs between the "without project" and the "with project" conditions, and operating at LOS E or worse:

Level of Service	Change in V/C
E, F	> 0.02

The following on-site improvements are also needed to accommodate the four (4) project driveways (same as EP conditions):

18. Driveway 1 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

19. Driveway 2 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

20. Driveway 3 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

21. Driveway 4 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

7.0 FREEWAY OFF-RAMP QUEUING ANALYSIS

The section presents the off-ramp queuing analysis at the SR-60 and I-605 freeway off-ramps. The queuing analysis evaluates the overall vehicular queue length at the freeway off-ramps to determine if the off-ramp queues will interfere with the freeway mainline traffic flow. The queuing analysis has been conducted using the Synchro analysis software for the following traffic scenarios:

- Existing 2016 conditions;
- Existing plus Project (EP) conditions;
- Opening Year 2018 without Project (2018nP) Conditions; and
- Opening Year 2018 with Project (2018wP) Conditions.

Table 9 summarizes the results of the off-ramp queuing analysis. Appendix I includes the freeway off-ramp queueing analysis worksheets.

Table 9 – Freeway Off-Ramp Queuing Analysis Summary

Intersection		Available Storage Length	Adequate Storage Length?	Maximum Queue Length	95th Percentile Queue Length[1] (feet)							
					Existing 2016		Existing With Project		2018 Without Project		2018 With Project	
No.	Name				AM	PM	AM	PM	AM	PM	AM	PM
8	SR-60 EB Off-Ramp @ 7th Ave SB											
	• EB Total	**820'**	**Yes**	**383'**	**25**	**330**	**25**	**330**	**25**	**383**	**25**	**383**
	• EB Left Turn											
	• EB Right Turn	820'			25	330	25	330	25	383	25	383
9	SR-60 EB Off-Ramp @ 7th Ave NB											
	• WB Total	**1450'**	**Yes**	**0'**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	• WB Right Turn	1450'			0	0	0	0	0	0	0	0
10	SR-60 WB Off-Ramp @ Gale Ave											
	• NB Total	**1030'**	**Yes**	**70'**	**43**	**67**	**46**	**68**	**53**	**69**	**56**	**70**
	• NB Left Turn	740'			43	67	46	68	53	69	56	70
	• NB Left-Right	290'										
16	I-605 NB Off-Ramp @ Valley Blvd											
	• NB Total	**1730'**	**Yes**	**1164'**	**1125**	**788**	**1129**	**896**	**1160**	**917**	**1164**	**955**
	• NB Left-Thru	1280'			803	642	803	717	807	735	807	763
	• NB Right Turn	450'			322	146	326	179	353	182	357	192
17	I-605 SB Off-Ramp @ Valley Blvd											
	• NB Total	**1455'**	**Yes**	**43'**	**38**	**33**	**38**	**33**	**43**	**38**	**43**	**38**
	• NB Left Turn	75'			38	33	38	33	43	38	43	38
	• NB Right Turn	1380'			0	0	0	0	0	0	0	0

Note

[1] Queue length rounded to a minimum of 25' for a vehicle length of 25 feet per vehicle.

As shown in Table 9, there are adequate storage lengths for the freeway off-ramp facilities for both existing and future traffic conditions. It should also be noted that the project has minimal effect on the off-ramp queuing lengths.

8.0 CONGESTION MANAGEMENT PROGRAM (CMP) ANALYSIS

This section presents the Los Angeles County Congestion Management Program (CMP) compliance assessment for the proposed project.

8.1 CMP Impact Review

According to the *2010 Congestion Management Program (CMP)* published by Los Angeles County Metropolitan Transportation Authority, those proposed projects which meet the following criteria must be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).

- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

8.1.1 CMP Intersection Impact

No CMP intersection monitoring location in the project study area has been identified. A CMP intersection traffic impact analysis is not required.

The proposed project is not forecasted to add 50 or more trips to a CMP arterial monitoring intersection during either the AM or PM weekday peak hours; therefore, no CMP traffic impact analysis is required for the proposed project.

8.1.2 CMP Freeway Impact

The following CMP freeway monitoring locations in the project study area have been identified:

- SR-60 Freeway; and
- I-605 Freeway.

The proposed project is not forecasted to add 150 or more trips to a mainline freeway monitoring location during either the AM or PM weekday peak hours; therefore, no CMP traffic impact analysis is required for the proposed project.

8.2 Transit Impact Review

Per the requirement of the CMP, the potential impact of the project on the transit service has been assessed. The project trip generation, as previously shown in Table 5, was adjusted to determine the transit trips generated by the project. Per the CMP guidelines, a person trips equal 1.4 times vehicle trips and transit trips equal to 3.5% of the total person trips. The conversion equation is: Transit trips = 0.035 x (1.4 x vehicle trips); or Transit trips = 0.049 x Vehicle trips.

Table 10 show project transit trip calculations. As shown in Table 10, the project will generate 53 daily transit trips with 5 AM peak hour transit trips (4 AM inbound and 1 AM outbound) and 5 PM peak hour transit trips (1 PM inbound and 4 PM outbound).

Table 10 – Project Transit Trip Calculation

Trip Type	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Net Vehicle Trips	***1,078***	***91***	*73*	*18*	***98***	*25*	*73*
Transit Trips	**53**	**5**	4	1	**5**	1	4

It is anticipated that the existing transit service in the project study area would be able to accommodate the project-generated transit trips. Appendix J shows the available transit service in the project study area. The project study area is currently being served by the following transit service:

- Foothill Transit Bus Line 194 – Valley Boulevard;
- Foothill Transit Bus Line 274 – Puente Avenue north of Temple Avenue; Temple Avenue from Puente Avenue to Orange Avenue; Orange Avenue from Temple Avenue to Valley Boulevard; Valley Boulevard from Orange Avenue to Workman Mill Road; Workman Mill Road south of Valley Boulevard; Don Julian Road between Workman Mill Road and 7th Avenue; Sunset Avenue and 7th Avenue between Temple Avenue Don Julian Road;
- Foothill Transit Bus Line 281 – Sunset Avenue north of Valley Boulevard; 7th Avenue from Valley Boulevard to Gale Avenue; Gale Avenue east of SR-60; and
- Foothill Transit Bus Line 282 – Valley Boulevard from I-605 to 7th Avenue; 7th Avenue from Valley Boulevard to Gale Avenue; Gale Avenue east of SR-60.

With a low number of transit trips generated by the project and available transit opportunities available in the study area, it is concluded that the existing public transit system would not be significantly impacted by the proposed project.

9.0 CONCLUSIONS

The 11.49-acre project site is currently vacant. The project proposes to construct two warehouse buildings with a total of 231,210 square feet. Building 1 is 63,240 square feet and it is located north of the project site. Building 2 is 167,970 square and it is located south of the project site. Each building has its own separate parking lot. Building 1 has 101 parking spaces and Building 2 has 218 parking spaces for a total of 319 parking spaces. Each building has two stop-controlled full access driveways on Nelson Avenue for a total of 4 vehicular access points for the project site. The proposed project is anticipated to be completed and operational in year 2018.

An axle classification adjustment factor was then used to convert truck traffic into passenger car equivalent (PCE) traffic to account for the impact of the heavy trucks because a large truck occupies more space on the roadway than a typical passenger vehicle. The project is anticipated to generate 1,078 daily PCE trips with 91 AM peak hour PCE trips and 98 PM peak hour PCE trips.

9.1 Intersection Analysis Results

For both existing 2016 and Existing plus Project (EP) traffic conditions, all existing study intersections are operating at acceptable LOS D or better, except for the following seven (7) intersections:

1. Sunset Avenue at Temple Avenue;
2. Sunset Avenue at Nelson Avenue;
3. Sunset Avenue/7th Avenue at Valley Boulevard;
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp;
15. Vineland Avenue/2nd Avenue at Valley Boulevard;
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard; and
17. I-605 Southbound Ramps at Valley Boulevard.

For both Opening Year 2018 without Project (2018nP) and Opening Year 2018 with Project (2018wP) conditions, all study intersections are projected to operate at LOS D or better, except for the following nine (9) intersections:

1. Sunset Avenue at Temple Avenue;
2. Sunset Avenue at Nelson Avenue;
3. Sunset Avenue/7th Avenue at Valley Boulevard;
8. 7th Avenue Southbound at SR-60 Eastbound Off-Ramp;
11. California Avenue at Nelson Avenue;
13. Orange Avenue at Valley Boulevard;
15. Vineland Avenue/2nd Avenue at Valley Boulevard;
16. Temple Avenue/I-605 Northbound Ramps at Valley Boulevard; and
17. I-605 Southbound Ramps at Valley Boulevard.

For both Existing plus Project (EP) and Opening Year 2018 with Project (2018wP) conditions, the project will contribute to a significant project impact at one study intersections based on City's threshold criteria. Additional off-site roadway improvements are recommended at the following intersection to mitigate the traffic impact:

2. Sunset Avenue at Nelson Avenue
   - Add eastbound and westbound left turn lanes (same as EP conditions)

The following on-site improvements are also needed to accommodate the four (4) project driveways (same as both EP and 2018wP conditions):

18. Driveway 1 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

19. Driveway 2 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

20. Driveway 3 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

21. Driveway 4 at Nelson Avenue
    - Northbound stop sign
    - Northbound all-way lane

9.2 Freeway Off-Ramp Queuing Analysis Results

The queuing analysis evaluates the overall vehicular queue length at the freeway off-ramps to determine if the off-ramp queues will interfere with the freeway mainline traffic flow. The queuing analysis has been conducted using the Synchro analysis software. Based on the analysis, there are adequate storage lengths for the freeway off-ramp facilities for both existing and future traffic conditions. It should also be noted that the project has minimal effect on the off-ramp queuing lengths.

9.3 CMP Traffic Impact

The proposed project is not forecasted to add 50 or more trips to a CMP arterial monitoring intersection, nor is the project forecasted to add 150 or more trips to a mainline freeway monitoring location during either the AM or PM weekday peak hours; therefore, no CMP traffic impact analysis is required for the proposed project.

The project will generate 53 daily transit trips with 5 AM peak hour transit trips (4 AM inbound and 1 AM outbound) and 5 PM peak hour transit trips (1 PM inbound and 4 PM outbound). It is anticipated that the existing transit service in the project study area would be able to accommodate the project-generated transit trips. The project study area is currently being served by the following transit service:

- Foothill Transit Bus Line 194 – Valley Boulevard;

- Foothill Transit Bus Line 274 – Puente Avenue north of Temple Avenue; Temple Avenue from Puente Avenue to Orange Avenue; Orange Avenue from Temple Avenue to Valley Boulevard; Valley Boulevard from Orange Avenue to Workman Mill Road; Workman Mill

Road south of Valley Boulevard; Don Julian Road between Workman Mill Road and 7th Avenue; Sunset Avenue and 7th Avenue between Temple Avenue Don Julian Road;

- Foothill Transit Bus Line 281 – Sunset Avenue north of Valley Boulevard; 7th Avenue from Valley Boulevard to Gale Avenue; Gale Avenue east of SR-60; and

- Foothill Transit Bus Line 282 – Valley Boulevard from I-605 to 7th Avenue; 7th Avenue from Valley Boulevard to Gale Avenue; Gale Avenue east of SR-60.

With a low number of transit trips generated by the project and available transit opportunities available in the study area, it is concluded that the existing public transit system would not be significantly impacted by the proposed project.

Appendix A – Grade Separation Project on Puente Avenue/Workman Mill Road at Valley Boulevard

PUENTE AVENUE UNDERPASS
VALLEY BOULEVARD
UNION PACIFIC RAILROAD
PUENTE AVENUE
CONNECTOR ROAD
WORKMAN MILL ROAD
3RD AVENUE

Figure 1: May 24, 2011 Turning Movement Counts

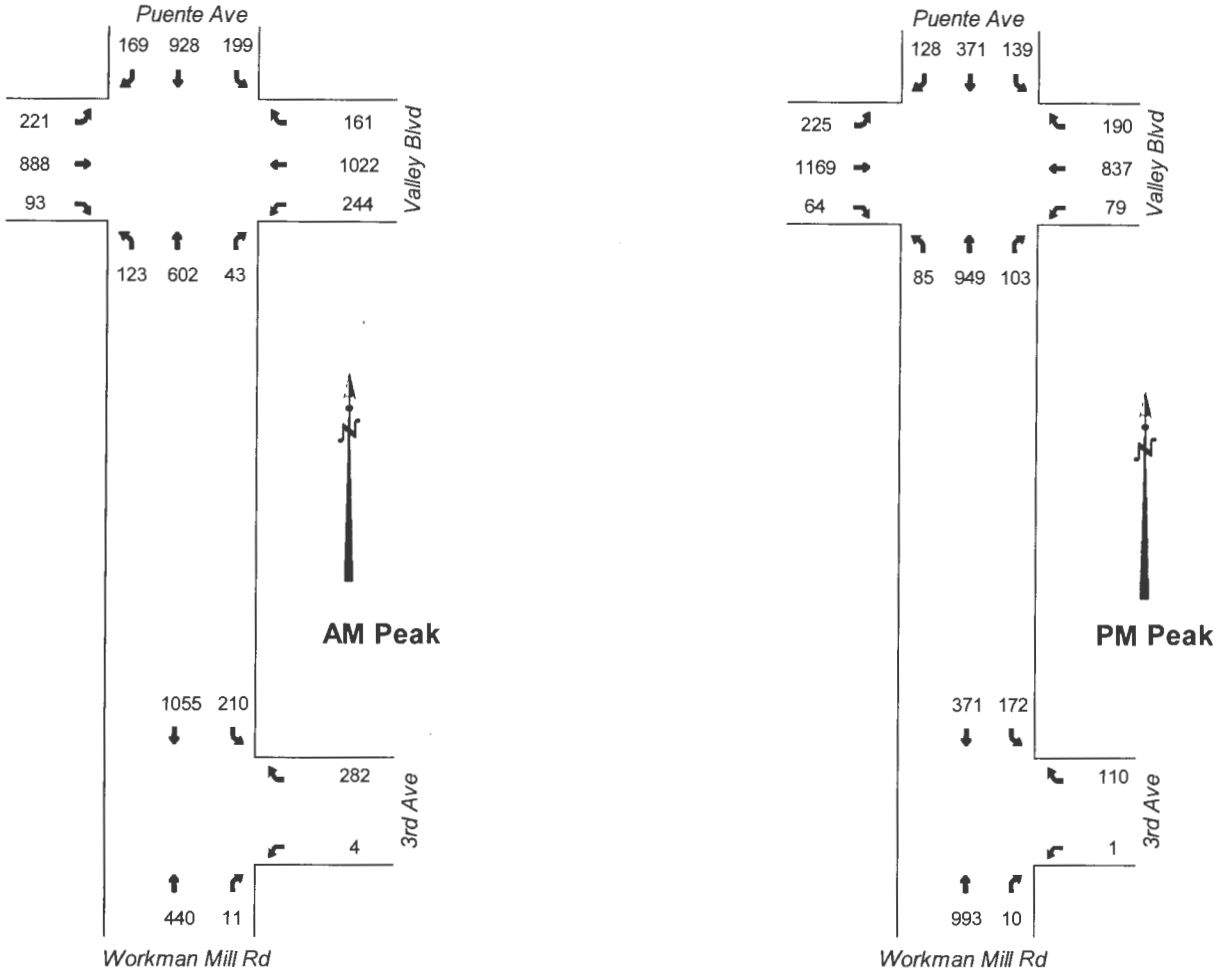


Table 1: LOS for 2011 Volumes at Valley Boulevard at Puente Avenue

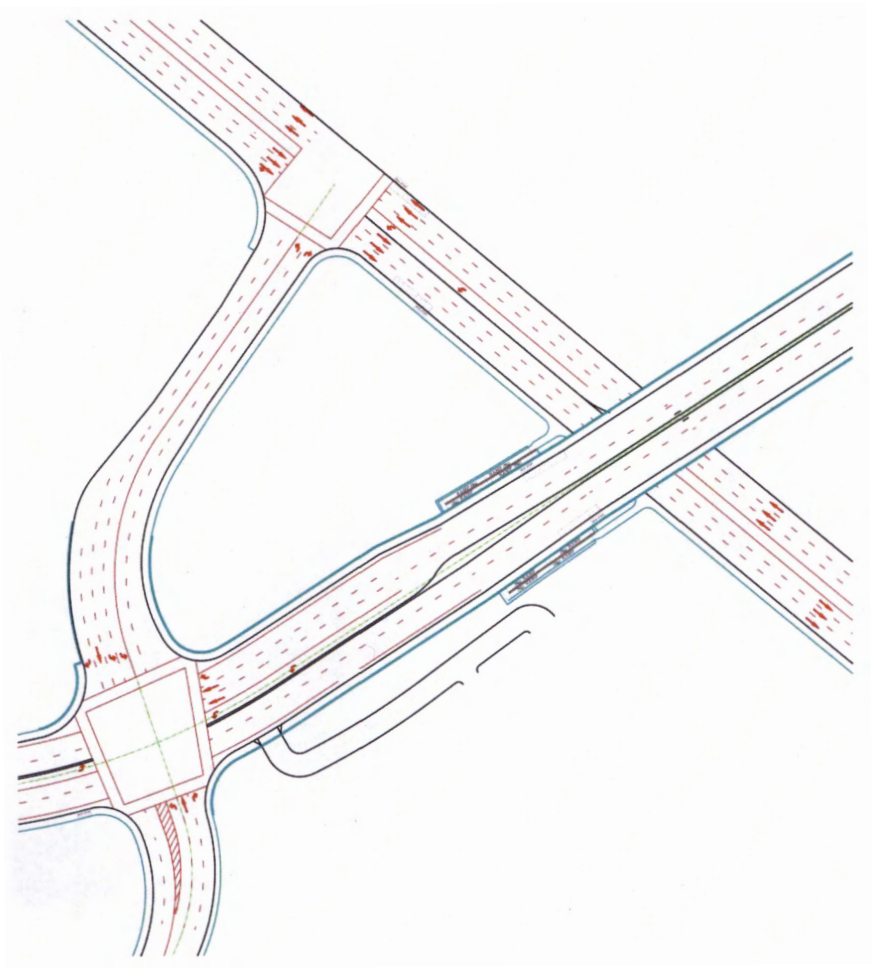
	AM Peak				PM Peak			
	ICU		HCM		ICU		HCM	
Approach	**V/C**	**LOS**	**Delay (S)**	**LOS**	**V/C**	**LOS**	**Delay (S)**	**LOS**
Eastbound	0.15		47.1	D	0.16		40.5	D
Westbound	0.27		53.7	D	0.24		40.8	D
Northbound	0.09		56.3	E	0.36		253.8	F
Southbound	0.32		114.3	F	0.10		35.4	D
Overall	0.93	E	69.2	E	0.96	E	95.7	F

The intersection of Workman Mill Road and 3rd Avenue is a stop controlled intersection. Therefore the key movements are the southbound left turn, and the right and left turns from 3rd Avenue onto Workman Mill Road. The left turns from 3rd Avenue on to Workman Mill Road operate at LOS E in the AM and LOS F in the PM. However, there are less than 4 of these turns per hour. The right turn from 3rd Avenue operates at LOS B in the AM and LOS C in the PM. Finally the left turn from Workman Mill Road

4.2 West Side Connector Road

The earlier study for the City of Industry also identified a possible connector road alignment that would start near the existing 3rd Avenue intersection with Workman Mill Road and proceed westerly and connect with Valley Boulevard approximately 350 feet west of the existing Valley Boulevard at Puente Avenue intersection. The proposed connector road will be approximately 720 feet long. This alternative retains the existing 3rd Avenue connection to Workman Mill Road and creates a four-legged intersection that will be signalized. Hereafter, this alternative will be referred to as **Alternative A** and be analyzed in more detail in subsequent sections of this report.

Figure 3: West side connector (Alternative A)



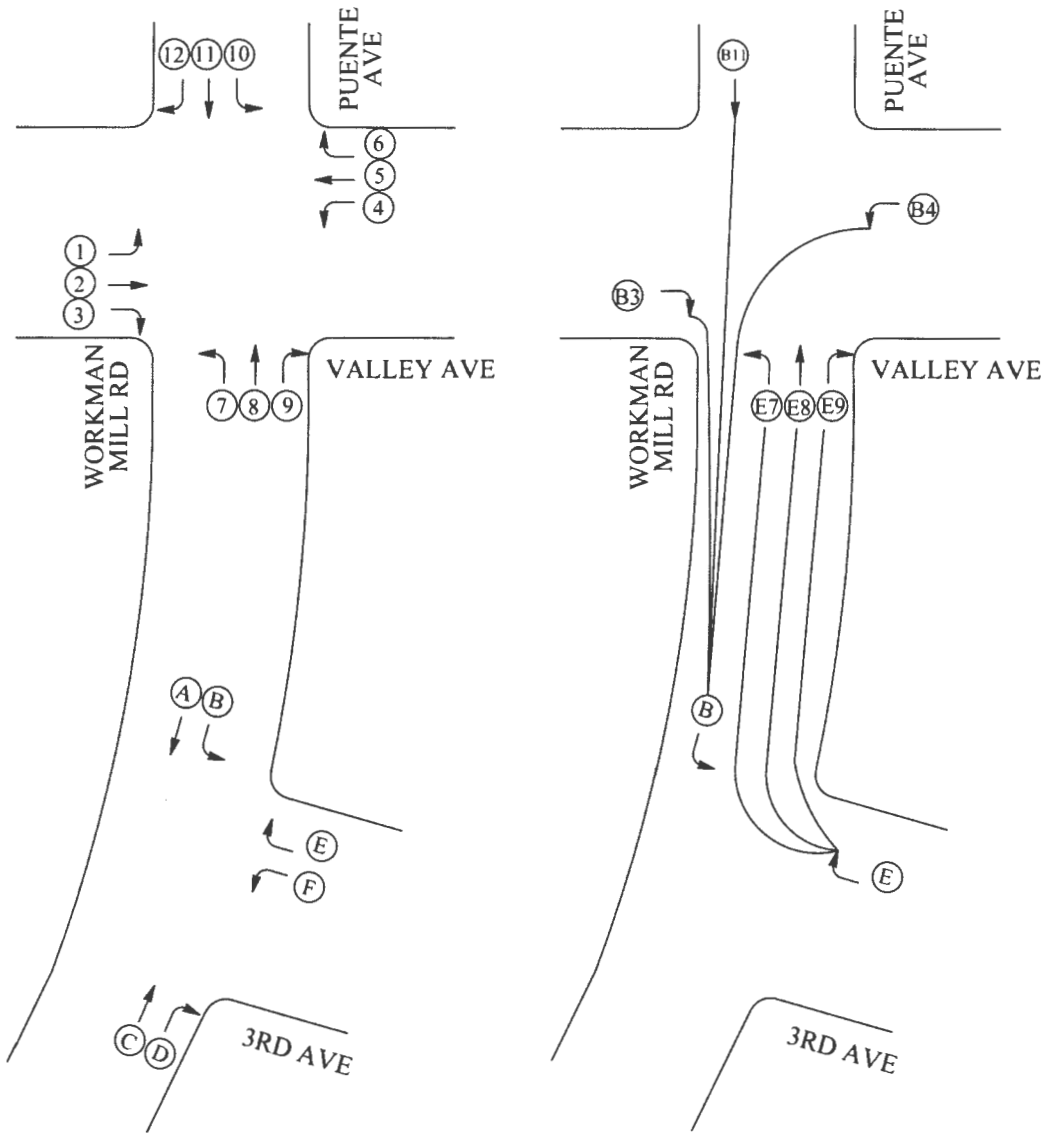
4.3 Dual Connector Roads without a Signal on Workman Mill Road

The project team developed an alternative that utilized a connector road on each side of Workman Mill Road and also extended 3rd Avenue north to Valley Boulevard, just west of McDonald's.

Key characteristics of this alternative were:

- Two traffic signals on Valley Boulevard near McDonalds and the Industry Inn
- Channelized right turns onto Workman Mill Road
- Stop control for 3rd Avenue intersection with the eastern connector

Figure 6: Existing Movements



The following formulas show how the "B" and "E" movements are estimated to be distributed at the Puente Avenue intersection:

$$E7 = E \times \frac{7}{7+8+9}$$

$$E8 = E \times \frac{8}{7+8+9}$$

$$E9 = E \times \frac{9}{7+8+9}$$

$$B3 = B \times \frac{3}{3+11+4}$$

$$B11 = B \times \frac{11}{3+11+4}$$

$$B4 = B \times \frac{4}{3+11+4}$$

Figure 7 and Figure 8 show the formulas used to re-assign traffic for Alternatives A and B, respectively.

Figure 7: Traffic Re-assignments for Alternative A

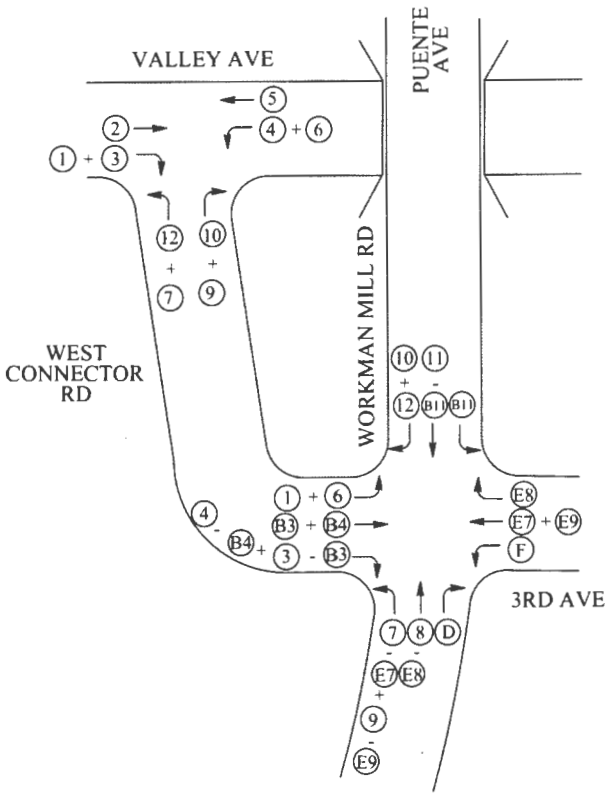
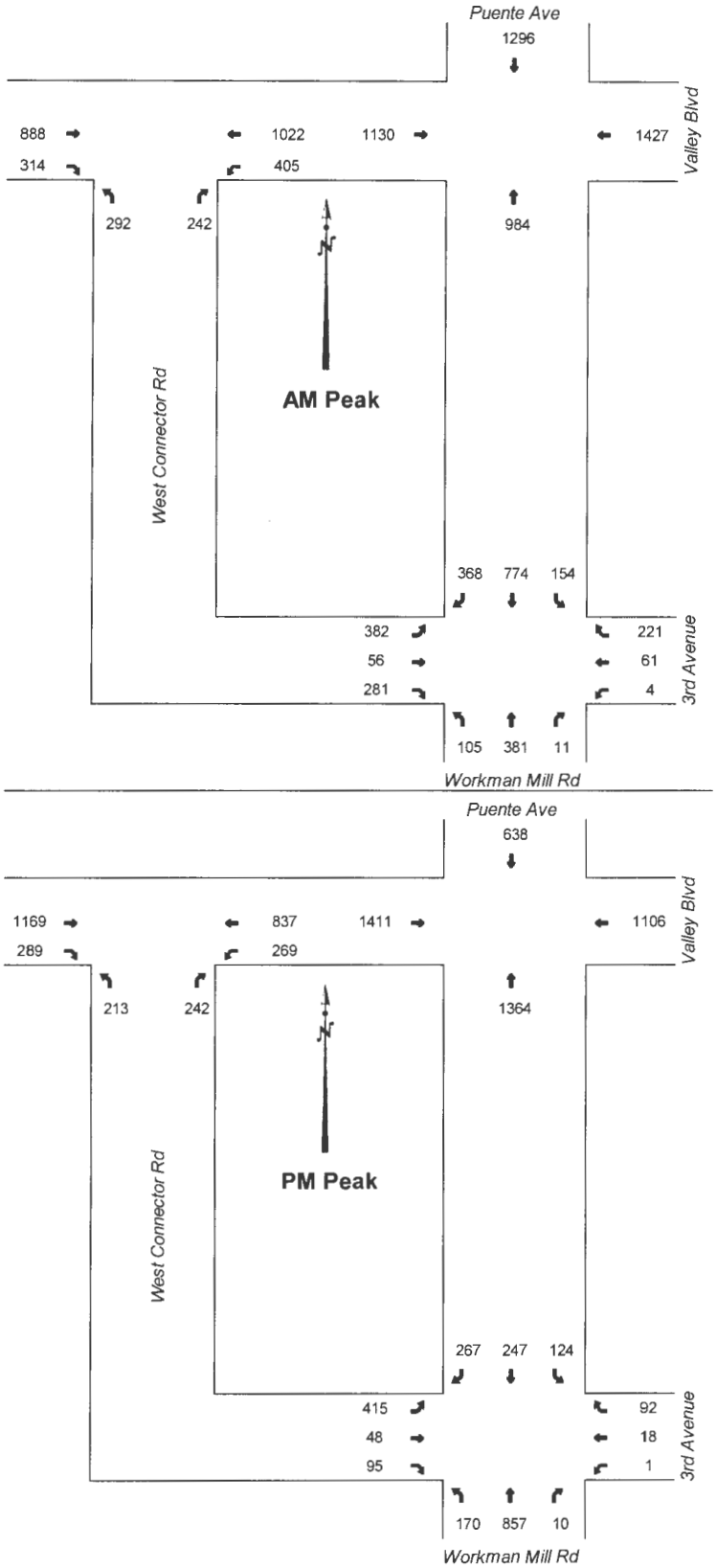


Figure 9: Alternative A - 2011 Volumes



Appendix B – Traffic Count Data Sheets

Turning Movement Count Report AM

Location ID: 1
North/South: Sunset Ave
East/West: Temple Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	26	236	12	9	156	46	11	91	25	40	68	18	738
7:15	30	288	16	21	170	35	9	131	32	39	89	21	881
7:30	26	306	9	16	168	43	7	104	30	32	84	22	847
7:45	32	316	17	8	117	44	11	105	29	42	74	15	810
8:00	30	203	21	14	156	31	11	113	21	36	59	21	716
8:15	19	212	19	18	139	30	10	123	21	38	59	7	695
8:30	20	181	16	14	152	34	13	106	24	25	71	24	680
8:45	29	215	24	16	104	20	15	112	23	33	54	24	669
Total Volume:	212	1957	134	116	1162	283	87	885	205	285	558	152	6036
Approach %	9%	85%	6%	7%	74%	18%	7%	75%	17%	29%	56%	15%	
Peak Hr Begin:	7:00												
PHV	114	1146	54	54	611	168	38	431	116	153	315	76	3276
PHF		0.900			0.917			0.850			0.913		0.930

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 1
North/South: Sunset Ave
East/West: Temple Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	15	174	9	22	92	16	34	256	40	32	141	53	884
16:15	17	151	20	17	78	23	40	285	35	24	178	61	929
16:30	25	167	16	22	93	21	40	338	38	21	158	59	998
16:45	21	138	16	18	106	13	42	302	39	19	196	62	972
17:00	23	168	17	20	80	21	30	321	38	22	174	54	968
17:15	33	190	26	20	76	25	40	339	30	32	191	59	1061
17:30	30	187	29	27	96	24	48	323	45	23	176	51	1059
17:45	28	147	22	22	121	21	42	306	51	29	208	55	1052
Total Volume:	192	1322	155	168	742	164	316	2470	316	202	1422	454	7923
Approach %	12%	79%	9%	16%	69%	15%	10%	80%	10%	10%	68%	22%	
Peak Hr Begin:	17:00												
PHV	114	692	94	89	373	91	160	1289	164	106	749	219	4140
PHF		0.904			0.843			0.969			0.920		0.975

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 2
North/South: Sunset Ave
East/West: Nelson Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	20	306	5	7	23	29	12	104	12	34	31	5	588
7:15	16	344	9	18	49	17	10	163	20	37	23	4	710
7:30	30	372	5	13	44	13	14	116	12	30	24	9	682
7:45	22	373	10	5	34	17	18	130	35	36	21	2	703
8:00	14	244	1	15	27	9	8	114	16	38	20	4	510
8:15	14	255	4	7	17	15	12	138	21	30	18	1	532
8:30	15	220	2	5	27	7	10	122	26	26	17	4	481
8:45	13	269	5	7	22	13	13	150	15	25	11	1	544
Total Volume:	144	2383	41	77	243	120	97	1037	157	256	165	30	4750
Approach %	6%	93%	2%	18%	55%	27%	8%	80%	12%	57%	37%	7%	
Peak Hr Begin:	7:00												
PHV	88	1395	29	43	150	76	54	513	79	137	99	20	2683
PHF	0.929			0.801			0.837			0.914			0.945

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 2
North/South: Sunset Ave
East/West: Nelson Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	4	193	8	10	13	12	21	328	14	35	29	13	680
16:15	7	169	7	12	24	9	19	324	17	24	19	15	646
16:30	8	185	3	16	18	24	29	362	12	35	32	18	742
16:45	5	161	3	14	24	6	14	381	20	26	30	12	696
17:00	10	172	10	18	19	6	14	374	14	32	25	20	714
17:15	4	223	10	18	26	12	17	390	12	30	24	14	780
17:30	8	198	7	17	28	11	22	362	13	38	34	9	747
17:45	6	187	6	20	27	3	20	403	10	25	30	12	749
Total Volume:	52	1488	54	125	179	83	156	2924	112	245	223	113	5754
Approach %	3%	93%	3%	32%	46%	21%	5%	92%	4%	42%	38%	19%	
Peak Hr Begin:	17:00												
PHV	28	780	33	73	100	32	73	1529	49	125	113	55	2990
PHF	0.887			0.915			0.953			0.904			0.958

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Turning Movement Count Report AM

Location ID: 3
North/South: Sunset Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	81	220	70	34	242	15	8	82	25	21	99	16	913
7:15	93	212	89	60	303	18	6	97	29	24	109	29	1069
7:30	91	209	76	55	295	23	4	70	37	28	144	27	1059
7:45	95	241	71	54	247	22	10	93	35	29	181	35	1113
8:00	49	190	80	41	207	30	15	75	32	23	170	30	942
8:15	58	151	66	62	279	13	7	79	32	28	179	35	989
8:30	55	130	64	53	262	20	14	94	38	21	164	28	943
8:45	56	172	80	44	189	27	18	96	35	30	186	38	971
Total Volume:	578	1525	596	403	2024	168	82	686	263	204	1232	238	7999
Approach %	21%	57%	22%	16%	78%	6%	8%	67%	26%	12%	74%	14%	
Peak Hr Begin:	7:15												
PHV	328	852	316	210	1052	93	35	335	133	104	604	121	4183
PHF	0.919			0.889			0.911			0.846			0.940

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 3
North/South: Sunset Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	24	146	61	74	133	20	18	210	29	41	254	85	1095
16:15	35	123	71	68	157	23	13	189	22	27	234	91	1053
16:30	35	114	52	77	146	21	10	208	37	37	301	123	1161
16:45	25	147	60	70	129	16	11	228	28	37	208	106	1065
17:00	20	127	66	88	180	27	7	201	35	33	276	108	1168
17:15	37	158	64	93	167	23	11	195	30	32	293	121	1224
17:30	30	175	69	97	185	24	7	187	29	18	305	117	1243
17:45	27	135	63	101	187	25	13	213	28	26	319	105	1242
Total Volume:	233	1125	506	668	1284	179	90	1631	238	251	2190	856	9251
Approach %	13%	60%	27%	31%	60%	8%	5%	83%	12%	8%	66%	26%	
Peak Hr Begin:	17:00												
PHV	114	595	262	379	719	95	38	796	122	109	1193	451	4877
PHF	0.886			0.956			0.941			0.974			0.981

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 4
North/South: 7th Ave
East/West: Proctor Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	33	198	20	14	17	11	16	103	18	9	8	8	455
7:15	42	214	18	7	21	12	17	129	15	14	13	7	509
7:30	52	206	14	12	39	8	18	92	14	11	17	5	488
7:45	63	206	27	16	23	8	21	126	27	13	19	5	554
8:00	42	183	21	11	24	12	15	117	17	9	12	7	470
8:15	32	182	10	11	19	5	9	114	15	15	13	4	429
8:30	24	139	11	15	23	6	16	117	25	11	14	6	407
8:45	28	175	17	21	16	11	17	128	15	6	13	3	450
Total Volume:	316	1503	138	107	182	73	129	926	146	88	109	45	3762
Approach %	16%	77%	7%	30%	50%	20%	11%	77%	12%	36%	45%	19%	
Peak Hr Begin:	7:15												
PHV	199	809	80	46	107	40	71	464	73	47	61	24	2021
PHF		0.919			0.818			0.874			0.892		0.912

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 4
North/South: 7th Ave
East/West: Proctor Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	23	170	15	34	16	23	17	225	20	16	17	13	589
16:15	20	154	14	26	13	25	21	201	14	12	25	11	536
16:30	21	151	7	16	18	26	23	257	13	25	39	15	611
16:45	36	158	12	17	15	17	27	200	8	16	26	10	542
17:00	29	156	12	14	28	17	27	240	18	29	34	20	624
17:15	27	190	13	18	17	20	40	215	19	16	47	16	638
17:30	24	185	19	16	17	22	28	199	16	17	43	13	599
17:45	24	152	15	23	14	14	32	218	21	16	20	11	560
Total Volume:	204	1316	107	164	138	164	215	1755	129	147	251	109	4699
Approach %	13%	81%	7%	35%	30%	35%	10%	84%	6%	29%	50%	21%	
Peak Hr Begin:	17:00												
PHV	104	683	59	71	76	73	127	872	74	78	144	60	2421
PHF		0.920			0.932			0.941			0.849		0.949

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 5
North/South: 7th Ave
East/West: Don Julian Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	22	191	8	22	45	8	26	108	33	44	27	13	547
7:15	20	196	5	14	68	9	19	136	34	39	28	17	585
7:30	22	217	9	6	71	9	19	110	39	39	38	8	587
7:45	28	173	17	14	69	11	33	134	26	39	45	10	599
8:00	27	169	18	12	58	10	27	127	50	30	26	10	564
8:15	20	163	13	5	66	11	29	115	37	27	42	8	536
8:30	18	136	7	12	60	13	28	148	35	39	36	17	549
8:45	17	164	11	14	65	10	26	121	38	39	38	17	560
Total Volume:	174	1409	88	99	502	81	207	999	292	296	280	100	4527
Approach %	10%	84%	5%	15%	74%	12%	14%	67%	19%	44%	41%	15%	
Peak Hr Begin:	7:15												
PHV	97	755	49	46	266	39	98	507	149	147	137	45	2335
PHF		0.908			0.934			0.924			0.875		0.975

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 5
North/South: 7th Ave
East/West: Don Julian Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	20	185	8	15	36	19	9	211	40	46	63	25	677
16:15	13	154	10	11	60	20	16	200	32	52	62	26	656
16:30	12	185	11	17	39	39	16	222	44	48	78	30	741
16:45	14	155	9	6	44	11	11	195	33	56	53	26	613
17:00	15	177	10	28	51	40	20	231	41	54	95	41	803
17:15	16	213	14	7	61	16	21	207	33	59	80	40	767
17:30	24	194	8	8	48	22	15	194	26	70	94	36	739
17:45	18	156	9	7	48	18	13	217	34	54	63	33	670
Total Volume:	132	1419	79	99	387	185	121	1677	283	439	588	257	5666
Approach %	8%	87%	5%	15%	58%	28%	6%	81%	14%	34%	46%	20%	
Peak Hr Begin:	17:00												
PHV	73	740	41	50	208	96	69	849	134	237	332	150	2979
PHF		0.879			0.744			0.901			0.899		0.927

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 6
North/South: 7th Ave
East/West: Clark Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	4	215	14	16	5	9	5	161	9	25	15	11	489
7:15	6	246	23	55	9	10	9	128	5	41	21	15	568
7:30	6	208	18	39	15	6	9	138	13	25	8	9	494
7:45	6	178	21	41	6	13	8	192	6	22	10	16	519
8:00	5	181	21	35	7	12	8	155	7	25	9	10	475
8:15	5	177	8	35	6	11	10	178	11	26	7	9	483
8:30	8	174	14	26	10	13	10	156	9	14	15	24	473
8:45	6	184	11	17	3	4	8	177	8	14	4	14	450
Total Volume:	46	1563	130	264	61	78	67	1285	68	192	89	108	3951
Approach %	3%	90%	7%	66%	15%	19%	5%	90%	5%	49%	23%	28%	
Peak Hr Begin:	7:00												
PHV	22	847	76	151	35	38	31	619	33	113	54	51	2070
PHF		0.859			0.757			0.829			0.708		0.911

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 6
North/South: 7th Ave
East/West: Clark Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	18	250	14	18	15	17	8	220	33	15	16	21	645
16:15	8	210	25	22	15	5	10	225	21	19	10	15	585
16:30	15	274	17	27	8	16	14	239	25	8	14	12	669
16:45	10	218	16	19	18	9	17	229	21	14	13	6	590
17:00	12	260	27	13	11	18	8	239	21	20	17	6	652
17:15	19	273	20	17	11	6	13	224	30	16	9	13	651
17:30	21	245	22	15	16	16	9	216	28	11	13	15	627
17:45	14	212	15	17	23	9	16	234	29	20	14	12	615
Total Volume:	117	1942	156	148	117	96	95	1826	208	123	106	100	5034
Approach %	5%	88%	7%	41%	32%	27%	4%	86%	10%	37%	32%	30%	
Peak Hr Begin:	16:30												
PHV	56	1025	80	76	48	49	52	931	97	58	53	37	2562
PHF		0.930			0.848			0.971			0.860		0.957

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 7
North/South: 7th Ave
East/West: Gale Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	103	106	12	31	191	19	43	138	67	0	0	0	710
7:15	126	169	17	36	198	12	46	114	98	0	0	0	816
7:30	96	127	9	39	184	11	64	117	97	0	0	0	744
7:45	105	113	25	33	184	17	76	183	94	0	0	0	830
8:00	82	105	17	44	192	13	57	130	78	0	0	0	718
8:15	105	103	24	50	188	17	80	141	67	0	0	0	775
8:30	81	90	16	56	178	12	83	122	76	0	0	0	714
8:45	109	87	26	41	166	17	67	153	79	0	0	0	745
Total Volume:	807	900	146	330	1481	118	516	1098	656	0	0	0	6052
Approach %	44%	49%	8%	17%	77%	6%	23%	48%	29%	0%	0%	0%	
Peak Hr Begin:	7:15												
PHV	409	514	68	152	758	53	243	544	367	0	0	0	3108
PHF	0.794			0.967			0.817			0.000			0.936

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 7
North/South: 7th Ave
East/West: Gale Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	149	62	32	104	137	22	110	165	30	0	0	0	811
16:15	145	81	34	88	108	38	133	159	44	0	0	0	830
16:30	178	66	32	105	116	34	141	178	38	0	0	0	888
16:45	154	73	37	103	107	29	109	160	34	0	0	0	806
17:00	148	76	27	95	136	31	126	171	41	0	0	0	851
17:15	172	95	56	104	138	27	149	160	34	0	0	0	935
17:30	144	84	36	110	130	31	154	137	29	0	0	0	855
17:45	138	82	42	96	134	27	140	189	39	0	0	0	887
Total Volume:	1228	619	296	805	1006	239	1062	1319	285	0	0	0	6863
Approach %	57%	29%	14%	39%	49%	12%	40%	49%	11%	0%	0%	0%	
Peak Hr Begin:	17:00												
PHV	602	337	161	405	538	116	569	657	143	0	0	0	3528
PHF	0.851			0.977			0.930			0.000			0.943

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 8
North/South: 7th Ave
East/West: CA-60 EB Off-Ramps

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	148	0	0	0	0	0	244	0	26	0	0	418
7:15	0	164	0	0	0	0	0	274	0	54	0	0	492
7:30	0	144	0	0	0	0	0	287	0	32	0	0	463
7:45	0	115	0	0	0	0	0	320	0	33	0	0	468
8:00	0	129	0	0	0	0	0	261	0	29	0	0	419
8:15	0	108	0	0	0	0	0	278	0	21	0	0	407
8:30	0	108	0	0	0	0	0	291	0	32	0	0	431
8:45	0	95	0	0	0	0	0	268	0	40	0	0	403
Total Volume:	0	1011	0	0	0	0	0	2223	0	267	0	0	3501
Approach %	0%	100%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	

Peak Hr Begin:	7:15												
PHV	0	552	0	0	0	0	0	1142	0	148	0	0	1842
PHF		0.841			0.000			0.892			0.685		0.936

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 8
North/South: 7th Ave
East/West: CA-60 EB Off-Ramps

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	107	0	0	0	0	0	306	0	104	0	0	517
16:15	0	105	0	0	0	0	0	336	0	139	0	0	580
16:30	0	102	0	0	0	0	0	336	0	118	0	0	556
16:45	0	105	0	0	0	0	0	322	0	132	0	0	559
17:00	0	118	0	0	0	0	0	342	0	134	0	0	594
17:15	0	121	0	0	0	0	0	345	0	156	0	0	622
17:30	0	118	0	0	0	0	0	330	0	179	0	0	627
17:45	0	123	0	0	0	0	0	364	0	161	0	0	648
Total Volume:	0	899	0	0	0	0	0	2681	0	1123	0	0	4703
Approach %	0%	100%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%	

Peak Hr Begin:	17:00												
PHV	0	480	0	0	0	0	0	1381	0	630	0	0	2491
PHF		0.976			0.000			0.948			0.880		0.961

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 9
North/South: 7th Ave
East/West: CA-60 EB On/Off-Ramps

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	75	76	136	0	0	20	91	0	0	0	0	398
7:15	0	101	114	130	0	0	21	121	0	0	0	0	487
7:30	0	63	93	184	0	0	24	124	0	0	0	0	488
7:45	0	50	94	213	0	0	16	102	0	0	0	0	475
8:00	0	39	96	159	0	0	19	78	0	0	0	0	391
8:15	0	39	78	182	0	0	12	96	0	0	0	0	407
8:30	0	51	62	181	0	0	23	15	0	0	0	0	332
8:45	0	58	76	174	0	0	19	92	0	0	0	0	419
Total Volume:	0	476	689	1359	0	0	154	719	0	0	0	0	3397
Approach %	0%	41%	59%	100%	0%	0%	18%	82%	0%	0%	0%	0%	
Peak Hr Begin:	7:00												
PHV	0	289	377	663	0	0	81	438	0	0	0	0	1848
PHF	0.774			0.778			0.877			0.000			0.947

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 9
North/South: 7th Ave
East/West: CA-60 EB On/Off-Ramps

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	136	44	250	0	0	9	39	0	0	0	0	478
16:15	0	182	46	237	0	0	7	65	0	0	0	0	537
16:30	0	163	41	261	0	0	8	45	0	0	0	0	518
16:45	0	188	35	251	0	0	5	54	0	0	0	0	533
17:00	0	176	54	272	0	0	11	64	0	0	0	0	577
17:15	0	206	53	286	0	0	9	42	0	0	0	0	596
17:30	0	239	44	276	0	0	3	47	0	0	0	0	609
17:45	0	211	47	276	0	0	7	65	0	0	0	0	606
Total Volume:	0	1501	364	2109	0	0	59	421	0	0	0	0	4454
Approach %	0%	80%	20%	100%	0%	0%	12%	88%	0%	0%	0%	0%	
Peak Hr Begin:	17:00												
PHV	0	832	198	1110	0	0	30	218	0	0	0	0	2388
PHF	0.910			0.970			0.827			0.000			0.980

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 10
North/South: CA-60 WB Off-Ramp
East/West: Gale Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	203	0	4	0	31	0	56	0	294
7:15	0	0	0	0	222	0	3	0	29	0	65	0	319
7:30	0	0	0	0	201	0	3	0	27	0	76	0	307
7:45	0	0	0	0	206	0	4	0	32	0	102	0	344
8:00	0	0	0	0	211	0	4	0	33	0	76	0	324
8:15	0	0	0	0	226	0	5	0	36	0	100	0	367
8:30	0	0	0	0	199	0	3	0	33	0	102	0	337
8:45	0	0	0	0	203	0	4	0	32	0	83	0	322
Total Volume:	0	0	0	0	1671	0	30	0	253	0	660	0	2614
Approach %	0%	0%	0%	0%	100%	0%	11%	0%	89%	0%	100%	0%	
Peak Hr Begin:	7:45												
PHV	0	0	0	0	842	0	16	0	134	0	380	0	1372
PHF	0.000			0.931			0.915			0.931			0.935

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 10
North/South: CA-60 WB Off-Ramp
East/West: Gale Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	162	0	14	0	99	0	137	0	412
16:15	0	0	0	0	146	0	15	0	95	0	168	0	424
16:30	0	0	0	0	160	0	21	0	96	0	167	0	444
16:45	0	0	0	0	146	0	19	0	104	0	148	0	417
17:00	0	0	0	0	172	0	12	0	89	0	158	0	431
17:15	0	0	0	0	165	0	19	0	98	0	207	0	489
17:30	0	0	0	0	158	0	20	0	106	0	193	0	477
17:45	0	0	0	0	172	0	12	0	89	0	168	0	441
Total Volume:	0	0	0	0	1281	0	132	0	776	0	1346	0	3535
Approach %	0%	0%	0%	0%	100%	0%	15%	0%	85%	0%	100%	0%	
Peak Hr Begin:	17:00												
PHV	0	0	0	0	667	0	63	0	382	0	726	0	1838
PHF	0.000			0.969			0.883			0.877			0.940

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 11
North/South: California Ave
East/West: Nelson Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	3	36	8	2	42	24	13	7	5	4	39	0	183
7:15	3	39	11	11	80	22	10	17	13	9	54	0	269
7:30	3	31	9	4	70	21	13	28	10	11	36	3	239
7:45	4	40	4	4	40	17	8	18	8	19	32	4	198
8:00	2	30	4	2	37	21	10	11	6	12	26	0	161
8:15	4	26	3	2	26	13	8	15	4	12	30	2	145
8:30	2	17	4	4	28	16	10	13	7	9	26	1	137
8:45	5	24	3	4	33	13	9	14	6	10	25	3	149
Total Volume:	26	243	46	33	356	147	81	123	59	86	268	13	1481
Approach %	8%	77%	15%	6%	66%	27%	31%	47%	22%	23%	73%	4%	
Peak Hr Begin:	7:00												
PHV	13	146	32	21	232	84	44	70	36	43	161	7	889
PHF	0.901			0.746			0.735			0.837			0.826

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 11
North/South: California Ave
East/West: Nelson Ave

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	23	3	3	24	16	15	53	10	9	49	4	210
16:15	1	26	6	4	29	14	21	38	18	2	34	2	195
16:30	4	23	6	7	36	20	32	74	15	5	48	8	278
16:45	1	18	5	5	29	17	41	61	23	3	39	1	243
17:00	4	29	6	8	19	15	28	81	18	8	31	2	249
17:15	2	30	6	5	33	12	41	102	23	6	41	7	308
17:30	3	22	7	4	41	13	34	65	15	4	39	5	252
17:45	1	21	7	3	32	8	49	91	27	8	51	4	302
Total Volume:	17	192	46	39	243	115	261	565	149	45	332	33	2037
Approach %	7%	75%	18%	10%	61%	29%	27%	58%	15%	11%	81%	8%	
Peak Hr Begin:	17:00												
PHV	10	102	26	20	125	48	152	339	83	26	162	18	1111
PHF	0.885			0.832			0.859			0.817			0.902

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 12
North/South: California Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	23	0	40	17	336	0	0	0	0	0	153	12	581
7:15	22	2	50	32	312	2	2	0	0	0	184	11	617
7:30	17	0	38	48	386	1	0	0	0	2	213	5	710
7:45	25	2	56	23	320	1	1	1	0	0	235	13	677
8:00	28	0	38	17	293	1	0	0	1	1	229	15	623
8:15	15	1	33	25	316	1	0	1	1	3	224	13	633
8:30	16	0	28	20	323	0	1	1	0	2	199	12	602
8:45	16	0	30	26	280	1	0	1	0	2	268	12	636
Total Volume:	162	5	313	208	2566	7	4	4	2	10	1705	93	5079
Approach %	34%	1%	65%	7%	92%	0%	40%	40%	20%	1%	94%	5%	
Peak Hr Begin:	7:30												
PHV	85	3	165	113	1315	4	1	2	2	6	901	46	2643
PHF	0.762			0.823			0.625			0.961			0.931

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 12
North/South: California Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	15	1	30	43	207	2	1	0	3	3	306	39	650
16:15	12	1	25	51	233	1	1	0	1	1	303	24	653
16:30	25	0	29	68	210	0	2	1	0	2	308	51	696
16:45	15	0	26	81	237	4	4	0	2	5	304	43	721
17:00	30	0	24	81	251	1	2	0	4	4	339	61	797
17:15	22	0	32	89	301	2	2	3	1	4	340	74	870
17:30	20	0	24	48	250	0	1	2	2	4	342	42	735
17:45	8	2	31	91	295	3	0	3	2	2	319	68	824
Total Volume:	147	4	221	552	1984	13	13	9	15	25	2561	402	5946
Approach %	40%	1%	59%	22%	78%	1%	35%	24%	41%	1%	86%	13%	
Peak Hr Begin:	17:00												
PHV	80	2	111	309	1097	6	5	8	9	14	1340	245	3226
PHF	0.894			0.901			0.917			0.956			0.927

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 13
North/South: Orange Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	53	0	26	34	315	0	1	4	1	2	149	46	631
7:15	55	0	33	37	338	0	0	5	0	4	138	47	657
7:30	57	1	21	33	307	1	0	6	2	1	204	40	673
7:45	54	0	42	42	292	1	1	5	1	2	234	45	719
8:00	39	0	38	36	250	1	0	0	2	0	214	37	617
8:15	43	0	43	37	279	1	0	1	1	0	227	40	672
8:30	44	0	32	45	275	1	1	4	1	1	209	35	648
8:45	43	1	29	33	237	2	2	1	1	1	240	37	627
Total Volume:	388	2	264	297	2293	7	5	26	9	11	1615	327	5244
Approach %	59%	0%	40%	11%	88%	0%	13%	65%	23%	1%	83%	17%	
Peak Hr Begin:	7:30												
PHV	193	1	144	148	1128	4	1	12	6	3	879	162	2681
PHF	0.880			0.938			0.594			0.929			0.932

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 13
North/South: Orange Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	42	1	34	40	163	1	6	3	0	4	364	77	735
16:15	31	2	41	38	170	2	3	11	5	3	342	72	720
16:30	33	0	38	40	178	5	3	4	0	1	382	93	777
16:45	41	0	28	40	170	3	4	6	2	2	345	96	737
17:00	32	0	26	62	203	2	4	2	4	1	383	101	820
17:15	48	2	30	53	204	3	8	8	5	2	377	104	844
17:30	28	1	28	59	214	2	2	8	3	1	409	120	875
17:45	34	1	21	67	190	3	3	9	1	0	357	99	785
Total Volume:	289	7	246	399	1492	21	33	51	20	14	2959	762	6293
Approach %	53%	1%	45%	21%	78%	1%	32%	49%	19%	0%	79%	20%	
Peak Hr Begin:	17:00												
PHV	142	4	105	241	811	10	17	27	13	4	1526	424	3324
PHF	0.784			0.965			0.679			0.922			0.950

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 14
North/South: Workman Mill Road
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	308	2	10	0	35	45	170	0	570
7:15	0	0	0	0	336	5	11	0	35	50	184	0	621
7:30	0	0	0	0	348	1	20	0	41	60	190	0	660
7:45	0	0	0	0	312	4	26	0	38	78	294	0	752
8:00	0	0	0	0	247	7	26	0	48	51	216	0	595
8:15	0	0	0	0	296	1	19	0	31	43	269	0	659
8:30	0	0	0	0	303	0	32	0	29	45	207	0	616
8:45	0	0	0	0	252	6	16	0	23	57	260	0	614
Total Volume:	0	0	0	0	2402	26	160	0	280	429	1790	0	5087
Approach %	0%	0%	0%	0%	99%	1%	36%	0%	64%	19%	81%	0%	
Peak Hr Begin:	7:30												
PHV	0	0	0	0	1203	13	91	0	158	232	969	0	2666
PHF	0.000			0.871			0.841			0.807			0.886

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 14
North/South: Workman Mill Road
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	183	0	59	0	41	41	311	0	635
16:15	0	0	0	0	201	0	83	0	79	41	362	0	766
16:30	0	0	0	0	212	0	70	0	66	37	330	0	715
16:45	0	0	0	0	204	2	81	0	75	52	316	0	730
17:00	0	0	0	0	237	1	95	0	83	46	343	0	805
17:15	0	0	0	0	256	0	90	0	75	35	355	0	811
17:30	0	0	0	0	221	1	90	0	79	46	365	0	802
17:45	0	0	0	0	250	0	88	0	77	39	331	0	785
Total Volume:	0	0	0	0	1764	4	656	0	575	337	2713	0	6049
Approach %	0%	0%	0%	0%	100%	0%	53%	0%	47%	11%	89%	0%	
Peak Hr Begin:	17:00												
PHV	0	0	0	0	964	2	363	0	314	166	1394	0	3203
PHF	0.000			0.943			0.951			0.949			0.987

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 15A
North/South: Vineland Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	109	0	34	49	298	0	0	0	0	0	166	49	705
7:15	101	0	50	59	298	0	0	0	0	0	174	54	736
7:30	93	0	53	58	337	0	0	0	0	0	245	74	860
7:45	123	0	49	53	273	0	0	0	0	0	293	62	853
8:00	72	0	33	60	217	0	0	0	0	0	236	81	699
8:15	82	0	37	55	267	0	0	0	0	0	294	66	801
8:30	84	0	38	34	278	0	0	0	0	0	226	73	733
8:45	80	0	22	36	230	0	0	0	0	0	279	58	705
Total Volume:	744	0	316	404	2198	0	0	0	0	0	1913	517	6092
Approach %	70%	0%	30%	16%	84%	0%	0%	0%	0%	0%	79%	21%	

Peak Hr Begin:	7:30												
PHV	370	0	172	226	1094	0	0	0	0	0	1068	283	3213
PHF	0.788			0.835			0.000			0.938			0.934

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 0
North/South: Vineland Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	64	0	28	58	166	0	0	0	0	0	323	65	704
16:15	88	0	36	87	171	0	0	0	0	0	373	83	838
16:30	71	0	34	78	193	0	0	0	0	0	316	70	762
16:45	76	0	44	100	183	0	0	0	0	0	349	79	831
17:00	79	0	43	89	244	0	0	0	0	0	359	77	891
17:15	75	0	32	98	256	0	0	0	0	0	388	82	931
17:30	75	0	42	86	220	0	0	0	0	0	405	91	919
17:45	71	0	48	105	230	0	0	0	0	0	369	73	896
Total Volume:	599	0	307	701	1663	0	0	0	0	0	2882	620	6772
Approach %	66%	0%	34%	30%	70%	0%	0%	0%	0%	0%	82%	18%	

Peak Hr Begin:	17:00												
PHV	300	0	165	378	950	0	0	0	0	0	1521	323	3637
PHF	0.953			0.938			0.000			0.929			0.977

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report AM

Location ID: 15B
North/South: 2nd Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	347	2	2	0	1	11	190	0	553
7:15	0	0	0	0	352	0	22	0	3	21	209	0	607
7:30	0	0	0	0	381	1	13	0	5	14	267	0	681
7:45	0	0	0	0	326	2	9	0	1	11	338	0	687
8:00	0	0	0	0	272	4	17	0	4	17	251	0	565
8:15	0	0	0	0	319	0	6	0	2	5	332	0	664
8:30	0	0	0	0	303	1	9	0	7	13	249	0	582
8:45	0	0	0	0	255	1	12	0	10	12	289	0	579
Total Volume:	0	0	0	0	2555	11	90	0	33	104	2125	0	4918
Approach %	0%	0%	0%	0%	100%	0%	73%	0%	27%	5%	95%	0%	

Peak Hr Begin:	7:30												
PHV	0	0	0	0	1298	7	45	0	12	47	1188	0	2597
PHF	0.000			0.854			0.679			0.885			0.945

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 0
North/South: 2nd Ave
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	224	3	5	0	2	11	344	0	589
16:15	0	0	0	0	247	4	23	0	7	22	376	0	679
16:30	0	0	0	0	271	2	13	0	2	16	344	0	648
16:45	0	0	0	0	280	2	12	0	2	21	373	0	690
17:00	0	0	0	0	328	6	11	0	7	19	381	0	752
17:15	0	0	0	0	252	3	14	0	2	14	405	0	690
17:30	0	0	0	0	305	5	10	0	4	18	425	0	767
17:45	0	0	0	0	333	4	17	0	1	13	407	0	775
Total Volume:	0	0	0	0	2240	29	105	0	27	134	3055	0	5590
Approach %	0%	0%	0%	0%	99%	1%	80%	0%	20%	4%	96%	0%	

Peak Hr Begin:	17:00												
PHV	0	0	0	0	1218	18	52	0	14	64	1618	0	2984
PHF	0.000			0.917			0.917			0.949			0.963

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report

Location ID: 16
North/South: I-605 NB Off Ramps/Temple Ave
East/West: E Valley Blvd/I-605 NB On-Ramp

Date: 06/30/16
City: Industry, CA

	Westbound Valley			Southbound Temple			Eastbound Valley		I-605 NB Off-Ramp			
	1	2	3	4		5	6	7	8	9	10	Total:
Period	A	B	C	D	E	F	G	H	I	J	K	
7:00	204	254	15	15	87	186	53	190	18	85	43	1150
7:15	222	276	21	7	100	175	68	225	25	92	44	1255
7:30	224	236	21	14	96	205	86	272	20	56	50	1280
7:45	219	199	15	12	106	203	105	302	17	107	65	1350
8:00	209	216	21	7	65	145	88	275	12	70	58	1166
8:15	176	191	21	10	97	178	113	311	12	119	58	1286
8:30	219	199	24	12	62	163	75	250	18	87	55	1164
8:45	180	169	15	7	97	145	101	295	22	88	56	1175

	Westbound Valley			Southbound Temple			Eastbound Valley		I-605 NB Off-Ramp			
	1	2	3	4		5	6	7	8	9	10	Total:
Period	A	B	C	D	E	F	G	H	I	J	K	
7:00-8:00	869	965	72	48	389	769	312	989	80	340	202	5035
7:15-8:15	874	927	78	40	367	728	347	1074	74	325	217	5051
7:30-7:45	828	842	78	43	364	731	392	1160	61	352	231	5082
7:45-8:45	823	805	81	41	330	689	381	1138	59	383	236	4966
8:00-9:00	784	775	81	36	321	631	377	1131	64	364	227	4791

	Westbound Valley			Southbound Temple			Eastbound Valley		I-605 NB Off-Ramp			
	1	2	3	4		5	6	7	8	9	10	Total:
Period	A	B	C	D	E	F	G	H	I	J	K	
4:00	172	125	15	18	68	157	121	410	18	115	71	1290
4:15	143	138	28	16	53	130	109	429	16	118	63	1243
4:30	135	152	32	22	89	121	89	422	7	136	67	1272
4:45	181	123	27	18	74	164	153	442	12	155	68	1417
5:00	145	181	20	17	66	163	100	404	7	124	57	1284
5:15	210	163	16	32	68	128	120	475	8	151	64	1435
5:30	207	174	35	25	70	136	75	454	9	99	44	1328
5:45	166	155	14	9	78	167	182	505	11	143	61	1491

	Westbound Valley			Southbound Temple			Eastbound Valley		I-605 NB Off-Ramp			
	1	2	3	4		5	6	7	8	9	10	Total:
Period	A	B	C	D	E	F	G	H	I	J	K	
4:00-5:00	631	538	102	74	284	572	472	1703	53	524	269	5222
4:15-5:15	604	594	107	73	282	578	451	1697	42	533	255	5216
4:30-5:30	671	619	95	89	297	576	462	1743	34	566	256	5408
4:45-5:45	743	641	98	92	278	591	448	1775	36	529	233	5464
5:00-6:00	728	673	85	83	282	594	477	1838	35	517	226	5538

Turning Movement Count Report AM

Location ID: 17
North/South: I-605 On/Off Ramps
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	280	0	142	0	6	20	129	0	577
7:15	0	0	0	0	355	0	128	0	1	30	197	0	711
7:30	0	0	0	0	312	0	137	0	3	26	218	0	696
7:45	0	0	0	0	331	0	175	0	4	29	271	0	810
8:00	0	0	0	0	288	0	167	0	5	22	209	0	691
8:15	0	0	0	0	270	0	191	0	6	28	255	0	750
8:30	0	0	0	0	276	0	162	0	3	21	192	0	654
8:45	0	0	0	0	297	0	224	0	7	31	215	0	774
Total Volume:	0	0	0	0	2409	0	1326	0	35	207	1686	0	5663
Approach %	0%	0%	0%	0%	100%	0%	97%	0%	3%	11%	89%	0%	
Peak Hr Begin:	7:30												
PHV	0	0	0	0	1201	0	670	0	18	105	953	0	2947
PHF	0.000			0.907			0.873			0.882			0.910

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 17
North/South: I-605 On/Off Ramps
East/West: E Valley Blvd

Date: 06/30/16
City: Industry, CA

	Southbound			Westbound			Northbound			Eastbound			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	246	0	219	0	2	26	379	0	872
16:15	0	0	0	0	214	0	199	0	8	36	365	0	822
16:30	0	0	0	0	240	0	176	0	3	38	384	0	841
16:45	0	0	0	0	264	0	207	0	2	29	389	0	891
17:00	0	0	0	0	220	0	215	0	4	35	352	0	826
17:15	0	0	0	0	273	0	231	0	5	24	374	0	907
17:30	0	0	0	0	291	0	239	0	3	30	324	0	887
17:45	0	0	0	0	250	0	231	0	3	23	434	0	941
Total Volume:	0	0	0	0	1999	0	1717	0	30	241	3001	0	6987
Approach %	0%	0%	0%	0%	100%	0%	98%	0%	2%	7%	93%	0%	
Peak Hr Begin:	17:00												
PHV	0	0	0	0	1034	0	916	0	15	112	1484	0	3561
PHF		0.000			0.888			0.962			0.873		0.946

Prepared by City Count, LLC. (www.citycount.com)

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Nelson Avenue, east of Sunset Avenue

Day: Tuesday, July 5, 2016

City: Industry, CA

Daily Totals	NB	SB	EB	WB	Total
	0	0	2800	2858	5658

AM	NB	SB	EB		WB		Total		PM	NB	SB	EB		WB		Total	
00:00			8		11		19		12:00			51		30		81	
00:15			13		2		15		12:15			45		44		89	
00:30			2		5		7		12:30			39		43		82	
00:45			3	26	11	29	14	55	12:45			49	184	30	147	79	331
01:00			3		10		13		13:00			48		43		91	
01:15			4		5		9		13:15			42		40		82	
01:30			2		2		4		13:30			43		37		80	
01:45			3	12	2	19	5	31	13:45			42	175	49	169	91	344
02:00			1		3		4		14:00			48		39		87	
02:15			5		3		8		14:15			44		42		86	
02:30			1		5		6		14:30			59		45		104	
02:45			10	17	5	16	15	33	14:45			53	204	47	173	100	377
03:00			3		2		5		15:00			98		57		155	
03:15			1		6		7		15:15			71		44		115	
03:30			2		8		10		15:30			43		56		99	
03:45			9	15	8	24	17	39	15:45			55	267	32	189	87	456
04:00			4		8		12		16:00			55		42		97	
04:15			6		11		17		16:15			67		47		114	
04:30			10		10		20		16:30			80		55		135	
04:45			9	29	11	40	20	69	16:45			47	249	52	196	99	445
05:00			11		19		30		17:00			40		52		92	
05:15			19		27		46		17:15			64		55		119	
05:30			11		43		54		17:30			54		51		105	
05:45			19	60	37	126	56	186	17:45			62	220	56	214	118	434
06:00			18		28		46		18:00			51		48		99	
06:15			18		28		46		18:15			50		30		80	
06:30			24		36		60		18:30			48		30		78	
06:45			24	84	42	134	66	218	18:45			47	196	40	148	87	344
07:00			24		54		78		19:00			48		33		81	
07:15			27		63		90		19:15			41		38		79	
07:30			29		74		103		19:30			29		23		52	
07:45			37	117	62	253	99	370	19:45			25	143	17	111	42	254
08:00			40		40		80		20:00			21		19		40	
08:15			35		41		76		20:15			26		27		53	
08:30			37		45		82		20:30			23		27		50	
08:45			34	146	28	154	62	300	20:45			17	87	30	103	47	190
09:00			30		47		77		21:00			16		22		38	
09:15			24		41		65		21:15			19		21		40	
09:30			19		32		51		21:30			22		15		37	
09:45			35	108	39	159	74	267	21:45			18	75	17	75	35	150
10:00			39		37		76		22:00			22		16		38	
10:15			37		49		86		22:15			25		17		42	
10:30			29		34		63		22:30			15		9		24	
10:45			37	142	31	151	68	293	22:45			10	72	11	53	21	125
11:00			38		33		71		23:00			14		14		28	
11:15			39		42		81		23:15			9		9		18	
11:30			28		31		59		23:30			8		4		12	
11:45			30	135	27	133	57	268	23:45			6	37	15	42	21	79
Totals				891		1238	2129		Totals				1909		1620	3529	
Split %				41.9%		58.1%	37.6%		Split %				54.1%		45.9%	62.4%	

Daily Totals	NB	SB	EB	WB	Total
	0	0	2800	2858	5658

AM Peak Hour	07:45	07:00	07:15	PM Peak Hour	14:30	17:00	14:30
AM Peak Hr Volume	149	253	372	PM Peak Hr Volume	281	214	474
AM Pk Hr Factor	0.931	0.855	0.903	PM Pk Hr Factor	0.717	0.955	0.765

Prepared by City Count, LLC (www.citycount.com)

ADT Volume Report

Sunset Avenue, south of Nelson Avenue

Day: Tuesday, July 5, 2016

City: Industry, CA

Daily Totals	NB	SB	EB	WB	Total
	16475	16886	0	0	33361

AM	NB		SB		EB	WB	Total		PM	NB		SB		EB	WB	Total	
00:00	54		41				95		12:00	222		207				429	
00:15	60		27				87		12:15	203		187				390	
00:30	41		31				72		12:30	205		229				434	
00:45	31	186	23	122			54	308	12:45	214	844	229	852			443	1696
01:00	33		29				62		13:00	228		228				456	
01:15	28		27				55		13:15	206		226				432	
01:30	32		26				58		13:30	255		214				469	
01:45	28	121	31	113			59	234	13:45	243	932	230	898			473	1830
02:00	28		22				50		14:00	243		217				460	
02:15	27		24				51		14:15	207		239				446	
02:30	28		27				55		14:30	316		251				567	
02:45	28	111	42	115			70	226	14:45	273	1039	218	925			491	1964
03:00	28		43				71		15:00	303		246				549	
03:15	23		46				69		15:15	325		207				532	
03:30	26		66				92		15:30	400		219				619	
03:45	21	98	83	238			104	336	15:45	328	1356	203	875			531	2231
04:00	16		87				103		16:00	331		220				551	
04:15	32		115				147		16:15	366		193				559	
04:30	42		171				213		16:30	432		234				666	
04:45	46	136	179	552			225	688	16:45	360	1489	221	868			581	2357
05:00	49		176				225		17:00	399		202				601	
05:15	60		182				242		17:15	416		249				665	
05:30	89		304				393		17:30	447		230				677	
05:45	81	279	249	911			330	1190	17:45	429	1691	207	888			636	2579
06:00	69		251				320		18:00	400		206				606	
06:15	83		272				355		18:15	392		244				636	
06:30	109		340				449		18:30	373		178				551	
06:45	121	382	350	1213			471	1595	18:45	342	1507	190	818			532	2325
07:00	160		358				518		19:00	295		178				473	
07:15	183		380				563		19:15	237		127				364	
07:30	185		423				608		19:30	226		145				371	
07:45	157	685	339	1500			496	2185	19:45	211	969	131	581			342	1550
08:00	164		341				505		20:00	190		153				343	
08:15	133		346				479		20:15	158		132				290	
08:30	170		308				478		20:30	193		131				324	
08:45	179	646	242	1237			421	1883	20:45	173	714	136	552			309	1266
09:00	161		244				405		21:00	160		143				303	
09:15	165		242				407		21:15	164		120				284	
09:30	165		240				405		21:30	144		110				254	
09:45	162	653	171	897			333	1550	21:45	132	600	119	492			251	1092
10:00	201		216				417		22:00	136		98				234	
10:15	177		255				432		22:15	117		94				211	
10:30	133		213				346		22:30	106		80				186	
10:45	129	640	176	860			305	1500	22:45	73	432	63	335			136	767
11:00	169		236				405		23:00	91		41				132	
11:15	183		220				403		23:15	76		52				128	
11:30	159		201				360		23:30	74		56				130	
11:45	146	657	203	860			349	1517	23:45	67	308	35	184			102	492
Totals		4594		8618			13212		Totals		11881		8268			20149	
Split %		34.8%		65.2%			39.6%		Split %		59.0%		41.0%			60.4%	

Daily Totals	NB	SB	EB	WB	Total
	16475	16886	0	0	33361

AM Peak Hour	09:30	06:45	07:00	PM Peak Hour	17:15	14:15	17:15
AM Peak Volume	705	1511	2185	PM Peak Volume	1692	954	2584
AM Pk Hr Factor	0.877	0.893	0.898	PM Pk Hr Factor	0.946	0.950	0.954

Appendix C – Season Adjustment Factors and Historic Traffic Data Comparisons

Comparison of Historic Non-Summer Traffic Data to 2016 Summer Traffic Count

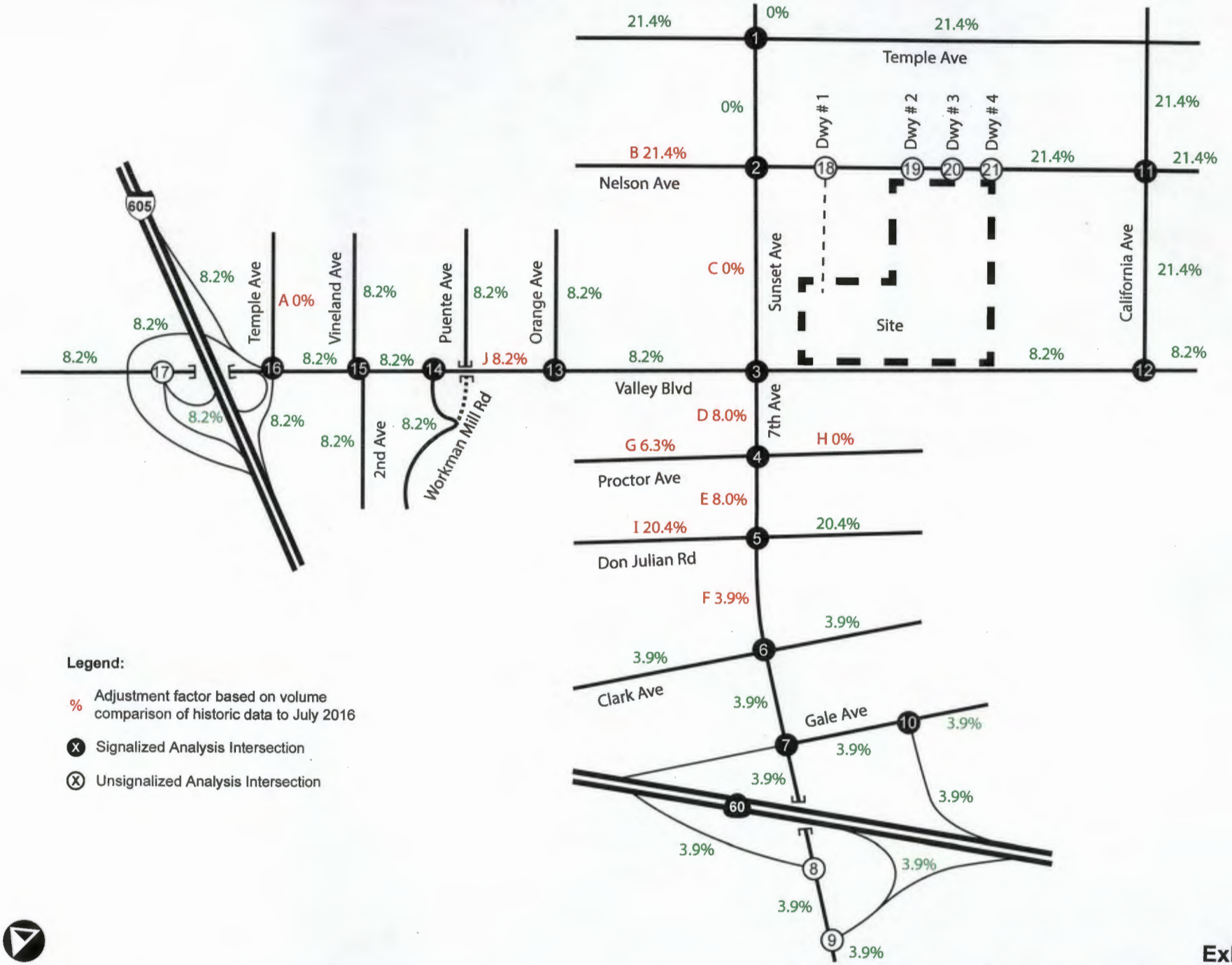
No.	Street Name	Segment	AM			PM			July 2016 Count Adjustment[1]	
			January 2016	July 2016	Percent Difference	January 2016	July 2016	Percent Difference	AM	PM
A	Temple Ave	Baldwin Park Blvd & Valley Blvd	2105	2137	-1.5%	2001	2175	-8.0%	0.0%	0.0%
B	Nelson Ave	Orange Ave & Sunset Ave	743	612	21.4%	565	507	11.4%	21.4%	11.4%
C	Sunset Ave	Valley Blvd & Nelson Ave	2143	2226	-3.7%	2423	2696	-10.1%	0.0%	0.0%
D	7th Ave	Proctor Ave & City Boundary	1879	1739	8.1%	1832	2008	-8.8%	8.0%	0.0%
E	7th Ave	Don Julian Rd & Proctor Ave	1760	1631	7.9%	2062	2065	-0.1%	8.0%	0.0%
F	7th Ave	Salt Lake Ave & Clark Ave	2041	1964	3.9%	2514	2457	2.3%	3.9%	2.3%
G	Proctor Ave	7th Ave & 9th Ave	577	543	6.3%	461	581	-20.7%	6.3%	0.0%
H	Proctor Ave	6th Ave & 7th Ave	422	464	-9.1%	485	615	-21.1%	0.0%	0.0%
I	Don Julian Rd	6th Ave & 7th Ave	1086	902	20.4%	1158	1223	-5.3%	20.4%	0.0%

No.	Street Name	Segment	AM			PM			July 2016 Count Adjustment[1]	
			May 2011	July 2016	Percent Difference	May 2011	July 2016	Percent Difference	AM[2]	PM
J	Valley Blvd	Workman Mill Rd & Orange Ave	2557	2483	3.0%	2517	2956	-14.9%	8.2%	0.0%

Note:

[1] For locations where the historic data are lower than July 2016 counts, there will be no adjustments (0%) to July 2016 counts.
For locations where the historic data are higher than July 2016 counts, the adjustment to July 2016 counts are the % difference.

[2] July 2016 AM peak hour count includes the 3.0% difference and an annual 1% growth (5.1% for 5 years) from May 2011.



Legend:

% Adjustment factor based on volume comparison of historic data to July 2016

Signalized Analysis Intersection

Unsignalized Analysis Intersection

Not to Scale

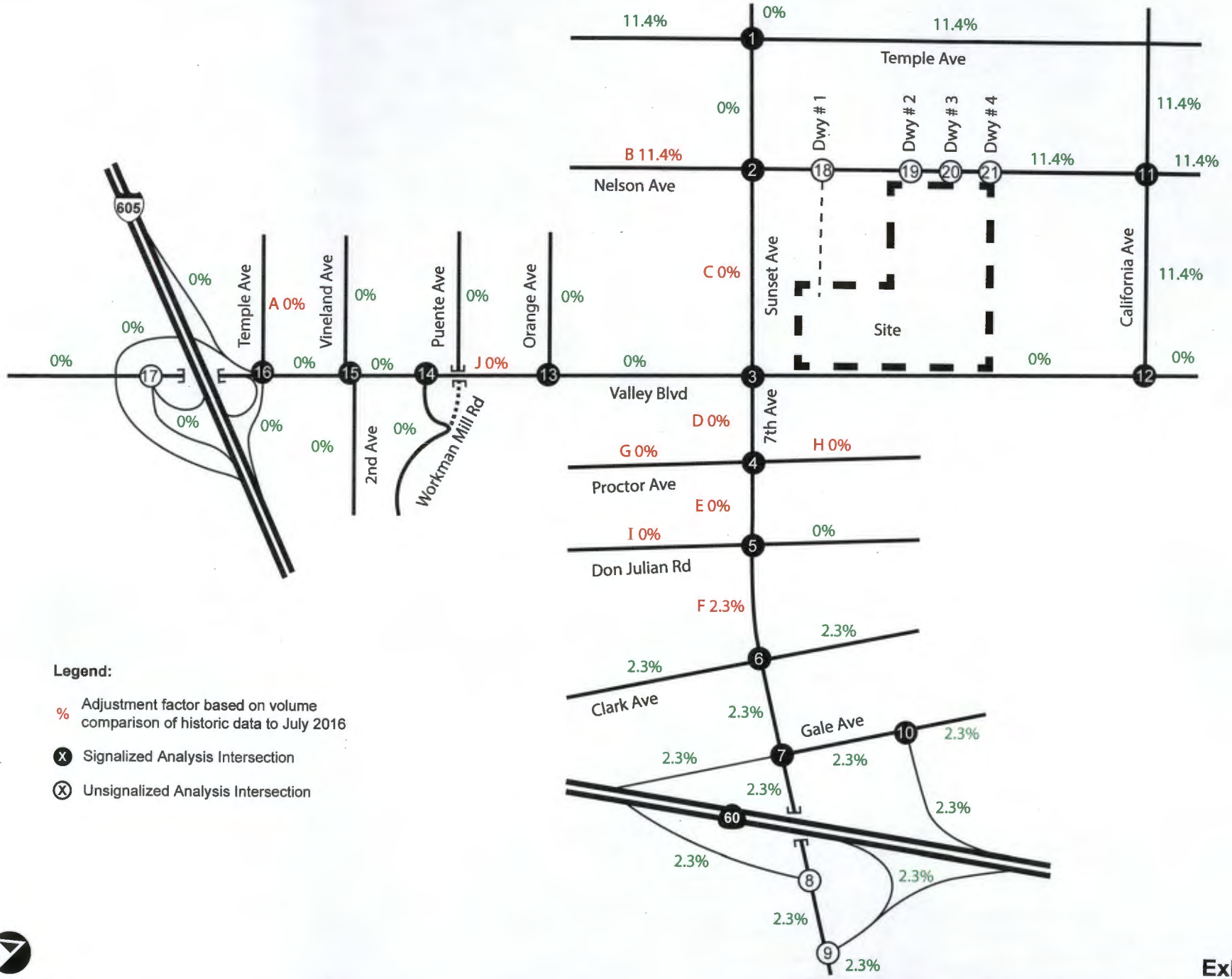
Michael Baker INTERNATIONAL

H:\pdata\152815\14700_Nelson\Exhibits

Exhibit A

Adjustments to July 2016 AM Peak Hour Counts

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis



Legend:

% Adjustment factor based on volume comparison of historic data to July 2016

Signalized Analysis Intersection

Unsignalized Analysis Intersection

Not to Scale

Michael Baker INTERNATIONAL

H:\pdata\152815\14700_Nelson\Exhibits

Exhibit B

Adjustments to July 2016 PM Peak Hour Counts

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

Prepared by NDS/ATD

VOLUME

Temple Ave Bet. Baldwin Park Blvd & Valley Blvd

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_026

DAILY TOTALS	NB	SB	EB	WB	Total
	12,981	13,726	0	0	26,707

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	50		46						96		12:00	166		188						354	
0:15	74		22						96		12:15	96		147						243	
0:30	46		21						67		12:30	183		190						373	
0:45	51	221	26	115					77	336	12:45	139	584	163	688					302	1272
1:00	47		27						74		13:00	153		166						319	
1:15	47		20						67		13:15	134		159						293	
1:30	48		12						60		13:30	181		189						370	
1:45	45	187	27	86					72	273	13:45	151	619	177	691					328	1310
2:00	43		31						74		14:00	149		181						330	
2:15	45		20						65		14:15	155		190						345	
2:30	39		18						57		14:30	218		198						416	
2:45	49	176	24	93					73	269	14:45	241	763	162	731					403	1494
3:00	23		15						38		15:00	245		201						446	
3:15	31		19						50		15:15	291		182						473	
3:30	34		22						56		15:30	297		160						457	
3:45	29	117	23	79					52	196	15:45	294	1127	152	695					446	1822
4:00	13		43						56		16:00	326		201						527	
4:15	13		67						80		16:15	271		183						454	
4:30	28		89						117		16:30	238		272						510	
4:45	29	83	102	301					131	384	16:45	275	1110	180	836					455	1946
5:00	29		133						162		17:00	361		221						582	
5:15	48		157						205		17:15	250		192						442	
5:30	64		182						246		17:30	303		207						510	
5:45	126	267	202	674					328	941	17:45	258	1172	181	801					439	1973
6:00	113		206						319		18:00	260		242						502	
6:15	123		234						357		18:15	286		169						455	
6:30	88		298						386		18:30	237		147						384	
6:45	93	417	330	1068					423	1485	18:45	240	1023	132	690					372	1713
7:00	114		322						436		19:00	243		174						417	
7:15	169		341						510		19:15	240		104						344	
7:30	177		351						528		19:30	162		125						287	
7:45	191	651	371	1385					562	2036	19:45	134	779	88	491					222	1270
8:00	154		351						505		20:00	123		89						212	
8:15	130		294						424		20:15	117		82						199	
8:30	146		252						398		20:30	113		71						184	
8:45	164	594	271	1168					435	1762	20:45	125	478	74	316					199	794
9:00	136		252						388		21:00	88		69						157	
9:15	158		200						358		21:15	136		62						198	
9:30	150		216						366		21:30	105		75						180	
9:45	122	566	178	846					300	1412	21:45	97	426	64	270					161	696
10:00	120		163						283		22:00	98		73						171	
10:15	115		160						275		22:15	93		55						148	
10:30	115		175						290		22:30	55		45						100	
10:45	115	465	141	639					256	1104	22:45	93	339	53	226					146	565
11:00	103		163						266		23:00	94		27						121	
11:15	150		214						364		23:15	100		49						149	
11:30	90		170						260		23:30	75		38						113	
11:45	125	468	150	697					275	1165	23:45	80	349	26	140					106	489
TOTALS		4212		7151						11363	TOTALS		8769		6575						15344
SPLIT %		37.1%		62.9%						42.5%	SPLIT %		57.1%		42.9%						57.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	12,981	13,726	0	0	26,707

AM Peak Hour	7:15	7:15			7:15	PM Peak Hour	15:15	16:30			16:15
AM Pk Volume	691	1414			2105	PM Pk Volume	1208	865			2001
Pk Hr Factor	0.904	0.953			0.936	Pk Hr Factor	0.926	0.795			0.860
7 - 9 Volume	1245	2553	0	0	3798	4 - 6 Volume	2282	1637	0	0	3919
7 - 9 Peak Hour	7:15	7:15			7:15	4 - 6 Peak Hour	16:45	16:30			16:15
7 - 9 Pk Volume	691	1414	0	0	2105	4 - 6 Pk Volume	1189	865	0	0	2001
Pk Hr Factor	0.904	0.953	0.000	0.000	0.936	Pk Hr Factor	0.823	0.795	0.000	0.000	0.860

Prepared by NDS/ATD

VOLUME

Nelson Ave Bet. Orange Ave & Sunset Ave

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_080

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,878	3,049	6,927

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			2		8		10		12:00			54		41		95	
0:15			5		5		10		12:15			51		34		85	
0:30			2		4		6		12:30			59		42		101	
0:45			2	11	8	25	10	36	12:45			62	226	41	158	103	384
1:00			1		15		16		13:00			71		40		111	
1:15			1		6		7		13:15			53		51		104	
1:30			5		2		7		13:30			70		49		119	
1:45			3	10	4	27	7	37	13:45			57	251	52	192	109	443
2:00			5		9		14		14:00			63		44		107	
2:15			5		6		11		14:15			56		37		93	
2:30			6		5		11		14:30			94		53		147	
2:45			4	20	4	24	8	44	14:45			89	302	48	182	137	484
3:00			5		7		12		15:00			71		52		123	
3:15			7		0		7		15:15			76		49		125	
3:30			12		2		14		15:30			71		54		125	
3:45			15	39	3	12	18	51	15:45			59	277	57	212	116	489
4:00			19		5		24		16:00			60		51		111	
4:15			24		5		29		16:15			68		54		122	
4:30			31		6		37		16:30			97		64		161	
4:45			31	105	10	26	41	131	16:45			95	320	52	221	147	541
5:00			25		7		32		17:00			76		53		129	
5:15			38		16		54		17:15			71		57		128	
5:30			52		12		64		17:30			72		60		132	
5:45			57	172	24	59	81	231	17:45			65	284	61	231	126	515
6:00			41		16		57		18:00			59		49		108	
6:15			42		19		61		18:15			52		34		86	
6:30			48		14		62		18:30			46		29		75	
6:45			58	189	38	87	96	276	18:45			36	193	32	144	68	337
7:00			47		60		107		19:00			31		36		67	
7:15			64		78		142		19:15			30		19		49	
7:30			86		123		209		19:30			22		28		50	
7:45			99	296	113	374	212	670	19:45			26	109	19	102	45	211
8:00			80		100		180		20:00			18		17		35	
8:15			64		57		121		20:15			25		16		41	
8:30			40		59		99		20:30			27		19		46	
8:45			47	231	71	287	118	518	20:45			36	106	15	67	51	173
9:00			36		39		75		21:00			26		30		56	
9:15			46		41		87		21:15			17		22		39	
9:30			42		41		83		21:30			15		14		29	
9:45			51	175	42	163	93	338	21:45			14	72	9	75	23	147
10:00			48		39		87		22:00			18		18		36	
10:15			46		42		88		22:15			12		15		27	
10:30			45		30		75		22:30			26		16		42	
10:45			48	187	40	151	88	338	22:45			19	75	13	62	32	137
11:00			50		24		74		23:00			6		5		11	
11:15			56		37		93		23:15			5		4		9	
11:30			49		42		91		23:30			7		6		13	
11:45			47	202	39	142	86	344	23:45			8	26	11	26	19	52
TOTALS				1637		1377		3014	TOTALS				2241		1672		3913
SPLIT %				54.3%		45.7%		43.5%	SPLIT %				57.3%		42.7%		56.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	3,878	3,049	6,927

AM Peak Hour			7:15	7:15	7:15	PM Peak Hour			16:30	17:00	16:30
AM Pk Volume			329	414	743	PM Pk Volume			339	231	565
Pk Hr Factor			0.831	0.841	0.876	Pk Hr Factor			0.874	0.947	0.877
7 - 9 Volume	0	0	527	661	1188	4 - 6 Volume	0	0	604	452	1056
7 - 9 Peak Hour			7:15	7:15	7:15	4 - 6 Peak Hour			16:30	17:00	16:30
7 - 9 Pk Volume	0	0	329	414	743	4 - 6 Pk Volume	0	0	339	231	565
Pk Hr Factor	0.000	0.000	0.831	0.841	0.876	Pk Hr Factor	0.000	0.000	0.874	0.947	0.877

Prepared by NDS/ATD

VOLUME

Sunset Ave Bet. Valley Blvd & Nelson Ave

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_065

DAILY TOTALS	NB	SB	EB	WB	Total
	16,119	14,222	0	0	30,341

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	68		21						89		12:00	198		176						374	
0:15	45		24						69		12:15	208		211						419	
0:30	47		15						62		12:30	211		194						405	
0:45	40	200	11	71					51	271	12:45	210	827	181	762					391	1589
1:00	32		16						48		13:00	221		184						405	
1:15	26		22						48		13:15	194		184						378	
1:30	36		29						65		13:30	278		193						471	
1:45	22	116	16	83					38	199	13:45	229	922	183	744					412	1666
2:00	27		23						50		14:00	236		207						443	
2:15	20		24						44		14:15	236		229						465	
2:30	31		24						55		14:30	320		240						560	
2:45	19	97	31	102					50	199	14:45	326	1118	235	911					561	2029
3:00	24		28						52		15:00	342		233						575	
3:15	9		31						40		15:15	341		216						557	
3:30	16		57						73		15:30	338		213						551	
3:45	18	67	71	187					89	254	15:45	379	1400	155	817					534	2217
4:00	24		53						77		16:00	356		204						560	
4:15	33		79						112		16:15	339		200						539	
4:30	36		143						179		16:30	388		203						591	
4:45	37	130	154	429					191	559	16:45	398	1481	207	814					605	2295
5:00	47		134						181		17:00	407		206						613	
5:15	43		166						209		17:15	413		182						595	
5:30	55		224						279		17:30	394		216						610	
5:45	82	227	211	735					293	962	17:45	393	1607	206	810					599	2417
6:00	52		194						246		18:00	391		178						569	
6:15	89		229						318		18:15	391		174						565	
6:30	96		260						356		18:30	340		147						487	
6:45	120	357	317	1000					437	1357	18:45	329	1451	134	633					463	2084
7:00	160		290						450		19:00	271		158						429	
7:15	196		306						502		19:15	277		124						401	
7:30	247		309						556		19:30	212		122						334	
7:45	211	814	351	1256					562	2070	19:45	196	956	114	518					310	1474
8:00	210		313						523		20:00	159		107						266	
8:15	189		250						439		20:15	152		84						236	
8:30	170		242						412		20:30	128		102						230	
8:45	187	756	237	1042					424	1798	20:45	119	558	103	396					222	954
9:00	149		194						343		21:00	132		114						246	
9:15	163		154						317		21:15	131		96						227	
9:30	136		215						351		21:30	97		108						205	
9:45	137	585	202	765					339	1350	21:45	103	463	84	402					187	865
10:00	181		159						340		22:00	118		63						181	
10:15	167		151						318		22:15	107		66						173	
10:30	147		143						290		22:30	114		72						186	
10:45	154	649	180	633					334	1282	22:45	82	421	48	249					130	670
11:00	163		154						317		23:00	88		47						135	
11:15	160		177						337		23:15	64		39						103	
11:30	143		188						331		23:30	66		44						110	
11:45	176	642	188	707					364	1349	23:45	57	275	26	156					83	431
TOTALS		4640		7010						11650	TOTALS		11479		7212						18691
SPLIT %		39.8%		60.2%						38.4%	SPLIT %		61.4%		38.6%						61.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	16,119	14,222	0	0	30,341

AM Peak Hour	7:15	7:15			7:15	PM Peak Hour	16:45	14:15			16:45
AM Pk Volume	864	1279			2143	PM Pk Volume	1612	937			2423
Pk Hr Factor	0.874	0.911			0.953	Pk Hr Factor	0.976	0.976			0.988
7 - 9 Volume	1570	2298	0	0	3868	4 - 6 Volume	3088	1624	0	0	4712
7 - 9 Peak Hour	7:15	7:15			7:15	4 - 6 Peak Hour	16:45	16:15			16:45
7 - 9 Pk Volume	864	1279	0	0	2143	4 - 6 Pk Volume	1612	816	0	0	2423
Pk Hr Factor	0.874	0.911	0.000	0.000	0.953	Pk Hr Factor	0.976	0.986	0.000	0.000	0.988

Prepared by NDS/ATD

VOLUME

7th Ave Bet. Proctor Ave & City Boundary

Day: Wednesday
Date: 1/27/2016

City: Industry
Project #: CA15_5829_063

DAILY TOTALS	NB	SB	EB	WB	Total
	12,728	13,526	0	0	26,254

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	37		21						58		12:00	163		172						335	
0:15	31		21						52		12:15	182		196						378	
0:30	39		24						63		12:30	213		211						424	
0:45	23	130	19	85					42	215	12:45	155	713	217	796					372	1509
1:00	20		17						37		13:00	160		174						334	
1:15	22		17						39		13:15	189		181						370	
1:30	12		29						41		13:30	217		212						429	
1:45	21	75	15	78					36	153	13:45	189	755	184	751					373	1506
2:00	23		24						47		14:00	226		196						422	
2:15	19		31						50		14:15	201		212						413	
2:30	21		21						42		14:30	262		203						465	
2:45	21	84	36	112					57	196	14:45	229	918	215	826					444	1744
3:00	16		30						46		15:00	255		197						452	
3:15	13		42						55		15:15	229		201						430	
3:30	23		59						82		15:30	287		172						459	
3:45	21	73	84	215					105	288	15:45	251	1022	168	738					419	1760
4:00	24		56						80		16:00	266		191						457	
4:15	30		84						114		16:15	277		180						457	
4:30	41		166						207		16:30	275		185						460	
4:45	51	146	171	477					222	623	16:45	268	1086	188	744					456	1830
5:00	58		127						185		17:00	260		199						459	
5:15	50		163						213		17:15	211		175						386	
5:30	61		197						258		17:30	222		197						419	
5:45	57	226	186	673					243	899	17:45	208	901	206	777					414	1678
6:00	69		182						251		18:00	226		179						405	
6:15	84		256						340		18:15	256		153						409	
6:30	89		242						331		18:30	239		128						367	
6:45	126	368	291	971					417	1339	18:45	204	925	118	578					322	1503
7:00	131		269						400		19:00	210		118						328	
7:15	169		286						455		19:15	158		129						287	
7:30	196		286						482		19:30	182		108						290	
7:45	218	714	283	1124					501	1838	19:45	169	719	101	456					270	1175
8:00	169		272						441		20:00	132		95						227	
8:15	201		243						444		20:15	129		89						218	
8:30	166		224						390		20:30	123		77						200	
8:45	152	688	202	941					354	1629	20:45	106	490	93	354					199	844
9:00	152		179						331		21:00	107		96						203	
9:15	192		169						361		21:15	92		94						186	
9:30	135		181						316		21:30	74		94						168	
9:45	166	645	178	707					344	1352	21:45	83	356	77	361					160	717
10:00	139		211						350		22:00	103		62						165	
10:15	148		141						289		22:15	75		64						139	
10:30	125		134						259		22:30	71		58						129	
10:45	139	551	170	656					309	1207	22:45	66	315	39	223					105	538
11:00	144		162						306		23:00	76		46						122	
11:15	158		194						352		23:15	40		42						82	
11:30	152		184						336		23:30	56		33						89	
11:45	155	609	198	738					353	1347	23:45	47	219	24	145					71	364
TOTALS		4309		6777						11086	TOTALS		8419		6749						15168
SPLIT %		38.9%		61.1%						42.2%	SPLIT %		55.5%		44.5%						57.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	12,728	13,526	0	0	26,254

AM Peak Hour	7:30	6:45			7:15	PM Peak Hour	16:00	14:15			16:15
AM Pk Volume	784	1132			1879	PM Pk Volume	1086	827			1832
Pk Hr Factor	0.899	0.973			0.938	Pk Hr Factor	0.980	0.962			0.996
7 - 9 Volume	1402	2065	0	0	3467	4 - 6 Volume	1987	1521	0	0	3508
7 - 9 Peak Hour	7:30	7:15			7:15	4 - 6 Peak Hour	16:00	17:00			16:15
7 - 9 Pk Volume	784	1127	0	0	1879	4 - 6 Pk Volume	1086	777	0	0	1832
Pk Hr Factor	0.899	0.985	0.000	0.000	0.938	Pk Hr Factor	0.980	0.943	0.000	0.000	0.996

Prepared by NDS/ATD

VOLUME

7th Ave Bet. Don Julian Rd & Proctor Ave

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_062

DAILY TOTALS	NB	SB	EB	WB	Total
	13,437	14,314	0	0	27,751

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	59		25						84		12:00	190		192						382	
0:15	32		28						60		12:15	171		201						372	
0:30	45		31						76		12:30	226		219						445	
0:45	26	162	23	107					49	269	12:45	230	817	203	815					433	1632
1:00	27		21						48		13:00	207		203						410	
1:15	21		20						41		13:15	198		209						407	
1:30	29		32						61		13:30	234		255						489	
1:45	27	104	19	92					46	196	13:45	158	797	197	864					355	1661
2:00	22		34						56		14:00	210		227						437	
2:15	22		21						43		14:15	185		252						437	
2:30	32		26						58		14:30	233		242						475	
2:45	26	102	36	117					62	219	14:45	242	870	227	948					469	1818
3:00	23		32						55		15:00	276		210						486	
3:15	21		41						62		15:15	250		235						485	
3:30	23		62						85		15:30	284		255						539	
3:45	38	105	88	223					126	328	15:45	234	1044	205	905					439	1949
4:00	33		59						92		16:00	252		228						480	
4:15	34		92						126		16:15	316		219						535	
4:30	61		133						194		16:30	304		242						546	
4:45	87	215	148	432					235	647	16:45	265	1137	177	866					442	2003
5:00	62		133						195		17:00	280		259						539	
5:15	57		166						223		17:15	245		243						488	
5:30	88		176						264		17:30	300		212						512	
5:45	97	304	179	654					276	958	17:45	272	1097	233	947					505	2044
6:00	73		191						264		18:00	263		198						461	
6:15	77		218						295		18:15	249		176						425	
6:30	102		229						331		18:30	236		154						390	
6:45	156	408	236	874					392	1282	18:45	222	970	113	641					335	1611
7:00	132		240						372		19:00	219		146						365	
7:15	184		277						461		19:15	183		139						322	
7:30	189		225						414		19:30	176		128						304	
7:45	227	732	247	989					474	1721	19:45	148	726	107	520					255	1246
8:00	182		229						411		20:00	137		115						252	
8:15	180		215						395		20:15	113		98						211	
8:30	171		182						353		20:30	112		92						204	
8:45	196	729	201	827					397	1556	20:45	103	465	111	416					214	881
9:00	147		171						318		21:00	119		115						234	
9:15	123		173						296		21:15	102		108						210	
9:30	144		183						327		21:30	85		110						195	
9:45	148	562	166	693					314	1255	21:45	85	391	88	421					173	812
10:00	149		203						352		22:00	98		78						176	
10:15	152		144						296		22:15	81		72						153	
10:30	123		154						277		22:30	94		76						170	
10:45	149	573	173	674					322	1247	22:45	60	333	48	274					108	607
11:00	150		177						327		23:00	67		56						123	
11:15	170		209						379		23:15	35		62						97	
11:30	132		227						359		23:30	42		46						88	
11:45	156	608	209	822					365	1430	23:45	42	186	29	193					71	379
TOTALS		4604		6504						11108	TOTALS		8833		7810						16643
SPLIT %		41.4%		58.6%						40.0%	SPLIT %		53.1%		46.9%						60.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	13,437	14,314	0	0	27,751

AM Peak Hour	7:15	7:00			7:15	PM Peak Hour	16:15	14:00			16:15
AM Pk Volume	782	989			1760	PM Pk Volume	1165	948			2062
Pk Hr Factor	0.861	0.893			0.928	Pk Hr Factor	0.922	0.940			0.944
7 - 9 Volume	1461	1816	0	0	3277	4 - 6 Volume	2234	1813	0	0	4047
7 - 9 Peak Hour	7:15	7:00			7:15	4 - 6 Peak Hour	16:15	17:00			16:15
7 - 9 Pk Volume	782	989	0	0	1760	4 - 6 Pk Volume	1165	947	0	0	2062
Pk Hr Factor	0.861	0.893	0.000	0.000	0.928	Pk Hr Factor	0.922	0.914	0.000	0.000	0.944

Prepared by NDS/ATD

VOLUME

7th Ave Bet. Clark Ave & Salt Lake Ave

Day: Wednesday
Date: 1/27/2016

City: Industry
Project #: CA15_5829_060

DAILY TOTALS	NB	SB	EB	WB	Total
	16,472	17,405	0	0	33,877

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	65		53						118		12:00	213		266						479	
0:15	44		28						72		12:15	223		278						501	
0:30	41		41						82		12:30	281		300						581	
0:45	31	181	19	141					50	322	12:45	319	1036	244	1088					563	2124
1:00	34		30						64		13:00	275		290						565	
1:15	28		22						50		13:15	265		246						511	
1:30	29		31						60		13:30	297		281						578	
1:45	32	123	25	108					57	231	13:45	233	1070	282	1099					515	2169
2:00	32		36						68		14:00	269		303						572	
2:15	30		31						61		14:15	216		281						497	
2:30	38		40						78		14:30	271		333						604	
2:45	34	134	38	145					72	279	14:45	302	1058	292	1209					594	2267
3:00	24		43						67		15:00	283		297						580	
3:15	26		39						65		15:15	314		264						578	
3:30	33		35						68		15:30	328		316						644	
3:45	50	133	58	175					108	308	15:45	262	1187	291	1168					553	2355
4:00	46		72						118		16:00	272		291						563	
4:15	50		100						150		16:15	340		287						627	
4:30	98		133						231		16:30	311		345						656	
4:45	132	326	144	449					276	775	16:45	304	1227	265	1188					569	2415
5:00	101		165						266		17:00	276		386						662	
5:15	94		187						281		17:15	266		281						547	
5:30	134		217						351		17:30	322		271						593	
5:45	155	484	190	759					345	1243	17:45	285	1149	250	1188					535	2337
6:00	118		210						328		18:00	307		216						523	
6:15	117		187						304		18:15	263		275						538	
6:30	144		241						385		18:30	253		212						465	
6:45	234	613	223	861					457	1474	18:45	244	1067	189	892					433	1959
7:00	171		250						421		19:00	239		157						396	
7:15	220		292						512		19:15	201		175						376	
7:30	269		284						553		19:30	184		155						339	
7:45	271	931	233	1059					504	1990	19:45	171	795	157	644					328	1439
8:00	242		230						472		20:00	150		142						292	
8:15	237		226						463		20:15	107		131						238	
8:30	252		185						437		20:30	132		148						280	
8:45	256	987	214	855					470	1842	20:45	120	509	129	550					249	1059
9:00	198		196						394		21:00	129		137						266	
9:15	193		220						413		21:15	123		113						236	
9:30	174		215						389		21:30	110		99						209	
9:45	205	770	214	845					419	1615	21:45	121	483	95	444					216	927
10:00	230		220						450		22:00	118		111						229	
10:15	193		293						486		22:15	95		87						182	
10:30	186		253						439		22:30	111		107						218	
10:45	202	811	221	987					423	1798	22:45	72	396	72	377					144	773
11:00	194		214						408		23:00	64		79						143	
11:15	217		232						449		23:15	43		47						90	
11:30	188		234						422		23:30	46		58						104	
11:45	206	805	272	952					478	1757	23:45	44	197	38	222					82	419
TOTALS		6298		7336						13634	TOTALS		10174		10069						20243
SPLIT %		46.2%		53.8%						40.2%	SPLIT %		50.3%		49.7%						59.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	16,472	17,405	0	0	33,877

AM Peak Hour	7:30	11:45			7:15	PM Peak Hour	16:15	16:15			16:15
AM Pk Volume	1019	1116			2041	PM Pk Volume	1231	1283			2514
Pk Hr Factor	0.940	0.930			0.923	Pk Hr Factor	0.905	0.831			0.949
7 - 9 Volume	1918	1914	0	0	3832	4 - 6 Volume	2376	2376	0	0	4752
7 - 9 Peak Hour	7:30	7:00			7:15	4 - 6 Peak Hour	16:15	16:15			16:15
7 - 9 Pk Volume	1019	1059	0	0	2041	4 - 6 Pk Volume	1231	1283	0	0	2514
Pk Hr Factor	0.940	0.907	0.000	0.000	0.923	Pk Hr Factor	0.905	0.831	0.000	0.000	0.949

Prepared by NDS/ATD

VOLUME

Proctor Ave Bet. 6th Ave & 7th Ave

Day: Wednesday
Date: 1/27/2016

City: Industry
Project #: CA15_5829_055

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,907	2,938	4,845

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			4		5		9		12:00			28		38		66	
0:15			4		2		6		12:15			27		45		72	
0:30			3		4		7		12:30			25		37		62	
0:45			0	11	4	15	4	26	12:45			22	102	32	152	54	254
1:00			1		2		3		13:00			24		46		70	
1:15			1		0		1		13:15			31		38		69	
1:30			0		2		2		13:30			42		58		100	
1:45			1	3	4	8	5	11	13:45			36	133	53	195	89	328
2:00			0		6		6		14:00			34		39		73	
2:15			3		1		4		14:15			45		34		79	
2:30			2		2		4		14:30			26		54		80	
2:45			1	6	1	10	2	16	14:45			44	149	49	176	93	325
3:00			2		1		3		15:00			30		48		78	
3:15			4		3		7		15:15			29		52		81	
3:30			1		4		5		15:30			41		43		84	
3:45			2	9	3	11	5	20	15:45			36	136	58	201	94	337
4:00			3		3		6		16:00			37		43		80	
4:15			2		2		4		16:15			43		44		87	
4:30			3		7		10		16:30			76		54		130	
4:45			9	17	11	23	20	40	16:45			50	206	41	182	91	388
5:00			5		18		23		17:00			77		54		131	
5:15			8		12		20		17:15			64		45		109	
5:30			10		19		29		17:30			57		66		123	
5:45			9	32	23	72	32	104	17:45			42	240	43	208	85	448
6:00			7		13		20		18:00			39		37		76	
6:15			9		22		31		18:15			39		45		84	
6:30			13		34		47		18:30			26		33		59	
6:45			22	51	75	144	97	195	18:45			22	126	33	148	55	274
7:00			17		77		94		19:00			22		28		50	
7:15			40		80		120		19:15			9		23		32	
7:30			32		123		155		19:30			22		29		51	
7:45			22	111	127	407	149	518	19:45			13	66	20	100	33	166
8:00			29		121		150		20:00			10		15		25	
8:15			35		88		123		20:15			6		13		19	
8:30			15		71		86		20:30			4		19		23	
8:45			30	109	57	337	87	446	20:45			12	32	12	59	24	91
9:00			27		51		78		21:00			17		17		34	
9:15			21		40		61		21:15			7		13		20	
9:30			17		21		38		21:30			12		15		27	
9:45			25	90	40	152	65	242	21:45			6	42	7	52	13	94
10:00			15		27		42		22:00			4		9		13	
10:15			23		29		52		22:15			4		9		13	
10:30			26		23		49		22:30			4		10		14	
10:45			33	97	34	113	67	210	22:45			1	13	6	34	7	47
11:00			18		33		51		23:00			3		6		9	
11:15			31		15		46		23:15			2		2		4	
11:30			30		42		72		23:30			5		2		7	
11:45			34	113	35	125	69	238	23:45			3	13	4	14	7	27
TOTALS				649		1417		2066	TOTALS				1258		1521		2779
SPLIT %				31.4%		68.6%		42.6%	SPLIT %				45.3%		54.7%		57.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,907	2,938	4,845

AM Peak Hour			7:15	7:30	7:30	PM Peak Hour		16:30	17:00	16:30
AM Pk Volume			123	459	577	PM Pk Volume		267	208	461
Pk Hr Factor			0.769	0.904	0.931	Pk Hr Factor		0.867	0.788	0.880
7 - 9 Volume	0	0	220	744	964	4 - 6 Volume	0	446	390	836
7 - 9 Peak Hour			7:15	7:30	7:30	4 - 6 Peak Hour		16:30	17:00	16:30
7 - 9 Pk Volume	0	0	123	459	577	4 - 6 Pk Volume	0	267	208	461
Pk Hr Factor	0.000	0.000	0.769	0.904	0.931	Pk Hr Factor	0.000	0.867	0.788	0.880

Prepared by NDS/ATD

VOLUME

Proctor Ave Bet. 7th Ave & 9th Ave

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_056

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,802	2,638	5,440

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			0		9		9		12:00			48		41		89	
0:15			0		2		2		12:15			40		48		88	
0:30			4		3		7		12:30			57		36		93	
0:45			1	5	2	16	3	21	12:45			51	196	54	179	105	375
1:00			3		6		9		13:00			32		57		89	
1:15			0		3		3		13:15			39		45		84	
1:30			6		1		7		13:30			62		60		122	
1:45			6	15	11	21	17	36	13:45			46	179	39	201	85	380
2:00			1		3		4		14:00			55		43		98	
2:15			3		2		5		14:15			35		68		103	
2:30			4		3		7		14:30			66		62		128	
2:45			5	13	1	9	6	22	14:45			56	212	60	233	116	445
3:00			2		9		11		15:00			60		46		106	
3:15			4		3		7		15:15			43		62		105	
3:30			5		4		9		15:30			66		60		126	
3:45			9	20	1	17	10	37	15:45			57	226	57	225	114	451
4:00			8		6		14		16:00			59		57		116	
4:15			11		15		26		16:15			69		51		120	
4:30			12		24		36		16:30			65		70		135	
4:45			23	54	28	73	51	127	16:45			56	249	33	211	89	460
5:00			12		11		23		17:00			92		45		137	
5:15			18		6		24		17:15			51		30		81	
5:30			33		17		50		17:30			75		34		109	
5:45			35	98	11	45	46	143	17:45			48	266	23	132	71	398
6:00			17		14		31		18:00			66		35		101	
6:15			22		20		42		18:15			49		23		72	
6:30			21		24		45		18:30			28		30		58	
6:45			43	103	47	105	90	208	18:45			21	164	15	103	36	267
7:00			36		40		76		19:00			29		16		45	
7:15			44		48		92		19:15			9		11		20	
7:30			64		47		111		19:30			20		18		38	
7:45			53	197	57	192	110	389	19:45			14	72	9	54	23	126
8:00			47		58		105		20:00			7		22		29	
8:15			35		61		96		20:15			5		18		23	
8:30			45		36		81		20:30			9		15		24	
8:45			35	162	46	201	81	363	20:45			14	35	5	60	19	95
9:00			24		41		65		21:00			7		3		10	
9:15			41		37		78		21:15			14		10		24	
9:30			32		43		75		21:30			9		20		29	
9:45			56	153	25	146	81	299	21:45			9	39	8	41	17	80
10:00			50		58		108		22:00			2		8		10	
10:15			41		37		78		22:15			7		7		14	
10:30			35		36		71		22:30			4		5		9	
10:45			39	165	29	160	68	325	22:45			1	14	5	25	6	39
11:00			30		43		73		23:00			9		8		17	
11:15			31		43		74		23:15			2		5		7	
11:30			36		38		74		23:30			6		4		10	
11:45			49	146	45	169	94	315	23:45			2	19	3	20	5	39
TOTALS				1131		1154		2285	TOTALS				1671		1484		3155
SPLIT %				49.5%		50.5%		42.0%	SPLIT %				53.0%		47.0%		58.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,802	2,638	5,440

AM Peak Hour			7:15	7:30	7:30	PM Peak Hour		16:15	14:15	15:45
AM Pk Volume			208	223	422	PM Pk Volume		282	236	485
Pk Hr Factor			0.813	0.914	0.950	Pk Hr Factor		0.766	0.868	0.898
7 - 9 Volume	0	0	359	393	752	4 - 6 Volume	0	515	343	858
7 - 9 Peak Hour			7:15	7:30	7:30	4 - 6 Peak Hour		16:15	16:00	16:15
7 - 9 Pk Volume	0	0	208	223	422	4 - 6 Pk Volume	0	282	211	481
Pk Hr Factor	0.000	0.000	0.813	0.914	0.950	Pk Hr Factor	0.000	0.766	0.754	0.878

Prepared by NDS/ATD

VOLUME

Don Julian Rd Bet. 6th Ave & 7th Ave

Day: Thursday
Date: 1/14/2016

City: Industry
Project #: CA15_5829_072

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,978	6,531	13,509

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			10		20		30		12:00			106		78		184	
0:15			11		20		31		12:15			109		69		178	
0:30			7		5		12		12:30			95		97		192	
0:45			6	34	7	52	13	86	12:45			122	432	107	351	229	783
1:00			9		10		19		13:00			107		105		212	
1:15			6		7		13		13:15			113		108		221	
1:30			5		8		13		13:30			124		110		234	
1:45			11	31	8	33	19	64	13:45			110	454	106	429	216	883
2:00			9		9		18		14:00			107		115		222	
2:15			8		9		17		14:15			116		94		210	
2:30			22		10		32		14:30			148		97		245	
2:45			13	52	12	40	25	92	14:45			136	507	103	409	239	916
3:00			14		7		21		15:00			148		96		244	
3:15			9		5		14		15:15			140		139		279	
3:30			12		7		19		15:30			141		115		256	
3:45			10	45	13	32	23	77	15:45			163	592	105	455	268	1047
4:00			4		21		25		16:00			119		92		211	
4:15			7		19		26		16:15			150		95		245	
4:30			22		28		50		16:30			206		110		316	
4:45			28	61	45	113	73	174	16:45			173	648	101	398	274	1046
5:00			24		42		66		17:00			224		92		316	
5:15			28		61		89		17:15			131		121		252	
5:30			40		55		95		17:30			190		93		283	
5:45			49	141	70	228	119	369	17:45			186	731	101	407	287	1138
6:00			48		70		118		18:00			130		94		224	
6:15			36		76		112		18:15			132		65		197	
6:30			68		96		164		18:30			115		76		191	
6:45			71	223	118	360	189	583	18:45			83	460	83	318	166	778
7:00			85		140		225		19:00			81		91		172	
7:15			107		147		254		19:15			72		55		127	
7:30			110		184		294		19:30			58		42		100	
7:45			131	433	162	633	293	1066	19:45			54	265	40	228	94	493
8:00			93		151		244		20:00			50		38		88	
8:15			107		148		255		20:15			34		46		80	
8:30			102		132		234		20:30			29		40		69	
8:45			104	406	115	546	219	952	20:45			40	153	41	165	81	318
9:00			76		119		195		21:00			42		41		83	
9:15			65		95		160		21:15			30		45		75	
9:30			94		64		158		21:30			35		38		73	
9:45			72	307	76	354	148	661	21:45			31	138	47	171	78	309
10:00			90		94		184		22:00			22		36		58	
10:15			71		82		153		22:15			23		29		52	
10:30			76		82		158		22:30			38		26		64	
10:45			78	315	49	307	127	622	22:45			25	108	22	113	47	221
11:00			82		72		154		23:00			22		27		49	
11:15			80		79		159		23:15			23		32		55	
11:30			110		70		180		23:30			17		23		40	
11:45			96	368	82	303	178	671	23:45			12	74	4	86	16	160
TOTALS				2416		3001		5417	TOTALS				4562		3530		8092
SPLIT %				44.6%		55.4%		40.1%	SPLIT %				56.4%		43.6%		59.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	6,978	6,531	13,509

AM Peak Hour			7:15	7:30	7:30	PM Peak Hour			16:15	15:00	16:30
AM Pk Volume			441	645	1086	PM Pk Volume			753	455	1158
Pk Hr Factor			0.842	0.876	0.923	Pk Hr Factor			0.840	0.818	0.916
7 - 9 Volume	0	0	839	1179	2018	4 - 6 Volume	0	0	1379	805	2184
7 - 9 Peak Hour			7:15	7:30	7:30	4 - 6 Peak Hour			16:15	16:30	16:30
7 - 9 Pk Volume	0	0	441	645	1086	4 - 6 Pk Volume	0	0	753	424	1158
Pk Hr Factor	0.000	0.000	0.842	0.876	0.923	Pk Hr Factor	0.000	0.000	0.840	0.876	0.916

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:	LOCATION:	EL MONTE	PROJECT #:	CA11-0527-02
5/24/11	NORTH & SOUTH:	WORKMAN MILL RD / PUENTE AVE	LOCATION #:	11
TUESDAY	EAST & WEST:	VALLEY	CONTROL:	SIGNAL

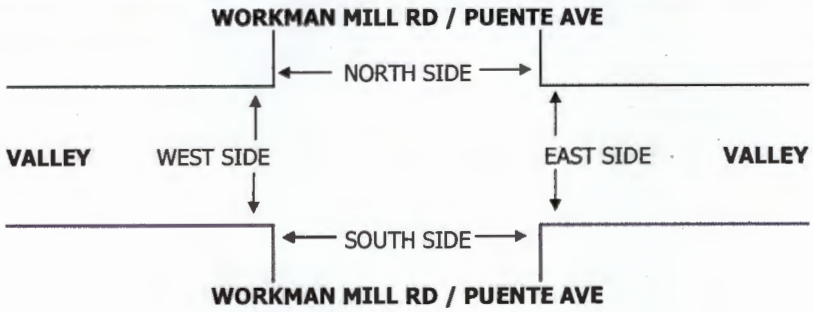
ALL CLASSES

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND WORKMAN MILL RD / PUENTE AVE			SOUTHBOUND WORKMAN MILL RD / PUENTE AVE			EASTBOUND VALLEY			WESTBOUND VALLEY			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
AM	6:00 AM	21	25	4	45	108	35	17	94	8	23	197	22	599
	6:15 AM	10	36	5	42	142	45	25	115	14	32	198	15	679
	6:30 AM	19	40	2	46	206	49	28	146	13	39	292	31	911
	6:45 AM	25	63	9	34	180	31	29	155	10	48	264	28	876
	7:00 AM	21	69	5	24	186	49	30	145	20	70	383	28	1,030
	7:15 AM	20	143	12	52	261	45	60	175	17	68	254	31	1,138
	7:30 AM	32	197	9	41	207	41	63	232	30	58	281	55	1,246
	7:45 AM	35	140	13	35	255	44	45	274	27	62	246	45	1,221
	8:00 AM	36	122	9	71	205	39	53	207	19	56	241	30	1,088
	8:15 AM	33	102	18	35	150	39	50	257	13	39	286	41	1,063
	8:30 AM	34	75	15	47	118	48	36	271	14	29	339	28	1,054
	8:45 AM	30	78	23	33	97	45	57	294	18	39	285	36	1,035
	VOLUMES	316	1,090	124	505	2,115	510	493	2,365	203	563	3,266	390	11,940
	APPROACH %	21%	71%	8%	16%	68%	16%	16%	77%	7%	13%	77%	9%	
	APP/DEPART	1,530	/	1,973	3,130	/	2,881	3,061	/	2,994	4,219	/	4,092	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	123	602	43	199	928	169	221	888	93	244	1,022	161	4,693
	APPROACH %	16%	78%	6%	15%	72%	13%	18%	74%	8%	17%	72%	11%	
	PEAK HR FACTOR		0.807			0.905			0.868			0.905		0.942
	APP/DEPART	768	/	984	1,296	/	1,265	1,202	/	1,130	1,427	/	1,314	0
PM	3:30 PM	26	201	28	30	86	34	68	230	13	21	207	53	997
	3:45 PM	22	177	27	20	72	20	51	246	19	17	165	31	867
	4:00 PM	30	239	28	36	112	43	52	262	18	21	184	44	1,069
	4:15 PM	20	186	35	31	84	35	51	277	23	16	164	46	968
	4:30 PM	18	216	20	38	92	58	59	274	16	13	210	33	1,047
	4:45 PM	22	214	32	24	85	28	51	261	13	22	206	43	1,001
	5:00 PM	19	238	26	37	77	23	51	285	11	17	235	54	1,073
	5:15 PM	22	266	23	37	107	33	66	332	12	19	211	50	1,178
	5:30 PM	22	231	22	41	102	44	57	291	28	21	185	43	1,087
	5:45 PM	24	197	22	25	72	22	70	294	19	21	190	39	995
	6:00 PM	25	195	25	35	94	32	43	259	24	17	177	30	956
	6:15 PM	21	154	23	28	77	36	63	309	25	11	172	43	962
	VOLUMES	271	2,514	311	382	1,060	408	682	3,320	221	216	2,306	509	12,200
	APPROACH %	9%	81%	10%	21%	57%	22%	16%	79%	5%	7%	76%	17%	
	APP/DEPART	3,096	/	3,705	1,850	/	1,497	4,223	/	4,013	3,031	/	2,985	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	85	949	103	139	371	128	225	1,169	64	79	837	190	4,339
	APPROACH %	7%	83%	9%	22%	58%	20%	15%	80%	4%	7%	76%	17%	
	PEAK HR FACTOR		0.914			0.853			0.889			0.904		0.921
	APP/DEPART	1,137	/	1,364	638	/	514	1,458	/	1,411	1,106	/	1,050	0



Appendix D – Existing 2016 Conditions Intersection Analysis Worksheets

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	117	443	40	54	1162	116	93	384	188	206	748	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	443	40	54	1162	116	93	384	188	206	748	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	126	477	43	58	1251	125	100	413	202	222	805	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	477	43	58	1251	125	100	413	202	222	805	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	477	43	58	1251	125	100	413	202	222	805	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.82	0.18	1.00	1.34	0.66	1.00	1.84	0.16
Final Sat.:	1600	2935	265	1600	2910	290	1600	2148	1052	1600	2941	259
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.04	0.43	0.43	0.06	0.19	0.19	0.14	0.27	0.27
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	568	66	29	1409	92	24	130	188	104	189	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	94	597	69	30	1482	97	25	137	198	109	199	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	597	69	30	1482	97	25	137	198	109	199	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	597	69	30	1482	97	25	137	198	109	199	56
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.88	0.12	0.07	0.38	0.55	0.30	0.55	0.15
Final Sat.:	1600	2867	333	1600	3004	196	112	608	880	481	874	245
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.21	0.02	0.49	0.49	0.02	0.22	0.22	0.07	0.23	0.23
Crit Moves:	****				****			****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	172	379	51	325	924	340	134	702	147	124	1204	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	379	51	325	924	340	134	702	147	124	1204	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	181	400	54	343	975	359	141	741	155	131	1270	247
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	400	54	343	975	359	141	741	155	131	1270	247
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	400	54	343	975	359	141	741	155	131	1270	247
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.76	0.24	2.00	2.19	0.81	1.00	2.48	0.52	1.00	2.51	0.49
Final Sat.:	2880	2820	380	2880	3509	1291	1600	3969	831	1600	4019	781
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.12	0.28	0.28	0.09	0.19	0.19	0.08	0.32	0.32
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	85	548	82	96	922	218	30	72	56	59	113	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	548	82	96	922	218	30	72	56	59	113	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	91	589	88	103	991	234	32	77	60	63	122	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	589	88	103	991	234	32	77	60	63	122	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	589	88	103	991	234	32	77	60	63	122	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.62	0.38	1.00	1.12	0.88	1.00	1.31	0.69
Final Sat.:	1600	2783	417	1600	2588	612	1600	1800	1400	1600	2102	1098
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.21	0.06	0.38	0.38	0.02	0.04	0.04	0.04	0.06	0.06
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.697
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	171	564	110	58	899	108	60	176	203	65	327	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	564	110	58	899	108	60	176	203	65	327	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	173	571	111	59	911	109	61	178	206	66	331	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	571	111	59	911	109	61	178	206	66	331	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	173	571	111	59	911	109	61	178	206	66	331	64
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.68	0.32
Final Sat.:	1600	2678	522	1600	2857	343	1600	1600	1600	1600	2683	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.21	0.04	0.32	0.32	0.04	0.11	0.13	0.04	0.12	0.12
Crit Moves:	****				****				****	****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.666
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	33	721	45	92	1036	26	52	51	117	47	39	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	721	45	92	1036	26	52	51	117	47	39	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	778	49	99	1118	28	56	55	126	51	42	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	778	49	99	1118	28	56	55	126	51	42	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	778	49	99	1118	28	56	55	126	51	42	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.95	0.05	1.00	0.30	0.70	1.00	0.17	0.83
Final Sat.:	1600	3012	188	1600	3122	78	1600	486	1114	1600	279	1321
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.06	0.36	0.36	0.04	0.11	0.11	0.03	0.15	0.15
Crit Moves:	****				****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	61	860	192	387	625	300	79	585	495
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				64	905	202	407	658	316	83	616	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				73	1076	622	446	1624	1229	107	949	424
Arrive On Green				0.32	0.32	0.32	0.25	0.46	0.46	0.06	0.27	0.00
Sat Flow, veh/h				229	3392	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				518	451	202	407	658	316	83	616	0
Grp Sat Flow(s),veh/h/ln				1851	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				23.5	20.7	7.7	19.8	11.0	4.9	4.1	13.7	0.0
Cycle Q Clear(g_c), s				23.5	20.7	7.7	19.8	11.0	4.9	4.1	13.7	0.0
Prop In Lane				0.12		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				587	561	622	446	1624	1229	107	949	424
V/C Ratio(X)				0.88	0.80	0.32	0.91	0.41	0.26	0.78	0.65	0.00
Avail Cap(c_a), veh/h				627	599	657	510	1801	1308	208	1198	536
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				28.7	27.7	19.6	32.3	15.9	2.8	41.1	28.7	0.0
Incr Delay (d2), s/veh				13.4	7.4	0.3	19.4	0.2	0.1	11.3	0.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.1	11.2	3.5	12.0	5.3	5.2	2.3	6.8	0.0
LnGrp Delay(d),s/veh				42.1	35.1	19.9	51.7	16.1	2.9	52.4	29.6	0.0
LnGrp LOS				D	D	B	D	B	A	D	C	
Approach Vol, veh/h					1171			1381			699	
Approach Delay, s/veh					35.6			23.6			32.3	
Approach LOS					D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.8	45.7			26.8	28.8		33.1
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	10.4	45.1			25.5	30.0		30.0
Max Q Clear Time (g_c+I1), s	6.1	13.0			21.8	15.7		25.5
Green Ext Time (p_c), s	0.1	12.2			0.5	8.1		2.6

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	156	0	1305	630	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	1374	663	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1350	332	663	0	-	0
Stage 1	663	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	142	664	922	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	142	664	922	-	-	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	922	-	664	-	-
HCM Lane V/C Ratio	-	-	0.247	-	-
HCM Control Delay (s)	0	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 7th Ave/SR60 EB Ramps

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[11.5]

Street Name:	7th Ave								SR60 EB Ramps											
Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	446		83		439	268		0		0		0		0	0		0		836
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	446		83		439	268		0		0		0		0	0		0		836
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		0.00
PHF Adj:	0.94	0.94		0.94		0.94	0.94		0.94		0.94		0.94		0.94	0.94		0.94		0.00
PHF Volume:	0	474		88		467	285		0		0		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	474		88		467	285		0		0		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		562	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		474
Potent Cap.:	xxxx	xxxx		xxxxx		1019	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		595
Move Cap.:	xxxx	xxxx		xxxxx		1019	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		595
Volume/Cap:	xxxx	xxxx		xxxx		0.46	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.00
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		2.4	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx		11.5	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	*	*		*		B	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

Note: Queue reported is the number of cars per lane.

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	457	0	0	960	174	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.99	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3408	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3408	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	0	0	1043	189	20
RTOR Reduction (vph)	0	0	0	0	17	0
Lane Group Flow (vph)	497	0	0	1043	192	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	19.1			19.1	5.8	
Effective Green, g (s)	19.1			19.1	5.8	
Actuated g/C Ratio	0.56			0.56	0.17	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1964			1964	574	
v/s Ratio Prot	0.14			c0.29	c0.06	
v/s Ratio Perm						
v/c Ratio	0.25			0.53	0.34	
Uniform Delay, d1	4.0			4.8	12.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.1			0.3	0.3	
Delay (s)	4.0			5.1	12.9	
Level of Service	A			A	B	
Approach Delay (s)	4.0			5.1	12.9	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	34.4	Sum of lost time (s)	9.5
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.664
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	44	85	56	40	180	16	8	203	55	104	291	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	85	56	40	180	16	8	203	55	104	291	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	53	103	68	49	219	19	10	247	67	126	354	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	103	68	49	219	19	10	247	67	126	354	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	103	68	49	219	19	10	247	67	126	354	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.46	0.30	1.00	0.92	0.08	1.00	0.79	0.21	1.00	0.92	0.08
Final Sat.:	381	735	484	1600	1469	131	1600	1259	341	1600	1473	127
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.03	0.15	0.15	0.01	0.20	0.20	0.08	0.24	0.24
Crit Moves:			****		****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	2	2	1	208	4	112	55	1045	6	4	1514	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	1	208	4	112	55	1045	6	4	1514	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	2	2	1	226	4	122	60	1136	7	4	1646	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	1	226	4	122	60	1136	7	4	1646	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	1	226	4	122	60	1136	7	4	1646	135
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.40	0.20	1.29	0.02	0.69	1.00	2.98	0.02	1.00	2.77	0.23
Final Sat.:	640	640	320	2054	40	1106	1600	4773	27	1600	4437	363
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.11	0.11	0.04	0.24	0.24	0.00	0.37	0.37
Crit Moves:		****				****	****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	7	21	3	143	1	265	258	856	14	2	1436	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	21	3	143	1	265	258	856	14	2	1436	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	7	22	3	150	1	279	271	900	15	2	1510	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	22	3	150	1	279	271	900	15	2	1510	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	22	3	150	1	279	271	900	15	2	1510	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.68	0.10	0.35	0.01	0.64	1.00	2.95	0.05	1.00	2.66	0.34
Final Sat.:	361	1084	155	559	4	1037	1600	4723	77	1600	4257	543
Capacity Analysis Module:												
Vol/Sat:	0.00	0.02	0.02	0.09	0.27	0.27	0.17	0.19	0.19	0.00	0.35	0.35
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.738
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	192	0	105	0	0	0	0	1149	260	15	1417	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	0	105	0	0	0	0	1149	260	15	1417	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	216	0	118	0	0	0	0	1291	292	17	1592	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	216	0	118	0	0	0	0	1291	292	17	1592	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	216	0	118	0	0	0	0	1291	292	17	1592	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.02	1.98	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	34	3166	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.07	0.00	0.00	0.00	0.00	0.40	0.18	0.01	0.50	0.00
Crit Moves:	****						****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.070
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	12	2	54	184	8	443	330	1225	47	8	1303	256
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	2	54	184	8	443	330	1225	47	8	1303	256
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	2	54	184	8	443	330	1225	47	8	1303	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	2	54	184	8	443	330	1225	47	8	1303	256
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	2	54	184	8	443	330	1225	47	8	1303	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.03	0.79	0.29	0.01	0.70	1.00	2.89	0.11	1.00	2.51	0.49
Final Sat.:	282	47	1271	464	20	1116	1600	4623	177	1600	4012	788
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.40	0.40	0.40	0.21	0.26	0.27	0.01	0.32	0.32
Crit Moves:		****			****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	437	1323	0	0	1990	90	75	438	306	55	0	1190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	465	1407	0	0	2117	96	80	466	326	59	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	738	3110	0	0	2276	103	85	494	496	0	0	0
Arrive On Green	0.21	0.61	0.00	0.00	0.36	0.36	0.31	0.31	0.31	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6592	287	271	1578	1583		0	
Grp Volume(v), veh/h	465	1407	0	0	1607	606	546	0	326		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1812	1849	0	1583			
Q Serve(g_s), s	16.3	19.7	0.0	0.0	42.7	42.7	38.2	0.0	23.6			
Cycle Q Clear(g_c), s	16.3	19.7	0.0	0.0	42.7	42.7	38.2	0.0	23.6			
Prop In Lane	1.00		0.00	0.00		0.16	0.15		1.00			
Lane Grp Cap(c), veh/h	738	3110	0	0	1728	651	579	0	496			
V/C Ratio(X)	0.63	0.45	0.00	0.00	0.93	0.93	0.94	0.00	0.66			
Avail Cap(c_a), veh/h	885	3319	0	0	1739	656	599	0	513			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.3	13.8	0.0	0.0	40.9	40.9	44.4	0.0	39.4			
Incr Delay (d2), s/veh	1.1	0.1	0.0	0.0	9.4	19.9	23.3	0.0	2.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.9	9.1	0.0	0.0	20.4	25.0	23.2	0.0	10.7			
LnGrp Delay(d),s/veh	48.4	13.9	0.0	0.0	50.3	60.8	67.7	0.0	42.4			
LnGrp LOS	D	B			D	E	E		D			
Approach Vol, veh/h		1872			2213			872				
Approach Delay, s/veh		22.5			53.2			58.2				
Approach LOS		C			D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		46.5		86.2			33.5	52.7
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		43.0		86.6			34.1	* 48
Max Q Clear Time (g_c+I1), s		40.2		21.7			18.3	44.7
Green Ext Time (p_c), s		1.3		19.5			10.2	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1056	126	0	1349	22	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	138	0	1482	24	866

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1160	0	1901	-
Stage 1	-	-	-	-	1160	-
Stage 2	-	-	-	-	741	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.6	-
Pot Cap-1 Maneuver	-	0	598	-	60	0
Stage 1	-	0	-	-	257	0
Stage 2	-	0	-	-	426	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	598	-	60	-
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	100.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	60	-	-	598	-
HCM Lane V/C Ratio	0.403	-	-	-	-
HCM Control Delay (s)	100.7	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	239	0	0	347	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	0	0	377	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	637	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1304	-	441	779
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	441	779
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1304	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	239	0	0	347	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	0	0	377	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	637	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1304	-	441	779
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	441	779
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1304	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	239	0	0	347	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	0	0	377	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	637	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1304	-	441	779
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	441	779
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1304	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	239	0	0	347	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	0	0	377	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	637	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	377	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1304	-	441	779
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	441	779
Mov Cap-2 Maneuver	-	-	-	-	441	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1304	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.007
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	169	1325	161	96	718	115	244	837	119	101	418	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1325	161	96	718	115	244	837	119	101	418	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	173	1356	165	98	735	118	250	857	122	103	428	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	1356	165	98	735	118	250	857	122	103	428	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	173	1356	165	98	735	118	250	857	122	103	428	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.72	0.28	1.00	1.75	0.25	1.00	1.61	0.39
Final Sat.:	1600	2853	347	1600	2758	442	1600	2802	398	1600	2582	618
Capacity Analysis Module:												
Vol/Sat:	0.11	0.48	0.48	0.06	0.27	0.27	0.16	0.31	0.31	0.06	0.17	0.17
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.909
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	1565	82	35	808	30	61	129	152	39	121	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	64	1634	86	37	843	31	64	135	159	41	126	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1634	86	37	843	31	64	135	159	41	126	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1634	86	37	843	31	64	135	159	41	126	88
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.93	0.07	0.18	0.38	0.44	0.16	0.50	0.34
Final Sat.:	1600	3041	159	1600	3085	115	285	604	711	256	793	551
Capacity Analysis Module:												
Vol/Sat:	0.04	0.54	0.54	0.02	0.27	0.27	0.04	0.22	0.22	0.03	0.16	0.16
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.030
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	148	815	50	279	619	120	471	1238	134	109	752	392
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	148	815	50	279	619	120	471	1238	134	109	752	392
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	152	836	51	286	635	123	483	1270	137	112	771	402
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	836	51	286	635	123	483	1270	137	112	771	402
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	836	51	286	635	123	483	1270	137	112	771	402
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.88	0.12	2.00	2.51	0.49	1.00	2.71	0.29	1.00	2.00	1.00
Final Sat.:	2880	3015	185	2880	4021	779	1600	4331	469	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.28	0.10	0.16	0.16	0.30	0.29	0.29	0.07	0.24	0.25
Crit Moves:		****		****			****					****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	70	976	146	53	717	118	64	152	97	104	80	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	976	146	53	717	118	64	152	97	104	80	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	74	1030	154	56	756	124	68	160	102	110	84	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1030	154	56	756	124	68	160	102	110	84	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1030	154	56	756	124	68	160	102	110	84	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.72	0.28	1.00	1.22	0.78	1.00	1.00	1.00
Final Sat.:	1600	2784	416	1600	2748	452	1600	1953	1247	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.37	0.03	0.28	0.28	0.04	0.08	0.08	0.07	0.05	0.05
Crit Moves:		****		****				****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	152	945	90	45	807	76	157	346	284	109	211	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	945	90	45	807	76	157	346	284	109	211	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	166	1032	98	49	881	83	171	378	310	119	230	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	1032	98	49	881	83	171	378	310	119	230	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	1032	98	49	881	83	171	378	310	119	230	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.83	0.17	1.00	1.10	0.90	1.00	1.58	0.42
Final Sat.:	1600	2922	278	1600	2925	275	1600	1757	1443	1600	2529	671
Capacity Analysis Module:												
Vol/Sat:	0.10	0.35	0.35	0.03	0.30	0.30	0.11	0.21	0.21	0.07	0.09	0.09
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	104	1089	55	85	1163	57	39	54	59	52	49	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	1089	55	85	1163	57	39	54	59	52	49	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	108	1126	57	88	1203	59	40	56	61	54	51	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1126	57	88	1203	59	40	56	61	54	51	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1126	57	88	1203	59	40	56	61	54	51	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.91	0.09	1.00	0.48	0.52	1.00	0.38	0.62
Final Sat.:	1600	3046	154	1600	3050	150	1600	765	835	1600	608	992
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.37	0.05	0.39	0.39	0.03	0.07	0.07	0.03	0.08	0.08
Crit Moves:	****				****		****				****	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	119	599	457	147	746	627	172	365	704
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				125	631	481	155	785	660	181	384	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				179	954	725	191	1326	1091	224	1391	622
Arrive On Green				0.31	0.31	0.31	0.11	0.37	0.37	0.13	0.39	0.00
Sat Flow, veh/h				569	3035	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				403	353	481	155	785	660	181	384	0
Grp Sat Flow(s),veh/h/ln				1834	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				15.1	13.4	18.1	6.7	14.0	17.4	7.8	5.8	0.0
Cycle Q Clear(g_c), s				15.1	13.4	18.1	6.7	14.0	17.4	7.8	5.8	0.0
Prop In Lane				0.31		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				577	556	725	191	1326	1091	224	1391	622
V/C Ratio(X)				0.70	0.63	0.66	0.81	0.59	0.60	0.81	0.28	0.00
Avail Cap(c_a), veh/h				701	677	837	237	1660	1240	423	2030	908
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				23.6	23.0	17.4	34.2	19.7	6.5	33.4	16.2	0.0
Incr Delay (d2), s/veh				2.4	1.4	1.6	15.4	0.4	0.7	6.8	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.0	6.8	8.5	4.1	6.8	14.3	4.2	2.8	0.0
LnGrp Delay(d),s/veh				26.0	24.4	19.0	49.7	20.1	7.2	40.2	16.3	0.0
LnGrp LOS				C	C	B	D	C	A	D	B	
Approach Vol, veh/h					1237			1600			565	
Approach Delay, s/veh					22.8			17.6			24.0	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	14.4	34.4			13.0	35.8		29.7
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	18.7	36.8			10.5	45.0		30.0
Max Q Clear Time (g_c+I1), s	9.8	19.4			8.7	7.8		20.1
Green Ext Time (p_c), s	0.3	10.0			0.1	14.5		4.6

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	646	0	1529	517	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	673	0	1593	539	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1335	269	539	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Critical Hdwy	6.84	7.1	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	145	720	1025	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	145	720	1025	-	-	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	405	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1025	-	720	-	-
HCM Lane V/C Ratio	-	-	0.935	-	-
HCM Control Delay (s)	0	-	43.4	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	13.2	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[8.3]

****

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0	1250	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	0	223		31		216	851		0		0		0		0	0		0	1250	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	0.00	
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97		0.97		0.97	0.97		0.97	0.00	
PHF Volume:	0	229		32		222	875		0		0		0		0	0		0	0	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	229		32		222	875		0		0		0		0	0		0	0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		261	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	229	
Potent Cap.:	xxxx	xxxx		xxxxx		1315	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	815	
Move Cap.:	xxxx	xxxx		xxxxx		1315	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	815	
Volume/Cap:	xxxx	xxxx		xxxx		0.17	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx	0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.6	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		8.3	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*	*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

****

Note: Queue reported is the number of cars per lane.

****

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	794	0	0	733	429	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.98	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3389	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3389	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	845	0	0	780	456	79
RTOR Reduction (vph)	0	0	0	0	40	0
Lane Group Flow (vph)	845	0	0	780	495	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	13.6			13.6	10.2	
Effective Green, g (s)	13.6			13.6	10.2	
Actuated g/C Ratio	0.41			0.41	0.31	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1445			1445	1038	
v/s Ratio Prot	c0.24			0.22	c0.15	
v/s Ratio Perm						
v/c Ratio	0.58			0.54	0.48	
Uniform Delay, d1	7.7			7.5	9.4	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.6			0.4	0.3	
Delay (s)	8.3			7.9	9.7	
Level of Service	A			A	A	
Approach Delay (s)	8.3			7.9	9.7	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	33.3	Sum of lost time (s)	9.5
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.851
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	98	380	175	29	116	11	20	185	38	55	147	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	380	175	29	116	11	20	185	38	55	147	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	111	431	199	33	132	12	23	210	43	62	167	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	431	199	33	132	12	23	210	43	62	167	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	431	199	33	132	12	23	210	43	62	167	25
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.58	0.27	1.00	0.91	0.09	1.00	0.83	0.17	1.00	0.87	0.13
Final Sat.:	240	931	429	1600	1461	139	1600	1327	273	1600	1392	208
Capacity Analysis Module:												
Vol/Sat:	0.46	0.46	0.46	0.02	0.09	0.09	0.01	0.16	0.16	0.04	0.12	0.12
Crit Moves:			****		****			****			****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	9	8	5	136	2	100	284	1404	14	6	1149	359
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	8	5	136	2	100	284	1404	14	6	1149	359
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	10	9	5	146	2	107	304	1503	15	6	1230	384
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	9	5	146	2	107	304	1503	15	6	1230	384
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	9	5	146	2	107	304	1503	15	6	1230	384
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.36	0.23	1.14	0.02	0.84	1.00	2.97	0.03	1.00	2.29	0.71
Final Sat.:	655	582	364	1829	27	1345	1600	4753	47	1600	3657	1143
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.08	0.19	0.32	0.32	0.00	0.34	0.34
Crit Moves:		****		****			****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.816
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	28	17	112	4	148	432	1619	5	11	874	245
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	28	17	112	4	148	432	1619	5	11	874	245
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	14	30	18	119	4	157	457	1713	5	12	925	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	30	18	119	4	157	457	1713	5	12	925	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	30	18	119	4	157	457	1713	5	12	925	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.49	0.29	0.42	0.02	0.56	1.00	2.99	0.01	1.00	2.34	0.66
Final Sat.:	359	772	469	679	24	897	1600	4785	15	1600	3749	1051
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.07	0.17	0.17	0.29	0.36	0.36	0.01	0.25	0.25
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	319	0	365	0	0	0	0	1557	168	2	1032	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	319	0	365	0	0	0	0	1557	168	2	1032	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	326	0	373	0	0	0	0	1592	172	2	1055	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	326	0	373	0	0	0	0	1592	172	2	1055	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	326	0	373	0	0	0	0	1592	172	2	1055	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.01	1.99	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	6	3194	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.00	0.23	0.00	0.00	0.00	0.00	0.50	0.11	0.00	0.33	0.00
Crit Moves:			****					****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	5	53	163	7	312	342	1602	60	20	934	382
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	5	53	163	7	312	342	1602	60	20	934	382
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	5	53	163	7	312	342	1602	60	20	934	382
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	5	53	163	7	312	342	1602	60	20	934	382
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	5	53	163	7	312	342	1602	60	20	934	382
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.07	0.75	0.34	0.01	0.65	1.00	2.89	0.11	1.00	2.13	0.87
Final Sat.:	293	113	1194	541	23	1036	1600	4627	173	1600	3407	1393
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.30	0.30	0.30	0.21	0.35	0.35	0.01	0.27	0.27
Crit Moves:			****		****		****				****	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	490	1939	0	0	1480	92	37	570	265	96	0	927
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	521	2063	0	0	1574	98	39	606	282	102	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	600	2578	0	0	1709	106	42	659	598	0	0	0
Arrive On Green	0.17	0.51	0.00	0.00	0.28	0.28	0.38	0.38	0.38	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6475	387	112	1745	1583		0	
Grp Volume(v), veh/h	521	2063	0	0	1217	455	645	0	282		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1795	1857	0	1583			
Q Serve(g_s), s	12.8	29.2	0.0	0.0	21.4	21.4	28.8	0.0	11.7			
Cycle Q Clear(g_c), s	12.8	29.2	0.0	0.0	21.4	21.4	28.8	0.0	11.7			
Prop In Lane	1.00		0.00	0.00		0.22	0.06		1.00			
Lane Grp Cap(c), veh/h	600	2578	0	0	1322	494	702	0	598			
V/C Ratio(X)	0.87	0.80	0.00	0.00	0.92	0.92	0.92	0.00	0.47			
Avail Cap(c_a), veh/h	614	2578	0	0	1327	495	748	0	638			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.9	17.8	0.0	0.0	30.6	30.6	25.8	0.0	20.5			
Incr Delay (d2), s/veh	12.4	1.9	0.0	0.0	10.6	22.7	15.9	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.1	14.0	0.0	0.0	10.8	13.7	17.8	0.0	5.2			
LnGrp Delay(d),s/veh	47.3	19.6	0.0	0.0	41.2	53.3	41.7	0.0	21.0			
LnGrp LOS	D	B			D	D	D		C			
Approach Vol, veh/h		2584			1672			927				
Approach Delay, s/veh		25.2			44.5			35.4				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		37.8		49.1			20.2	28.9
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		35.0		44.0			15.5	* 24
Max Q Clear Time (g_c+I1), s		30.8		31.2			14.8	23.4
Green Ext Time (p_c), s		2.1		11.0			0.4	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	33.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1524	116	0	1051	15	994
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1604	122	0	1106	16	1046

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1604	0	2157	-
Stage 1	-	-	-	-	1604	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	404	-	41	0
Stage 1	-	0	-	-	150	0
Stage 2	-	0	-	-	540	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	404	-	41	-
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	139.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	41	-	-	404	-
HCM Lane V/C Ratio	0.385	-	-	-	-
HCM Control Delay (s)	139.8	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.3	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	260	0	0	244	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	0	0	265	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	283	0	548	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1279	-	497	756
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1279	-	497	756
Mov Cap-2 Maneuver	-	-	-	-	497	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1279	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	260	0	0	244	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	0	0	265	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	283	0	548	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1279	-	497	756
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1279	-	497	756
Mov Cap-2 Maneuver	-	-	-	-	497	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1279	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	260	0	0	244	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	0	0	265	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	283	0	548	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1279	-	497	756
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1279	-	497	756
Mov Cap-2 Maneuver	-	-	-	-	497	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1279	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

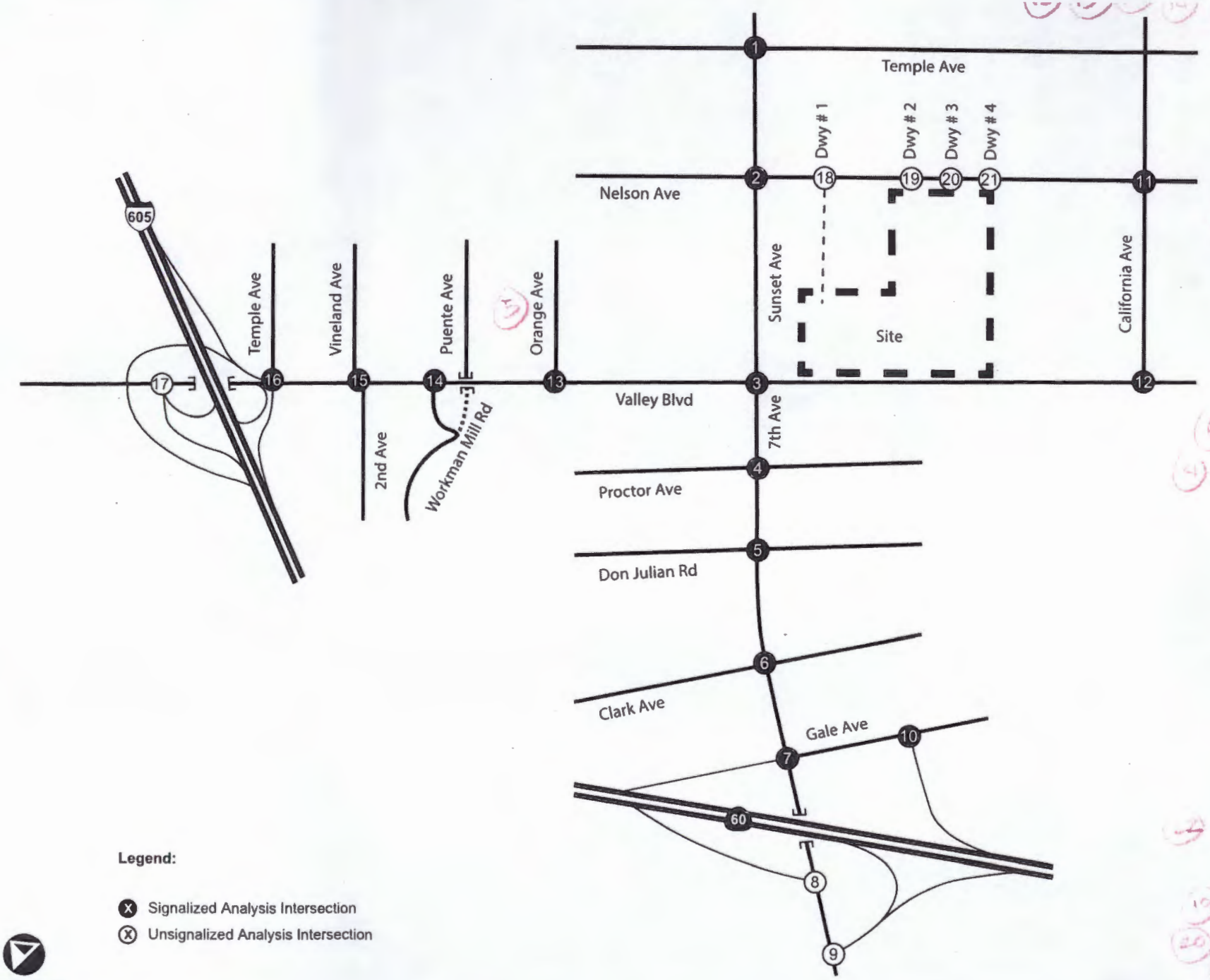
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	260	0	0	244	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	0	0	265	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	283	0	548	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	265	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1279	-	497	756
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1279	-	497	756
Mov Cap-2 Maneuver	-	-	-	-	497	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	779	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1279	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Appendix E – Cumulative Development Traffic Generation and Trip Distribution



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

CUMULATIVE PROJECT LOCATIONS
CITY OF INDUSTRY

Cumulative Project Locations (North Side)

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Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

Cumulative Project Locations (South Side)

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

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Table 1
Trip Generation Rates

Trip Rates										
Project					AM Peak			PM Peak		
No.	Land Use	Code*	Unit**	Daily	Total	In%	Out%	Total	In%	Out%
1	Mini-Warehouse	ITE 151	TSF	**2.500**	**0.14**	55%	45%	**0.26**	50%	50%
2	General Light Industrial	ITE 110	TSF	**6.970**	**0.92**	88%	12%	**0.97**	12%	88%
3	78.60% Passenger Cars (PCE[1] = 1.0)	78.60%	1.0	**5.478**	**0.72**	88%	12%	**0.76**	12%	88%
4	8.00% 2-Axle Trucks (PCE[1] = 1.5)	8.00%	1.5	**0.836**	**0.11**	88%	12%	**0.12**	12%	88%
5	3.90% 3-Axle Trucks (PCE[1] = 2.0)	3.90%	2.0	**0.544**	**0.07**	88%	12%	**0.08**	12%	88%
6	9.50% 4-Axle Trucks (PCE[1] = 3.0)	9.50%	3.0	**1.986**	**0.26**	88%	12%	**0.28**	12%	88%
7	Industrial Park	ITE 130	TSF	**6.830**	**0.82**	82%	18%	**0.85**	21%	79%
8	52.8% Passenger Cars (PCE[1] = 1.0)	52.80%	1.0	**3.606**	**0.43**	82%	18%	**0.45**	21%	79%
9	4.00% 2-Axle Trucks (PCE[1] = 1.5)	4.00%	1.5	**0.410**	**0.05**	82%	18%	**0.05**	21%	79%
10	3.30% 3-Axle Trucks (PCE[1] = 2.0)	3.30%	2.0	**0.451**	**0.05**	82%	18%	**0.06**	21%	79%
11	39.80% 4-Axle Trucks (PCE[1] = 3.0)	39.80%	3.0	**8.155**	**0.98**	82%	18%	**1.02**	21%	79%
12	Warehousing	ITE 150	TSF	**3.560**	**0.30**	79%	21%	**0.32**	25%	75%
13	79.57% Passenger Cars (PCE[1] = 1.0)	79.57%	1.0	**2.833**	**0.24**	79%	21%	**0.26**	25%	75%
14	3.46% 2-Axle Trucks (PCE[1] = 1.5)	3.46%	1.5	**0.185**	**0.02**	79%	21%	**0.02**	25%	75%
15	4.64% 3-Axle Trucks (PCE[1] = 2.0)	4.64%	2.0	**0.330**	**0.03**	79%	21%	**0.03**	25%	75%
16	12.33% 4-Axle Trucks (PCE[1] = 3.0)	12.33%	3.0	**1.317**	**0.11**	79%	21%	**0.12**	25%	75%
17	Utilities	ITE 170	TSF	**6.061**	**0.80**	90%	10%	**0.76**	45%	55%
18	Single-Family Detached Housing	ITE 210	DU	**9.52**	**0.75**	25%	75%	**1.00**	63%	37%
19	Apartments	ITE 220	DU	**6.65**	**0.51**	20%	80%	**0.62**	65%	35%
20	Condominium/Townhouse - (Attached)	ITE 230	DU	**5.81**	**0.44**	17%	83%	**0.52**	67%	33%
21	Swimming/Soccer Complex	ITE 488	FLD	**71.33**	**1.12**	57%	43%	**17.70**	67%	33%
22	Shopping Center	ITE 820	TSF	**42.70**	**0.96**	62%	38%	**3.71**	48%	52%
23	Tire Store	ITE 848	TSF	**24.87**	**2.89**	63%	37%	**4.15**	43%	57%
24	High-Turnover Restaurant	ITE 932	TSF	**127.15**	**10.81**	55%	45%	**9.85**	60%	40%
25	Fast Food Restaurant no Drive-Thru	ITE 933	TSF	**716.00**	**43.87**	60%	40%	**26.15**	51%	49%

Note

* City of Fontana, Truck Trip Generation Study, April 2003. Heavy Warehouse

Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition, 2012. Warehousing.

** TSF = Thousand Square Feet

[1] Passenger Car Equivalence (PCE) rate per SANBAG guidelines.

Table 2
Cumulative Project Traffic Generation Calculation

Traffic Generation									
Proj	Cumulative Project		Daily	AM Peak			PM Peak		
No.	Land Use	Quantity**		Total	In	Out	Total	In	Out
1	General Light Industrial	246.373 TSF							
	78.60% Passenger Cars (PCE[1] = 1.0)		**1,350**	**178**	157	21	**187**	22	165
	8.00% 2-Axle Trucks (PCE[1] = 1.5)		**206**	**27**	24	3	**28**	3	25
	3.90% 3-Axle Trucks (PCE[1] = 2.0)		**134**	**18**	16	2	**19**	2	17
	9.50% 4-Axle Trucks (PCE[1] = 3.0)		**489**	**65**	57	8	**68**	8	60
	Subtotal Trips - Project 1	*246.373 TSF*	***2,179***	***288***	*254*	*34*	***302***	*35*	*267*
2	Industrial Park	39.150 TSF							
	52.8% Passenger Cars (PCE[1] = 1.0)		**141**	**17**	14	3	**18**	4	14
	4.00% 2-Axle Trucks (PCE[1] = 1.5)		**16**	**2**	2	-	**2**	-	2
	3.30% 3-Axle Trucks (PCE[1] = 2.0)		**18**	**2**	2	-	**2**	-	2
	39.80% 4-Axle Trucks (PCE[1] = 3.0)		**319**	**38**	31	7	**39**	8	31
	Subtotal Trips - Project 2	*39.150 TSF*	***494***	***59***	*49*	*10*	***61***	*12*	*49*
3	Shopping Center	0.000 TSF	**-**	**0**	-	-	**0**	-	-
4	Warehousing	22.775 TSF							
	79.57% Passenger Cars (PCE[1] = 1.0)		**65**	**5**	4	1	**5**	1	4
	3.46% 2-Axle Trucks (PCE[1] = 1.5)		**4**	**0**	-	-	**0**	-	-
	4.64% 3-Axle Trucks (PCE[1] = 2.0)		**8**	**1**	1	-	**1**	-	1
	12.33% 4-Axle Trucks (PCE[1] = 3.0)		**30**	**3**	2	1	**3**	1	2
	Subtotal Trips - Project 4	*22.775 TSF*	***107***	***9***	*7*	*2*	***9***	*2*	*7*
5	General Light Industrial	80.000 TSF							
	78.60% Passenger Cars (PCE[1] = 1.0)		**438**	**58**	51	7	**61**	7	54
	8.00% 2-Axle Trucks (PCE[1] = 1.5)		**67**	**9**	8	1	**9**	1	8
	3.90% 3-Axle Trucks (PCE[1] = 2.0)		**44**	**6**	5	1	**6**	1	5
	9.50% 4-Axle Trucks (PCE[1] = 3.0)		**159**	**20**	18	2	**22**	3	19
	Subtotal Trips - Project 5	*80.000 TSF*	***708***	***93***	*82*	*11*	***98***	*12*	*86*
6	Shopping Center	1.573 TSF	**67**	**2**	1	1	**6**	3	3
7	Utilities	6.760 TSF	**41**	**6**	5	1	**5**	2	3
8	High-Turnover Restaurant	0.000 TSF	**-**	**0**	-	-	**0**	-	-
9	General Light Industrial	125.344 TSF							
	78.60% Passenger Cars (PCE[1] = 1.0)		**687**	**91**	80	11	**95**	11	84
	8.00% 2-Axle Trucks (PCE[1] = 1.5)		**105**	**14**	12	2	**15**	2	13
	3.90% 3-Axle Trucks (PCE[1] = 2.0)		**68**	**9**	8	1	**9**	1	8
	9.50% 4-Axle Trucks (PCE[1] = 3.0)		**249**	**33**	29	4	**34**	4	30
	Subtotal Trips - Project 9	*125.344 TSF*	***1,109***	***147***	*129*	*18*	***153***	*18*	*135*
10	General Light Industrial	-14.680 TSF							
	78.60% Passenger Cars (PCE[1] = 1.0)		**-80**	**-10**	-9	-1	**-11**	-1	-10
	8.00% 2-Axle Trucks (PCE[1] = 1.5)		**-12**	**-1**	-1	-	**-1**	-	-1
	3.90% 3-Axle Trucks (PCE[1] = 2.0)		**-8**	**-1**	-1	-	**-1**	-	-1
	9.50% 4-Axle Trucks (PCE[1] = 3.0)		**-29**	**-3**	-3	-	**-4**	-	-4
	Subtotal Trips - Project 10	*-14.680 TSF*	***-129***	***-15***	*-14*	*-1*	***-17***	*-1*	*-16*
11	General Light Industrial	130.170 TSF							
	78.60% Passenger Cars (PCE[1] = 1.0)		**713**	**94**	83	11	**99**	12	87
	8.00% 2-Axle Trucks (PCE[1] = 1.5)		**109**	**15**	13	2	**15**	2	13
	3.90% 3-Axle Trucks (PCE[1] = 2.0)		**71**	**9**	8	1	**10**	1	9
	9.50% 4-Axle Trucks (PCE[1] = 3.0)		**259**	**34**	30	4	**36**	4	32
	Subtotal Trips - Project 11	*130.170 TSF*	***1,152***	***152***	*134*	*18*	***160***	*19*	*141*

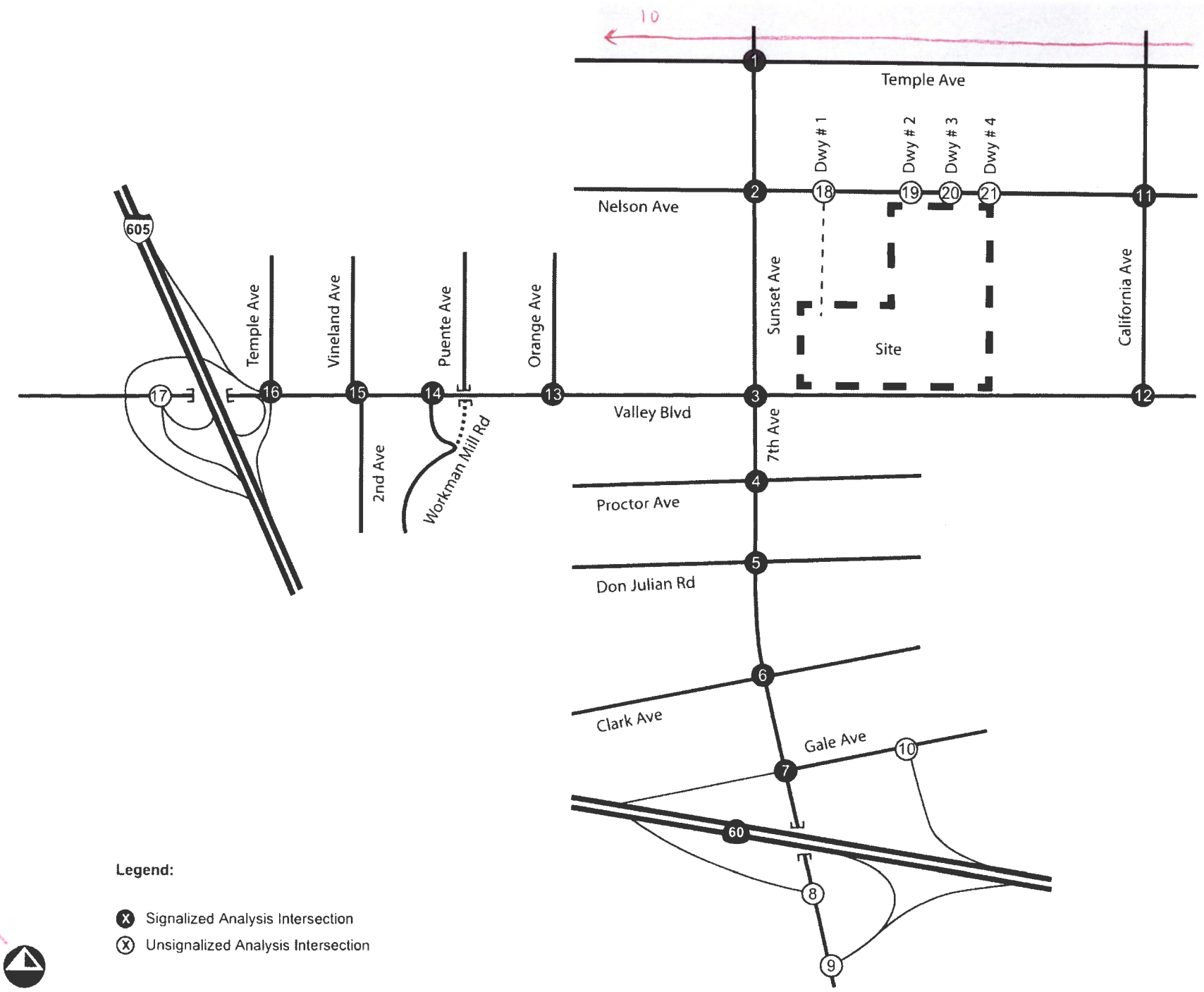
Table 2
Cumulative Project Traffic Generation Calculation

Traffic Generation									
Proj No.	Cumulative Project		Daily	AM Peak			PM Peak		
	Land Use	Quantity**		Total	In	Out	Total	In	Out
12	Condominium/Townhouse - (Attached)	450 DU	**2,615**	**199**	32	167	**235**	158	77
	Shopping Center	20.000 TSF	**854**	**19**	12	7	**75**	36	39
	Subtotal Trips - Project 12		***3,469***	***218***	*44*	*174*	***310***	*194*	*116*
13	Shopping Center	2.000 TSF	**85**	**2**	1	1	**8**	4	4
14	Mini-Warehouse	77.142 TSF	**193**	**11**	6	5	**20**	10	10
15	Single-Family Detached Housing	45.000 DU	**428**	**34**	9	25	**45**	28	17
16	Single-Family Detached Housing	21.000 DU	**200**	**16**	4	12	**21**	13	8
17	Shopping Center	6.695 TSF	**286**	**6**	4	2	**25**	12	13
18	Single-Family Detached Housing	45.000 DU	**428**	**34**	9	25	**45**	28	17
19	Single-Family Detached Housing	4.000 DU	**38**	**3**	1	2	**4**	3	1
20	Condominium/Townhouse - (Attached)	21.000 DU	**122**	**9**	1	8	**11**	7	4
21	Swimming/Soccer Complex	1.000 FLD	**71**	**1**	1	-	**18**	12	6
22	Apartments	12.000 DU	**80**	**6**	1	5	**8**	5	3
Total Project Trips		743.302 TSF 598.000 DU	**11,128**	**1,081**	**728**	**353**	**1,292**	**418**	**874**

Note

** TSF = Thousand Square Feet

1 Passenger Car Equivalence (PCE) rate per SANBAG guidelines.



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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CUMULATIVE

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Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

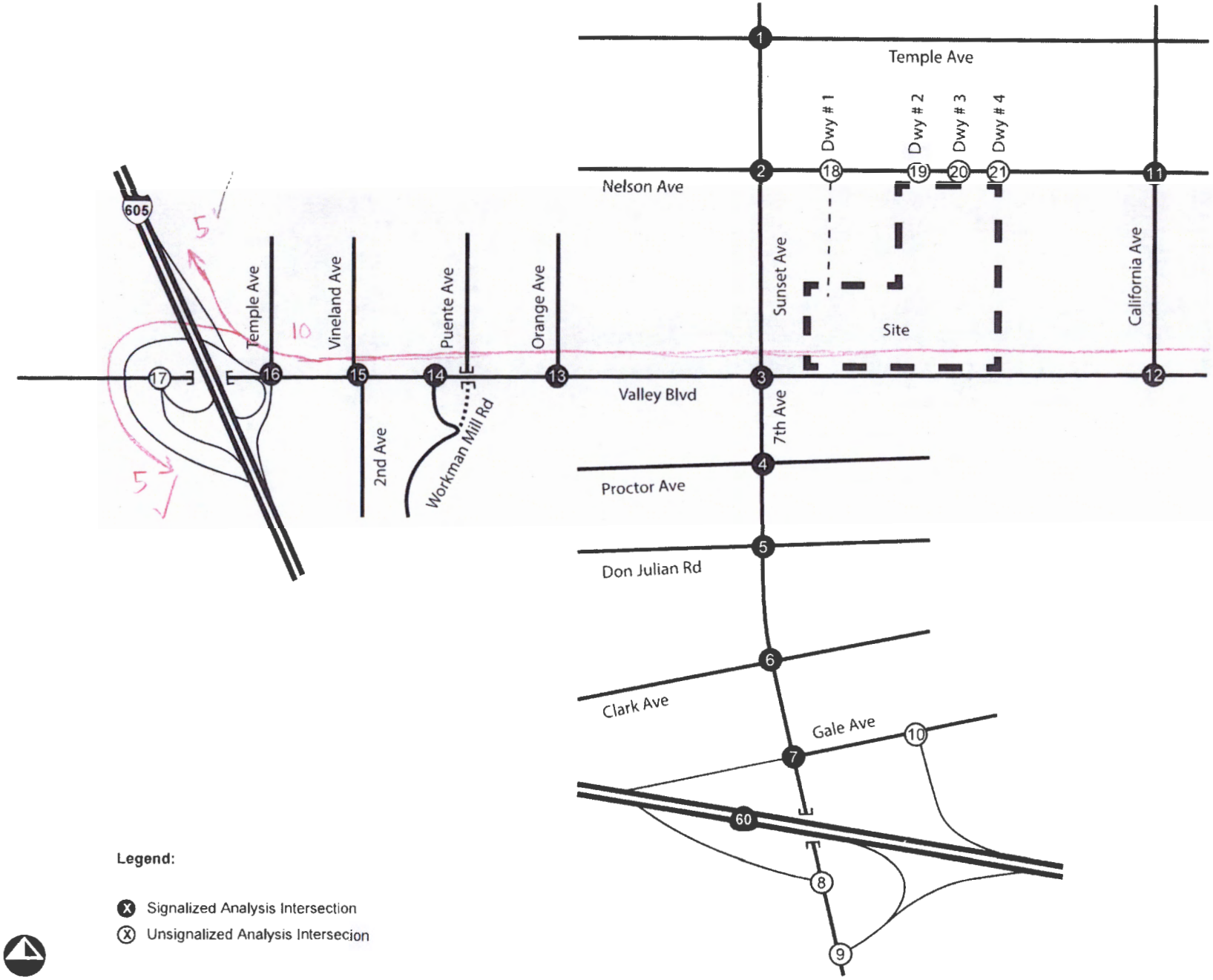

Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

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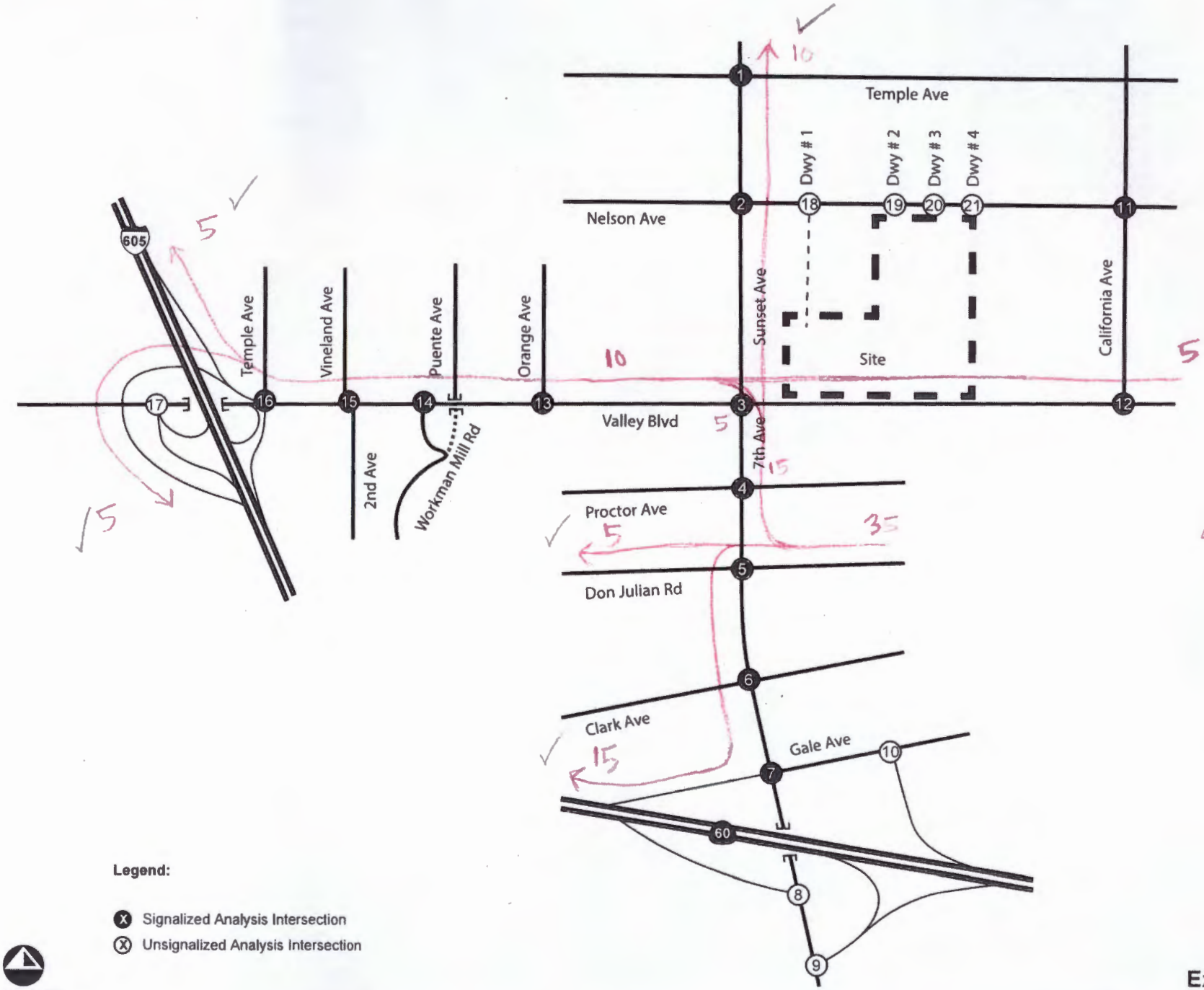
UMULATIVE TR DI TRIBUTION
CITY OF INDUSTRY



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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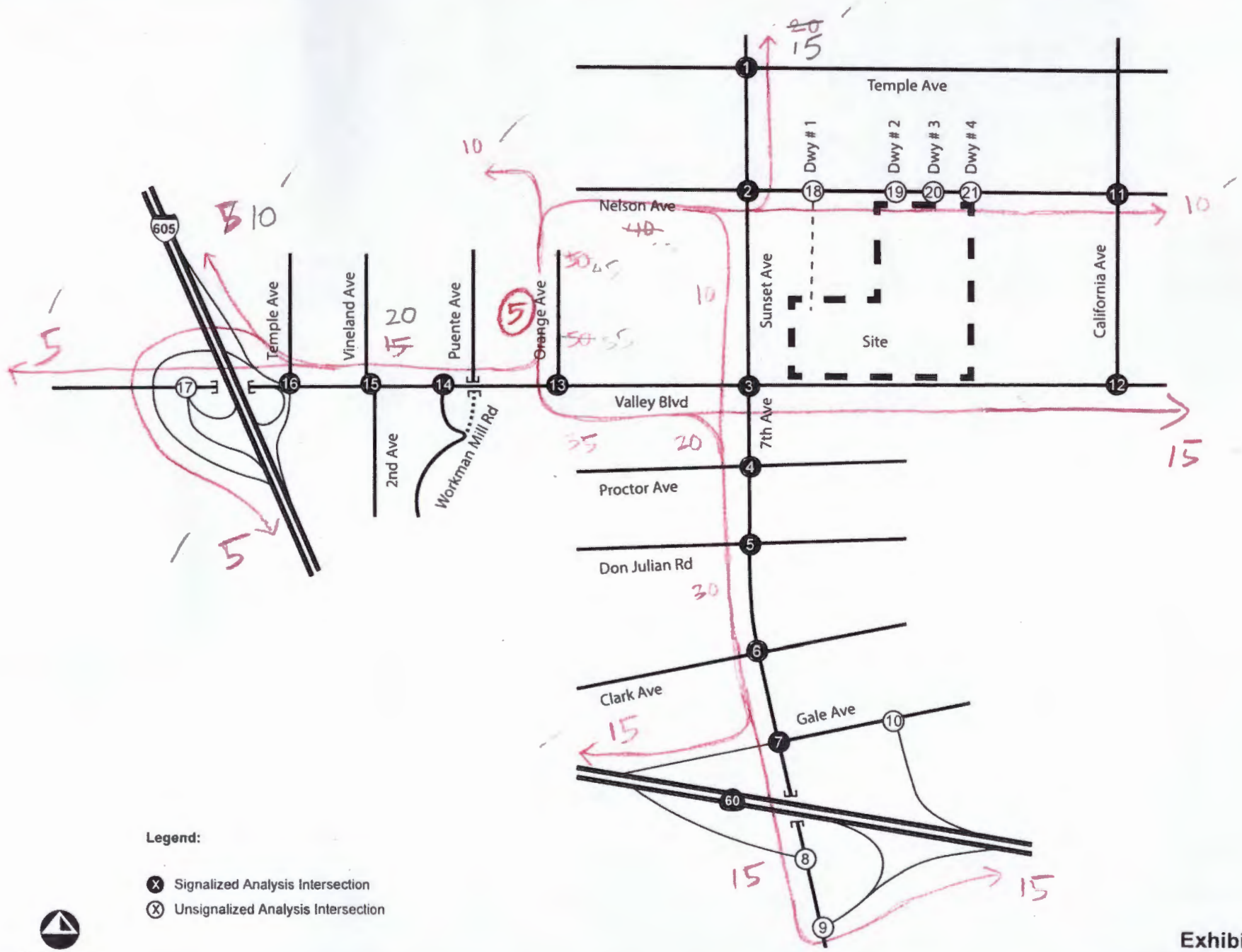
Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

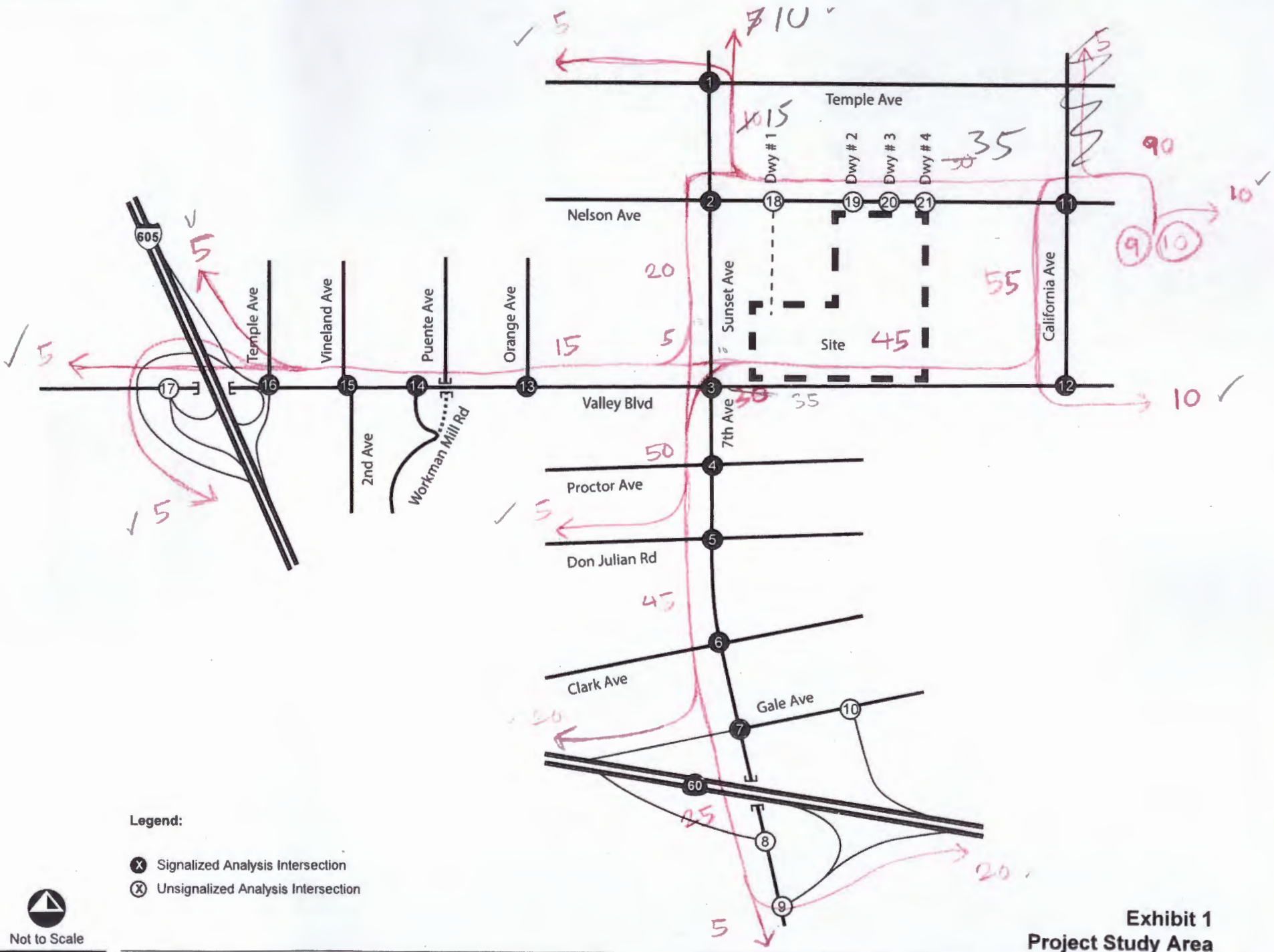

Exhibit 1
Project Study Area

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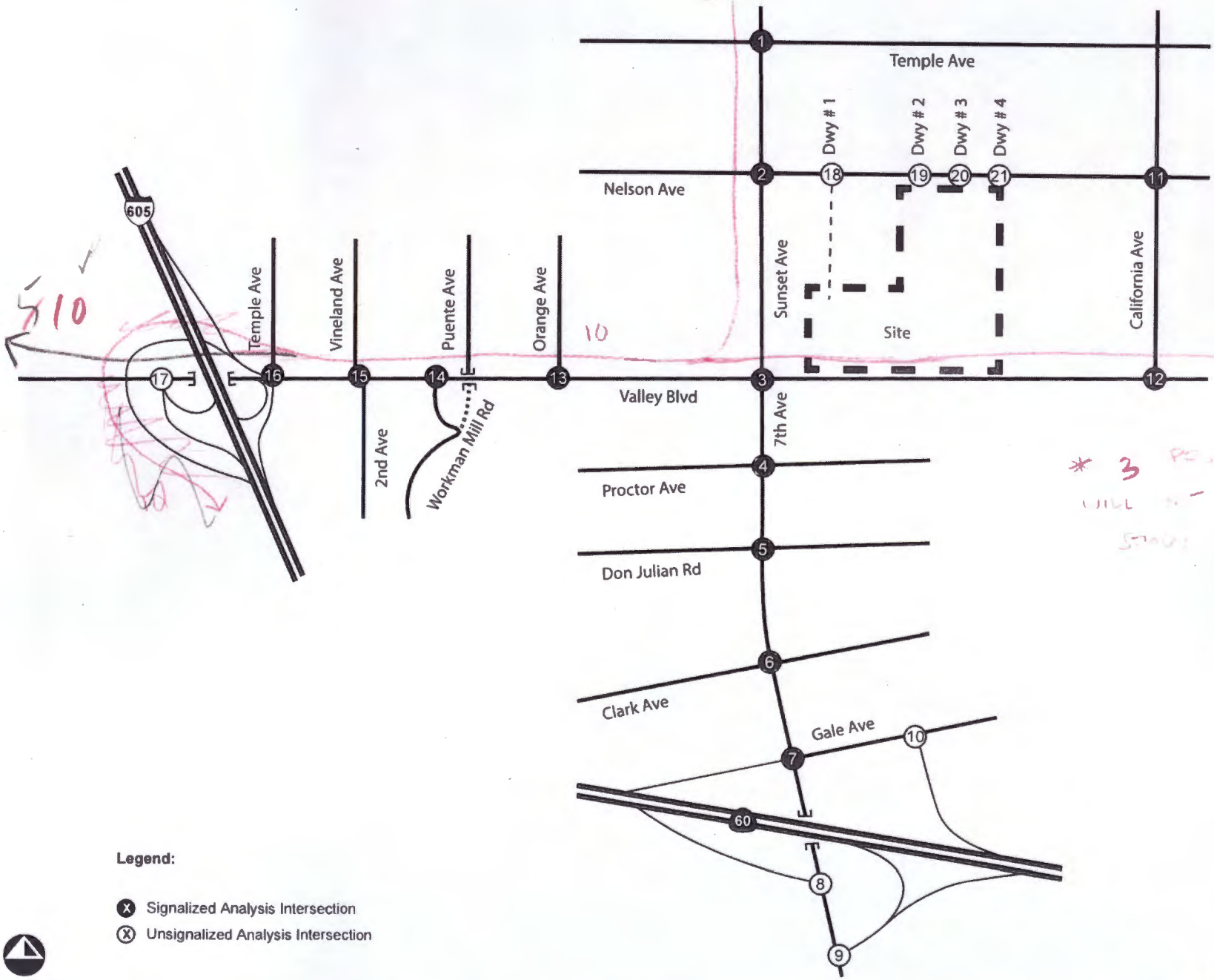
Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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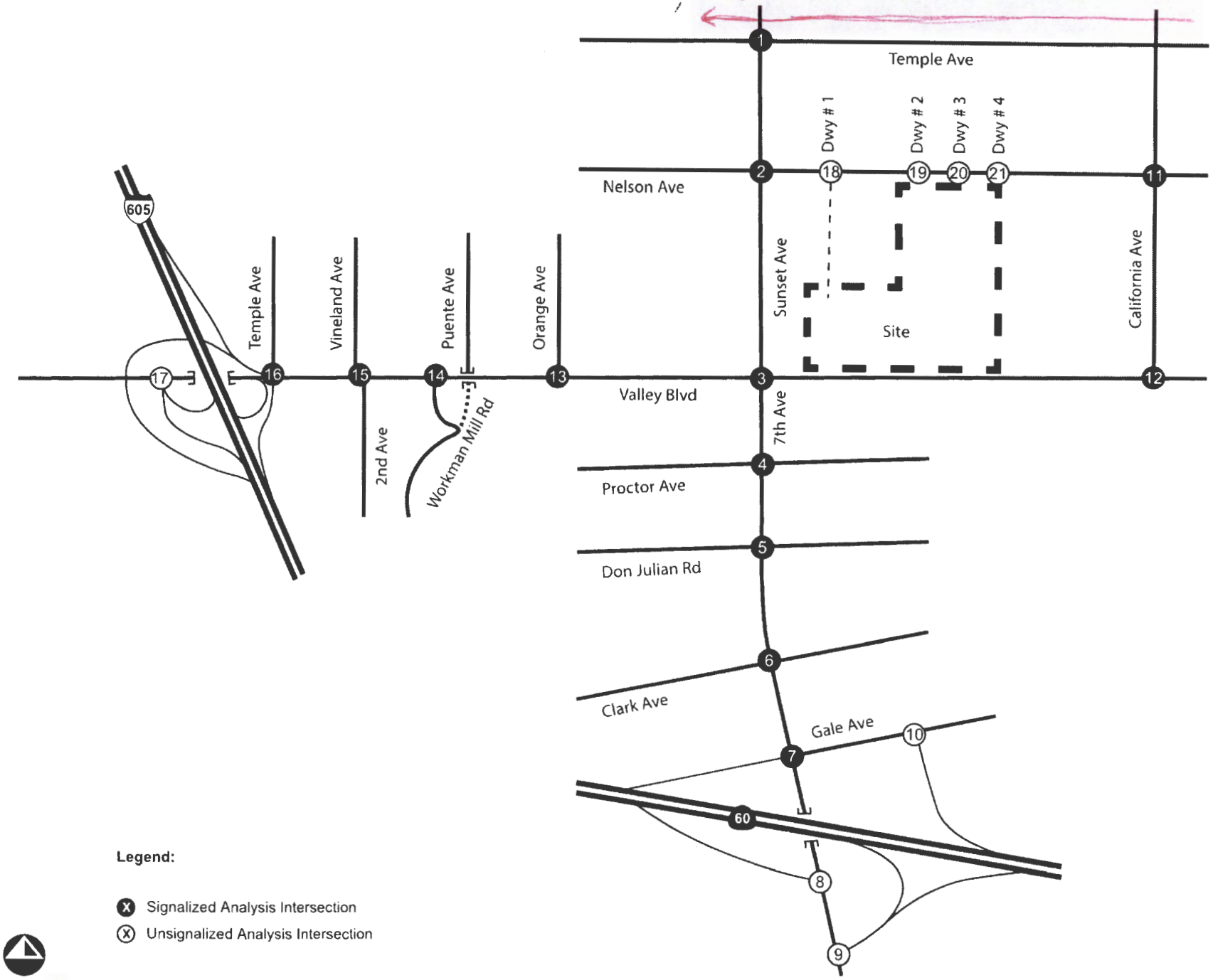
Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

CUMULATIVE PROJECT TRIP DISTRIBUTION
WEST COVINA

#1



Legend:

- Signalized Analysis Intersection
- Unsignalized Analysis Intersection

Not to Scale

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Exhibit 1
Project Study Area

Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

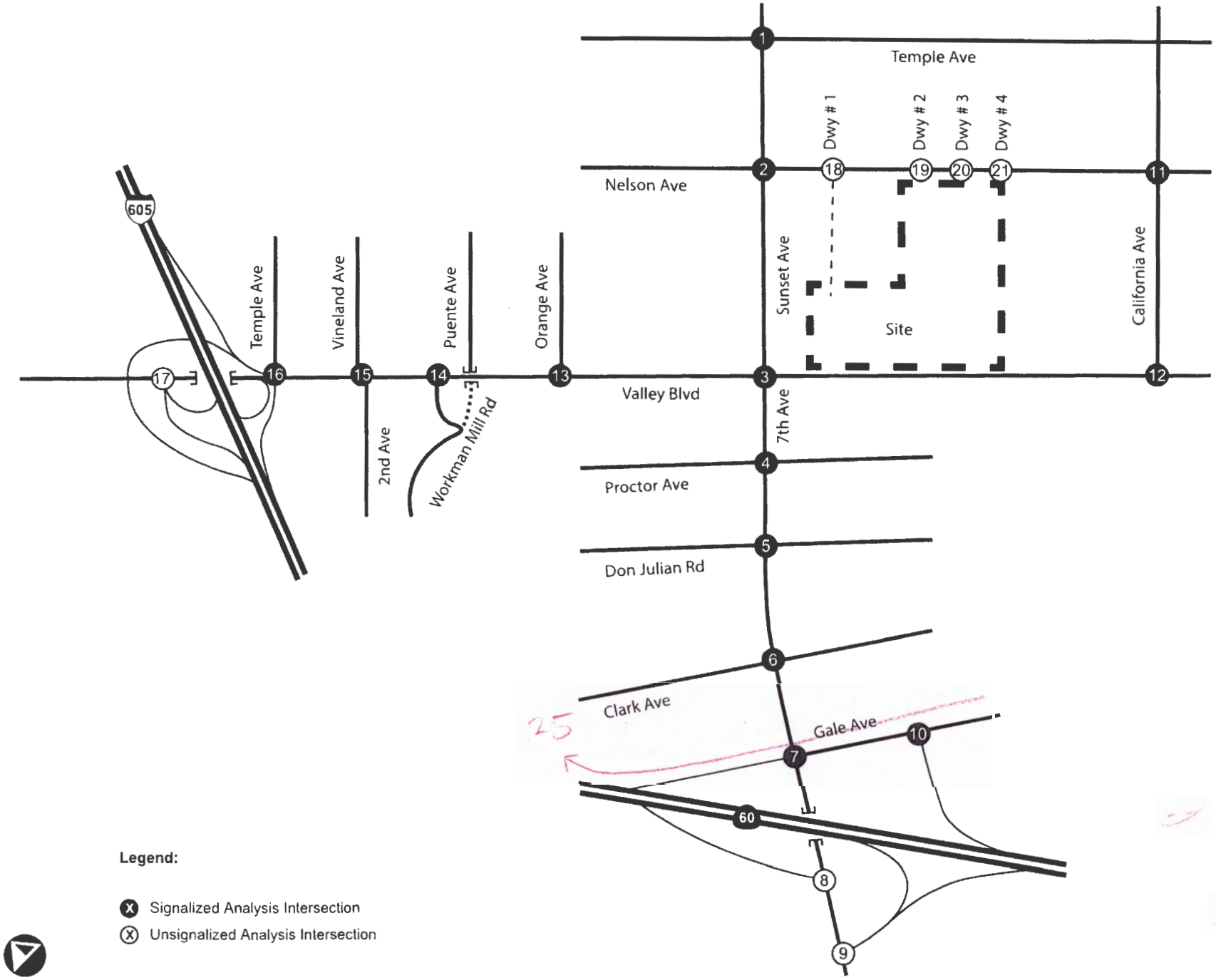

Exhibit 1
Project Study Area

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Nelson Business Park Warehouse Project at 14700 Nelson Avenue in City of Industry
Traffic Impact Analysis

Appendix F – Existing Plus Project Conditions Intersection Analysis Worksheets

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.944
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	117	443	40	54	1162	116	93	384	188	206	748	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	443	40	54	1162	116	93	384	188	206	748	66
Added Vol:	1	2	0	0	9	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	445	40	54	1171	116	93	384	190	206	748	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	127	479	43	58	1260	125	100	413	205	222	805	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	479	43	58	1260	125	100	413	205	222	805	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	127	479	43	58	1260	125	100	413	205	222	805	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.82	0.18	1.00	1.34	0.66	1.00	1.84	0.16
Final Sat.:	1600	2936	264	1600	2912	288	1600	2141	1059	1600	2941	259
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.04	0.43	0.43	0.06	0.19	0.19	0.14	0.27	0.27
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.954
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	568	66	29	1409	92	24	130	188	104	189	53
Added Vol:	0	0	58	11	0	0	0	0	0	14	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	568	124	40	1409	92	24	130	188	118	189	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	94	597	130	42	1482	97	25	137	198	124	199	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	597	130	42	1482	97	25	137	198	124	199	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	597	130	42	1482	97	25	137	198	124	199	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	1.88	0.12	0.07	0.38	0.55	0.33	0.52	0.15
Final Sat.:	1600	2627	573	1600	3004	196	112	608	880	520	833	247
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.03	0.49	0.49	0.02	0.22	0.22	0.08	0.24	0.24
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Mitigation Measures

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.938
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	568	66	29	1409	92	24	130	188	104	189	53
Added Vol:	0	0	58	11	0	0	0	0	0	14	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	568	124	40	1409	92	24	130	188	118	189	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	94	597	130	42	1482	97	25	137	198	124	199	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	597	130	42	1482	97	25	137	198	124	199	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	597	130	42	1482	97	25	137	198	124	199	59
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	1.88	0.12	1.00	0.41	0.59	1.00	0.77	0.23
Final Sat.:	1600	2627	573	1600	3004	196	1600	654	946	1600	1234	366
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.03	0.49	0.49	0.02	0.21	0.21	0.08	0.16	0.16
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	172	379	51	325	924	340	134	702	147	124	1204	234
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	379	51	325	924	340	134	702	147	124	1204	234
Added Vol:	0	35	0	2	9	3	14	0	0	0	0	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	414	51	327	933	343	148	702	147	124	1204	243
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	181	437	54	345	984	362	156	741	155	131	1270	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	437	54	345	984	362	156	741	155	131	1270	256
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	437	54	345	984	362	156	741	155	131	1270	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.78	0.22	2.00	2.19	0.81	1.00	2.48	0.52	1.00	2.50	0.50
Final Sat.:	2880	2849	351	2880	3510	1290	1600	3969	831	1600	3994	806
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.12	0.28	0.28	0.10	0.19	0.19	0.08	0.32	0.32
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.626
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	85	548	82	96	922	218	30	72	56	59	113	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	548	82	96	922	218	30	72	56	59	113	59
Added Vol:	0	35	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	583	82	96	931	218	30	72	56	59	113	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	91	627	88	103	1001	234	32	77	60	63	122	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	627	88	103	1001	234	32	77	60	63	122	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	627	88	103	1001	234	32	77	60	63	122	63
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.62	0.38	1.00	1.12	0.88	1.00	1.31	0.69
Final Sat.:	1600	2805	395	1600	2593	607	1600	1800	1400	1600	2102	1098
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.06	0.39	0.39	0.02	0.04	0.04	0.04	0.06	0.06
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	171	564	110	58	899	108	60	176	203	65	327	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	564	110	58	899	108	60	176	203	65	327	63
Added Vol:	0	31	0	0	8	1	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	171	595	110	58	907	109	64	176	203	65	327	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	173	603	111	59	919	110	65	178	206	66	331	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	603	111	59	919	110	65	178	206	66	331	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	173	603	111	59	919	110	65	178	206	66	331	64
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.69	0.31	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.68	0.32
Final Sat.:	1600	2701	499	1600	2857	343	1600	1600	1600	1600	2683	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.22	0.22	0.04	0.32	0.32	0.04	0.11	0.13	0.04	0.12	0.12
Crit Moves:	****				****				****	****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	33	721	45	92	1036	26	52	51	117	47	39	185
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	721	45	92	1036	26	52	51	117	47	39	185
Added Vol:	0	31	0	0	8	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	752	45	92	1044	26	52	51	117	47	39	185
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	811	49	99	1126	28	56	55	126	51	42	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	811	49	99	1126	28	56	55	126	51	42	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	811	49	99	1126	28	56	55	126	51	42	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.95	0.05	1.00	0.30	0.70	1.00	0.17	0.83
Final Sat.:	1600	3019	181	1600	3122	78	1600	486	1114	1600	279	1321
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.27	0.06	0.36	0.36	0.04	0.11	0.11	0.03	0.15	0.15
Crit Moves:	****				****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	61	860	204	387	644	300	79	589	499
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				64	905	215	407	678	316	83	620	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				72	1072	620	443	1634	1231	107	963	431
Arrive On Green				0.32	0.32	0.32	0.25	0.46	0.46	0.06	0.27	0.00
Sat Flow, veh/h				229	3392	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				518	451	215	407	678	316	83	620	0
Grp Sat Flow(s),veh/h/ln				1851	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				23.8	20.9	8.4	20.0	11.4	5.0	4.1	13.8	0.0
Cycle Q Clear(g_c), s				23.8	20.9	8.4	20.0	11.4	5.0	4.1	13.8	0.0
Prop In Lane				0.12		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				585	559	620	443	1634	1231	107	963	431
V/C Ratio(X)				0.89	0.81	0.35	0.92	0.42	0.26	0.78	0.64	0.00
Avail Cap(c_a), veh/h				621	593	652	486	1780	1297	208	1226	549
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				29.1	28.1	20.0	32.7	16.0	2.8	41.4	28.7	0.0
Incr Delay (d2), s/veh				13.9	7.7	0.3	21.5	0.2	0.1	11.3	0.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.4	11.3	3.9	12.4	5.6	5.2	2.4	6.8	0.0
LnGrp Delay(d),s/veh				43.0	35.7	20.3	54.2	16.2	2.9	52.7	29.5	0.0
LnGrp LOS				D	D	C	D	B	A	D	C	
Approach Vol, veh/h					1184			1401			703	
Approach Delay, s/veh					36.1			24.2			32.2	
Approach LOS					D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.9	46.3			26.8	29.3		33.3
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	10.5	45.0			24.5	31.0		30.0
Max Q Clear Time (g_c+I1), s	6.1	13.4			22.0	15.8		25.8
Green Ext Time (p_c), s	0.1	12.4			0.4	8.5		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	156	0	1324	634	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	1394	667	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1364	334	667	0	-	0
Stage 1	667	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	139	662	919	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	139	662	919	-	-	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	919	-	662	-	-
HCM Lane V/C Ratio	-	-	0.248	-	-
HCM Control Delay (s)	0	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[11.6]

****

Street Name:	7th Ave									SR60 EB Ramps									
Approach:	North Bound					South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign			
Rights:	Include					Include					Include					Ignore			
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0		446		83	439		268		0	0		0		0	0		0		836
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0		446		83	439		268		0	0		0		0	0		0		836
Added Vol:	0		4		0	3		1		0	0		0		0	0		0		15
PasserByVol:	0		0		0	0		0		0	0		0		0	0		0		0
Initial Fut:	0		450		83	442		269		0	0		0		0	0		0		851
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Adj:	0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.00	
PHF Volume:	0		478		88	470		286		0	0		0		0	0		0		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
FinalVolume:	0		478		88	470		286		0	0		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx			4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			6.2				
FollowUpTim:	xxxxx	xxxx	xxxxx			2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx			3.3				
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx			566	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			478				
Potent Cap.:	xxxx	xxxx	xxxxx			1016	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			591				
Move Cap.:	xxxx	xxxx	xxxxx			1016	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx			591				
Volume/Cap:	xxxx	xxxx	xxxx			0.46	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.00				
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx			2.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	xxxxx	xxxx	xxxxx			11.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*		*		*	B		*		*	*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*		*		*	*		*		*	*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

****

Note: Queue reported is the number of cars per lane.

****

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	457	0	0	960	186	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.99	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3410	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3410	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	0	0	1043	202	20
RTOR Reduction (vph)	0	0	0	0	15	0
Lane Group Flow (vph)	497	0	0	1043	207	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	19.2			19.2	6.0	
Effective Green, g (s)	19.2			19.2	6.0	
Actuated g/C Ratio	0.55			0.55	0.17	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1958			1958	589	
v/s Ratio Prot	0.14			c0.29	c0.06	
v/s Ratio Perm						
v/c Ratio	0.25			0.53	0.35	
Uniform Delay, d1	4.0			4.9	12.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.1			0.3	0.4	
Delay (s)	4.1			5.2	13.0	
Level of Service	A			A	B	
Approach Delay (s)	4.1			5.2	13.0	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	34.7	Sum of lost time (s)	9.5
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.665
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	44	85	56	40	180	16	8	203	55	104	291	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	85	56	40	180	16	8	203	55	104	291	25
Added Vol:	0	0	0	0	0	0	0	1	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	85	56	40	180	16	8	204	55	104	295	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	53	103	68	49	219	19	10	248	67	126	358	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	103	68	49	219	19	10	248	67	126	358	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	103	68	49	219	19	10	248	67	126	358	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.24	0.46	0.30	1.00	0.92	0.08	1.00	0.79	0.21	1.00	0.92	0.08
Final Sat.:	381	735	484	1600	1469	131	1600	1260	340	1600	1475	125
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.03	0.15	0.15	0.01	0.20	0.20	0.08	0.24	0.24
Crit Moves:			****		****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	2	2	1	208	4	112	55	1045	6	4	1514	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	2	1	208	4	112	55	1045	6	4	1514	124
Added Vol:	0	0	0	0	0	0	0	2	0	0	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	2	1	208	4	112	55	1047	6	4	1523	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	2	2	1	226	4	122	60	1138	7	4	1655	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	1	226	4	122	60	1138	7	4	1655	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	1	226	4	122	60	1138	7	4	1655	135
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.40	0.20	1.29	0.02	0.69	1.00	2.98	0.02	1.00	2.77	0.23
Final Sat.:	640	640	320	2054	40	1106	1600	4773	27	1600	4439	361
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.11	0.11	0.04	0.24	0.24	0.00	0.37	0.37
Crit Moves:		****				****	****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	Level Of Service:	D

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	7	21	3	143	1	265	258	856	14	2	1436	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	21	3	143	1	265	258	856	14	2	1436	183
Added Vol:	0	0	0	0	0	0	0	14	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	21	3	143	1	265	258	870	14	2	1439	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	7	22	3	150	1	279	271	915	15	2	1513	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	22	3	150	1	279	271	915	15	2	1513	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	22	3	150	1	279	271	915	15	2	1513	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.68	0.10	0.35	0.01	0.64	1.00	2.95	0.05	1.00	2.66	0.34
Final Sat.:	361	1084	155	559	4	1037	1600	4724	76	1600	4258	542
Capacity Analysis Module:												
Vol/Sat:	0.00	0.02	0.02	0.09	0.27	0.27	0.17	0.19	0.19	0.00	0.36	0.36
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	192	0	105	0	0	0	0	1149	260	15	1417	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	192	0	105	0	0	0	0	1149	260	15	1417	0
Added Vol:	0	0	0	0	0	0	0	14	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	0	105	0	0	0	0	1163	260	15	1420	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	216	0	118	0	0	0	0	1307	292	17	1596	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	216	0	118	0	0	0	0	1307	292	17	1596	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	216	0	118	0	0	0	0	1307	292	17	1596	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.02	1.98	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	33	3167	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.07	0.00	0.00	0.00	0.00	0.41	0.18	0.01	0.50	0.00
Crit Moves:	****						****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.071
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	12	2	54	184	8	443	330	1225	47	8	1303	256
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	2	54	184	8	443	330	1225	47	8	1303	256
Added Vol:	0	0	0	0	0	0	0	14	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	2	54	184	8	443	330	1239	47	8	1306	256
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	2	54	184	8	443	330	1239	47	8	1306	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	2	54	184	8	443	330	1239	47	8	1306	256
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	2	54	184	8	443	330	1239	47	8	1306	256
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.03	0.79	0.29	0.01	0.70	1.00	2.89	0.11	1.00	2.51	0.49
Final Sat.:	282	47	1271	464	20	1116	1600	4625	175	1600	4013	787
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.40	0.40	0.40	0.21	0.27	0.27	0.01	0.33	0.33
Crit Moves:	****			****			****				****	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RBF CONSULTING, IRVINE

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	437	1334	0	0	1993	90	75	438	309	55	0	1190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	465	1419	0	0	2120	96	80	466	329	59	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	739	3111	0	0	2275	103	85	494	495	0	0	0
Arrive On Green	0.21	0.61	0.00	0.00	0.36	0.36	0.31	0.31	0.31	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6592	287	271	1578	1583		0	
Grp Volume(v), veh/h	465	1419	0	0	1609	607	546	0	329		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1812	1849	0	1583			
Q Serve(g_s), s	16.3	20.0	0.0	0.0	42.8	42.9	38.2	0.0	23.9			
Cycle Q Clear(g_c), s	16.3	20.0	0.0	0.0	42.8	42.9	38.2	0.0	23.9			
Prop In Lane	1.00		0.00	0.00		0.16	0.15		1.00			
Lane Grp Cap(c), veh/h	739	3111	0	0	1727	651	579	0	495			
V/C Ratio(X)	0.63	0.46	0.00	0.00	0.93	0.93	0.94	0.00	0.66			
Avail Cap(c_a), veh/h	884	3316	0	0	1737	655	599	0	513			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	47.3	13.9	0.0	0.0	41.0	41.0	44.5	0.0	39.6			
Incr Delay (d2), s/veh	1.1	0.1	0.0	0.0	9.6	20.2	23.4	0.0	3.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.9	9.4	0.0	0.0	20.5	25.1	23.3	0.0	10.8			
LnGrp Delay(d),s/veh	48.4	14.0	0.0	0.0	50.6	61.2	67.8	0.0	42.6			
LnGrp LOS	D	B			D	E	E		D			
Approach Vol, veh/h		1884			2216			875				
Approach Delay, s/veh		22.5			53.5			58.4				
Approach LOS		C			D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		46.6		86.2			33.5	52.7
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		43.0		86.6			34.1	* 48
Max Q Clear Time (g_c+I1), s		40.2		22.0			18.3	44.9
Green Ext Time (p_c), s		1.3		19.7			10.2	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	42.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1058	126	0	1350	22	797
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1163	138	0	1484	24	876

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1163	0	1905	-
Stage 1	-	-	-	-	1163	-
Stage 2	-	-	-	-	742	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	596	-	60	0
Stage 1	-	0	-	-	260	0
Stage 2	-	0	-	-	432	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	596	-	60	-
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	432	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	100.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	60	-	-	596	-
HCM Lane V/C Ratio	0.403	-	-	-	-
HCM Control Delay (s)	100.7	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	294	13	0	356	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	320	14	0	387	9	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	334	0	714	327
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1225	-	398	714
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1225	-	398	714
Mov Cap-2 Maneuver	-	-	-	-	398	-
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	686	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	398	-	-	1225	-
HCM Lane V/C Ratio	0.022	-	-	-	-
HCM Control Delay (s)	14.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	286	9	0	351	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	311	10	0	382	5	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	321	0	698	316
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1239	-	407	724
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1239	-	407	724
Mov Cap-2 Maneuver	-	-	-	-	407	-
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	690	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	407	-	-	1239	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	14	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	270	16	4	349	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	293	17	4	379	2	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	311	0	690	302
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	388	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1249	-	411	738
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1249	-	409	738
Mov Cap-2 Maneuver	-	-	-	-	409	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	409	-	-	1249	-
HCM Lane V/C Ratio	0.005	-	-	0.003	-
HCM Control Delay (s)	13.8	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	239	31	0	351	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	260	34	0	382	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	293	0	659	277
Stage 1	-	-	-	-	277	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1269	-	429	762
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	690	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1269	-	429	762
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	690	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	502	-	-	1269	-
HCM Lane V/C Ratio	0.006	-	-	-	-
HCM Control Delay (s)	12.2	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.010
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	169	1325	161	96	718	115	244	837	119	101	418	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1325	161	96	718	115	244	837	119	101	418	100
Added Vol:	2	9	0	0	3	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	171	1334	161	96	721	115	244	837	120	101	418	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	175	1365	165	98	738	118	250	857	123	103	428	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	1365	165	98	738	118	250	857	123	103	428	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	1365	165	98	738	118	250	857	123	103	428	102
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.72	0.28	1.00	1.75	0.25	1.00	1.61	0.39
Final Sat.:	1600	2855	345	1600	2760	440	1600	2799	401	1600	2582	618
Capacity Analysis Module:												
Vol/Sat:	0.11	0.48	0.48	0.06	0.27	0.27	0.16	0.31	0.31	0.06	0.17	0.17
Crit Moves:		****		****				****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.956
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	1565	82	35	808	30	61	129	152	39	121	84
Added Vol:	0	0	20	4	0	0	0	0	0	58	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1565	102	39	808	30	61	129	152	97	121	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	64	1634	106	41	843	31	64	135	159	101	126	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1634	106	41	843	31	64	135	159	101	126	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1634	106	41	843	31	64	135	159	101	126	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.93	0.07	0.18	0.38	0.44	0.31	0.39	0.30
Final Sat.:	1600	3004	196	1600	3085	115	285	604	711	496	619	486
Capacity Analysis Module:												
Vol/Sat:	0.04	0.54	0.54	0.03	0.27	0.27	0.04	0.22	0.22	0.06	0.20	0.20
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Mitigation Measures

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	1565	82	35	808	30	61	129	152	39	121	84
Added Vol:	0	0	20	4	0	0	0	0	0	58	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1565	102	39	808	30	61	129	152	97	121	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	64	1634	106	41	843	31	64	135	159	101	126	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1634	106	41	843	31	64	135	159	101	126	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1634	106	41	843	31	64	135	159	101	126	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.93	0.07	1.00	0.46	0.54	1.00	0.56	0.44
Final Sat.:	1600	3004	196	1600	3085	115	1600	735	865	1600	896	704
Capacity Analysis Module:												
Vol/Sat:	0.04	0.54	0.54	0.03	0.27	0.27	0.04	0.18	0.18	0.06	0.14	0.14
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.042
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	148	815	50	279	619	120	471	1238	134	109	752	392
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	148	815	50	279	619	120	471	1238	134	109	752	392
Added Vol:	0	12	0	9	35	14	5	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	827	50	288	654	134	476	1238	134	109	752	395
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	152	848	51	295	671	137	488	1270	137	112	771	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	848	51	295	671	137	488	1270	137	112	771	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	848	51	295	671	137	488	1270	137	112	771	405
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.89	0.11	2.00	2.49	0.51	1.00	2.71	0.29	1.00	2.00	1.00
Final Sat.:	2880	3018	182	2880	3984	816	1600	4331	469	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.28	0.10	0.17	0.17	0.31	0.29	0.29	0.07	0.24	0.25
Crit Moves:		****		****			****					****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.659
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	70	976	146	53	717	118	64	152	97	104	80	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	976	146	53	717	118	64	152	97	104	80	80
Added Vol:	0	12	0	0	35	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	70	988	146	53	752	118	64	152	97	104	80	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	74	1042	154	56	793	124	68	160	102	110	84	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	1042	154	56	793	124	68	160	102	110	84	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	1042	154	56	793	124	68	160	102	110	84	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.73	0.27	1.00	1.22	0.78	1.00	1.00	1.00
Final Sat.:	1600	2788	412	1600	2766	434	1600	1953	1247	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.37	0.03	0.29	0.29	0.04	0.08	0.08	0.07	0.05	0.05
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.806
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	152	945	90	45	807	76	157	346	284	109	211	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	945	90	45	807	76	157	346	284	109	211	56
Added Vol:	0	11	0	0	31	4	2	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	956	90	45	838	80	159	346	284	109	211	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	166	1044	98	49	915	87	174	378	310	119	230	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	1044	98	49	915	87	174	378	310	119	230	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	1044	98	49	915	87	174	378	310	119	230	61
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.83	0.17	1.00	1.83	0.17	1.00	1.10	0.90	1.00	1.58	0.42
Final Sat.:	1600	2925	275	1600	2921	279	1600	1757	1443	1600	2529	671
Capacity Analysis Module:												
Vol/Sat:	0.10	0.36	0.36	0.03	0.31	0.31	0.11	0.21	0.21	0.07	0.09	0.09
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	104	1089	55	85	1163	57	39	54	59	52	49	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	1089	55	85	1163	57	39	54	59	52	49	80
Added Vol:	0	11	0	0	31	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	1100	55	85	1194	57	39	54	59	52	49	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	108	1138	57	88	1235	59	40	56	61	54	51	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1138	57	88	1235	59	40	56	61	54	51	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1138	57	88	1235	59	40	56	61	54	51	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.91	0.09	1.00	0.48	0.52	1.00	0.38	0.62
Final Sat.:	1600	3048	152	1600	3054	146	1600	765	835	1600	608	992
Capacity Analysis Module:												
Vol/Sat:	0.07	0.37	0.37	0.05	0.40	0.40	0.03	0.07	0.07	0.03	0.08	0.08
Crit Moves:	****				****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	119	599	461	147	753	627	172	381	719
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				125	631	485	155	793	660	181	401	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				179	957	727	191	1327	1093	224	1391	622
Arrive On Green				0.32	0.32	0.32	0.11	0.37	0.37	0.13	0.39	0.00
Sat Flow, veh/h				569	3035	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				403	353	485	155	793	660	181	401	0
Grp Sat Flow(s),veh/h/ln				1834	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				15.2	13.5	18.4	6.7	14.2	17.5	7.8	6.1	0.0
Cycle Q Clear(g_c), s				15.2	13.5	18.4	6.7	14.2	17.5	7.8	6.1	0.0
Prop In Lane				0.31		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				578	558	727	191	1327	1093	224	1391	622
V/C Ratio(X)				0.70	0.63	0.67	0.81	0.60	0.60	0.81	0.29	0.00
Avail Cap(c_a), veh/h				697	673	834	232	1651	1238	420	2028	907
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				23.7	23.1	17.5	34.4	19.9	6.5	33.6	16.4	0.0
Incr Delay (d2), s/veh				2.4	1.4	1.7	16.3	0.4	0.7	6.8	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.1	6.8	8.6	4.2	7.0	14.3	4.2	3.0	0.0
LnGrp Delay(d),s/veh				26.1	24.5	19.1	50.7	20.3	7.2	40.4	16.5	0.0
LnGrp LOS				C	C	B	D	C	A	D	B	
Approach Vol, veh/h					1241			1608			582	
Approach Delay, s/veh					22.9			17.8			23.9	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	14.4	34.6			13.0	36.0		29.9
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	18.7	36.8			10.3	45.2		30.0
Max Q Clear Time (g_c+I1), s	9.8	19.5			8.7	8.1		20.4
Green Ext Time (p_c), s	0.3	10.1			0.1	14.8		4.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	646	0	1536	533	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	673	0	1600	555	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1355	278	555	0	-	0
Stage 1	555	-	-	-	-	-
Stage 2	800	-	-	-	-	-
Critical Hdwy	6.84	7	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	2.22	-	-	-
Pot Cap-1 Maneuver	141	720	1011	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	720	1011	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	403	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1011	-	720	-	-
HCM Lane V/C Ratio	-	-	0.935	-	-
HCM Control Delay (s)	0	-	43.4	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	13.2	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #9 7th Ave/SR60 EB Ramps

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[8.3]

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0	1250	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	0	223		31		216	851		0		0		0		0	0		0	1250	
Added Vol:	0	2		0		12	4		0		0		0		0	0		0	5	
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0	0	
Initial Fut:	0	225		31		228	855		0		0		0		0	0		0	1255	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	0.00	
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97		0.97		0.97	0.97		0.97	0.00	
PHF Volume:	0	231		32		234	879		0		0		0		0	0		0	0	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	231		32		234	879		0		0		0		0	0		0	0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		263	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	231	
Potent Cap.:	xxxx	xxxx		xxxxx		1313	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	813	
Move Cap.:	xxxx	xxxx		xxxxx		1313	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	813	
Volume/Cap:	xxxx	xxxx		xxxx		0.18	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx	0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.6	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		8.3	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*	*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

Note: Queue reported is the number of cars per lane.

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	794	0	0	733	433	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.98	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3390	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3390	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	845	0	0	780	461	79
RTOR Reduction (vph)	0	0	0	0	39	0
Lane Group Flow (vph)	845	0	0	780	501	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	13.6			13.6	10.2	
Effective Green, g (s)	13.6			13.6	10.2	
Actuated g/C Ratio	0.41			0.41	0.31	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1445			1445	1038	
v/s Ratio Prot	c0.24			0.22	c0.15	
v/s Ratio Perm						
v/c Ratio	0.58			0.54	0.48	
Uniform Delay, d1	7.7			7.5	9.4	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.6			0.4	0.4	
Delay (s)	8.3			7.9	9.8	
Level of Service	A			A	A	
Approach Delay (s)	8.3			7.9	9.8	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	33.3	Sum of lost time (s)	9.5
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	98	380	175	29	116	11	20	185	38	55	147	22
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	98	380	175	29	116	11	20	185	38	55	147	22
Added Vol:	0	0	0	0	0	0	0	4	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	380	175	29	116	11	20	189	38	55	149	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	111	431	199	33	132	12	23	215	43	62	169	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	431	199	33	132	12	23	215	43	62	169	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	431	199	33	132	12	23	215	43	62	169	25
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.58	0.27	1.00	0.91	0.09	1.00	0.83	0.17	1.00	0.87	0.13
Final Sat.:	240	931	429	1600	1461	139	1600	1332	268	1600	1394	206
Capacity Analysis Module:												
Vol/Sat:	0.46	0.46	0.46	0.02	0.09	0.09	0.01	0.16	0.16	0.04	0.12	0.12
Crit Moves:			****		****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	9	8	5	136	2	100	284	1404	14	6	1149	359
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	8	5	136	2	100	284	1404	14	6	1149	359
Added Vol:	0	0	0	0	0	0	0	9	0	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	8	5	136	2	100	284	1413	14	6	1152	359
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	10	9	5	146	2	107	304	1513	15	6	1233	384
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	9	5	146	2	107	304	1513	15	6	1233	384
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	9	5	146	2	107	304	1513	15	6	1233	384
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.36	0.23	1.14	0.02	0.84	1.00	2.97	0.03	1.00	2.29	0.71
Final Sat.:	655	582	364	1829	27	1345	1600	4753	47	1600	3660	1140
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.08	0.19	0.32	0.32	0.00	0.34	0.34
Crit Moves:		****		****			****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.819
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	D

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	28	17	112	4	148	432	1619	5	11	874	245
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	28	17	112	4	148	432	1619	5	11	874	245
Added Vol:	0	0	0	0	0	0	0	5	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	28	17	112	4	148	432	1624	5	11	888	245
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	14	30	18	119	4	157	457	1719	5	12	940	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	30	18	119	4	157	457	1719	5	12	940	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	30	18	119	4	157	457	1719	5	12	940	259
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.49	0.29	0.42	0.02	0.56	1.00	2.99	0.01	1.00	2.35	0.65
Final Sat.:	359	772	469	679	24	897	1600	4785	15	1600	3762	1038
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.07	0.17	0.17	0.29	0.36	0.36	0.01	0.25	0.25
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.834
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	319	0	365	0	0	0	0	1557	168	2	1032	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	319	0	365	0	0	0	0	1557	168	2	1032	0
Added Vol:	0	0	0	0	0	0	0	5	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	319	0	365	0	0	0	0	1562	168	2	1046	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	326	0	373	0	0	0	0	1597	172	2	1070	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	326	0	373	0	0	0	0	1597	172	2	1070	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	326	0	373	0	0	0	0	1597	172	2	1070	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.01	1.99	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	6	3194	0
Capacity Analysis Module:												
Vol/Sat:	0.20	0.00	0.23	0.00	0.00	0.00	0.00	0.50	0.11	0.00	0.33	0.00
Crit Moves:			****					****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	5	53	163	7	312	342	1602	60	20	934	382
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	5	53	163	7	312	342	1602	60	20	934	382
Added Vol:	0	0	0	0	0	0	0	5	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	5	53	163	7	312	342	1607	60	20	948	382
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	5	53	163	7	312	342	1607	60	20	948	382
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	5	53	163	7	312	342	1607	60	20	948	382
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	5	53	163	7	312	342	1607	60	20	948	382
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.07	0.75	0.34	0.01	0.65	1.00	2.89	0.11	1.00	2.14	0.86
Final Sat.:	293	113	1194	541	23	1036	1600	4627	173	1600	3421	1379
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.30	0.30	0.30	0.21	0.35	0.35	0.01	0.28	0.28
Crit Moves:			****		****		****				****	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RBF CONSULTING, IRVINE

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	490	1943	0	0	1494	92	37	570	266	96	0	927
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	521	2067	0	0	1589	98	39	606	283	102	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	636	2647	0	0	1785	110	43	667	605	0	0	0
Arrive On Green	0.18	0.52	0.00	0.00	0.29	0.29	0.38	0.38	0.38	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6478	383	112	1745	1583		0	
Grp Volume(v), veh/h	521	2067	0	0	1228	459	645	0	283		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1795	1857	0	1583			
Q Serve(g_s), s	14.9	33.7	0.0	0.0	25.1	25.2	33.8	0.0	13.8			
Cycle Q Clear(g_c), s	14.9	33.7	0.0	0.0	25.1	25.2	33.8	0.0	13.8			
Prop In Lane	1.00		0.00	0.00		0.21	0.06		1.00			
Lane Grp Cap(c), veh/h	636	2647	0	0	1379	515	710	0	605			
V/C Ratio(X)	0.82	0.78	0.00	0.00	0.89	0.89	0.91	0.00	0.47			
Avail Cap(c_a), veh/h	640	2653	0	0	1403	524	799	0	681			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	40.2	19.9	0.0	0.0	35.1	35.1	30.0	0.0	23.9			
Incr Delay (d2), s/veh	8.3	1.6	0.0	0.0	7.4	17.0	13.3	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	16.1	0.0	0.0	12.1	14.9	19.8	0.0	6.1			
LnGrp Delay(d),s/veh	48.5	21.5	0.0	0.0	42.5	52.1	43.3	0.0	24.4			
LnGrp LOS	D	C			D	D	D		C			
Approach Vol, veh/h		2588			1687			928				
Approach Delay, s/veh		26.9			45.1			37.6				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		44.3		58.5			24.0	34.5
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		44.2		53.6			19.1	* 30
Max Q Clear Time (g_c+I1), s		35.8		35.7			16.9	27.2
Green Ext Time (p_c), s		3.5		14.7			2.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1525	116	0	1053	15	997
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1605	122	0	1108	16	1049

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1605	0	2159	-
Stage 1	-	-	-	-	1605	-
Stage 2	-	-	-	-	554	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	403	-	41	0
Stage 1	-	0	-	-	150	0
Stage 2	-	0	-	-	539	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	403	-	41	-
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	139.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	41	-	-	403	-
HCM Lane V/C Ratio	0.385	-	-	-	-
HCM Control Delay (s)	139.8	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	279	5	0	282	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	303	5	0	307	34	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	613	306
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	307	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1252	-	456	734
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	746	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1252	-	456	734
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	456	-	-	1252	-
HCM Lane V/C Ratio	0.074	-	-	-	-
HCM Control Delay (s)	13.5	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	276	3	0	262	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	300	3	0	285	22	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	303	0	587	302
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1258	-	472	738
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1258	-	472	738
Mov Cap-2 Maneuver	-	-	-	-	472	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	472	-	-	1258	-
HCM Lane V/C Ratio	0.046	-	-	-	-
HCM Control Delay (s)	13	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	271	6	2	253	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	295	7	2	275	10	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	301	0	577	298
Stage 1	-	-	-	-	298	-
Stage 2	-	-	-	-	279	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1260	-	478	741
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1260	-	477	741
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	477	-	-	1260	-
HCM Lane V/C Ratio	0.021	-	-	0.002	-
HCM Control Delay (s)	12.7	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	260	11	0	246	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	12	0	267	10	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	295	0	556	289
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	267	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1266	-	492	750
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	778	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1266	-	492	750
Mov Cap-2 Maneuver	-	-	-	-	492	-
Stage 1	-	-	-	-	760	-
Stage 2	-	-	-	-	778	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	550	-	-	1266	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	11.7	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Appendix G – Opening Year 2018 Without Project Conditions Intersection Analysis Worksheets

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.984
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	117	443	40	54	1162	116	93	384	188	206	748	66
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	119	452	41	55	1185	118	95	392	192	210	763	67
Added Vol:	1	9	0	0	49	0	0	26	6	0	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	461	41	55	1234	118	95	418	198	210	769	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	130	496	44	59	1329	127	102	450	213	226	828	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	496	44	59	1329	127	102	450	213	226	828	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	496	44	59	1329	127	102	450	213	226	828	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.83	0.17	1.00	1.36	0.64	1.00	1.84	0.16
Final Sat.:	1600	2940	260	1600	2920	280	1600	2172	1028	1600	2942	258
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.04	0.45	0.45	0.06	0.21	0.21	0.14	0.28	0.28
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.984
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	91	579	67	30	1437	94	24	133	192	106	193	54
Added Vol:	8	6	23	17	25	12	2	1	1	3	8	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	585	90	47	1462	106	26	134	193	109	201	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	104	616	95	49	1538	111	28	140	203	115	211	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	616	95	49	1538	111	28	140	203	115	211	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	616	95	49	1538	111	28	140	203	115	211	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.87	0.13	0.07	0.38	0.55	0.30	0.55	0.15
Final Sat.:	1600	2772	428	1600	2984	216	120	606	874	476	876	249
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.03	0.52	0.52	0.02	0.23	0.23	0.07	0.24	0.24
Crit Moves:	****				****			****			****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	172	379	51	325	924	340	134	702	147	124	1204	234
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	175	387	52	332	942	347	137	716	150	126	1228	239
Added Vol:	17	28	40	0	18	12	9	29	9	6	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	415	92	332	960	359	146	745	159	132	1255	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	203	437	97	350	1013	378	154	786	168	140	1324	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	437	97	350	1013	378	154	786	168	140	1324	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	203	437	97	350	1013	378	154	786	168	140	1324	252
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.64	0.36	2.00	2.18	0.82	1.00	2.47	0.53	1.00	2.52	0.48
Final Sat.:	2880	2619	581	2880	3495	1305	1600	3956	844	1600	4033	767
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.12	0.29	0.29	0.10	0.20	0.20	0.09	0.33	0.33
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #4 7th Ave/Proctor Ave

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.644
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

****

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	85	548	82	96	922	218	30	72	56	59	113	59
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	87	559	84	98	940	222	31	73	57	60	115	60
Added Vol:	0	85	0	0	33	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	644	84	98	973	222	31	73	57	60	115	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	93	692	90	105	1047	239	33	79	61	65	124	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	692	90	105	1047	239	33	79	61	65	124	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	692	90	105	1047	239	33	79	61	65	124	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	1.00	1.63	0.37	1.00	1.13	0.87	1.00	1.31	0.69
Final Sat.:	1600	2832	368	1600	2605	595	1600	1800	1400	1600	2102	1098
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.07	0.40	0.40	0.02	0.04	0.04	0.04	0.06	0.06
Crit Moves:	****				****			****		****		

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.709
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	171	564	110	58	899	108	60	176	203	65	327	63
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	174	575	112	59	917	110	61	180	207	66	334	64
Added Vol:	0	76	21	21	11	1	6	7	0	3	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	174	651	133	80	928	111	67	187	207	69	335	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	177	660	135	81	940	113	68	189	210	70	339	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	660	135	81	940	113	68	189	210	70	339	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	660	135	81	940	113	68	189	210	70	339	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.66	0.34	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.67	0.33
Final Sat.:	1600	2657	543	1600	2858	342	1600	1600	1600	1600	2664	536
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.25	0.05	0.33	0.33	0.04	0.12	0.13	0.04	0.13	0.13
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	33	721	45	92	1036	26	52	51	117	47	39	185
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	34	735	46	94	1057	27	53	52	119	48	40	189
Added Vol:	0	98	0	0	14	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	833	46	94	1071	27	53	52	119	48	40	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	899	50	101	1155	29	57	56	129	52	43	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	899	50	101	1155	29	57	56	129	52	43	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	899	50	101	1155	29	57	56	129	52	43	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.95	0.05	1.00	0.30	0.70	1.00	0.17	0.83
Final Sat.:	1600	3033	167	1600	3123	77	1600	486	1114	1600	279	1321
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.30	0.06	0.37	0.37	0.04	0.12	0.12	0.03	0.15	0.15
Crit Moves:	****				****		****				****	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	62	881	231	395	700	307	81	603	513
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				65	927	243	416	737	323	85	635	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				72	1071	621	449	1646	1236	109	968	433
Arrive On Green				0.32	0.32	0.32	0.25	0.47	0.47	0.06	0.27	0.00
Sat Flow, veh/h				227	3394	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				531	461	243	416	737	323	85	635	0
Grp Sat Flow(s),veh/h/ln				1851	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				25.3	22.2	9.9	21.0	12.9	5.2	4.3	14.6	0.0
Cycle Q Clear(g_c), s				25.3	22.2	9.9	21.0	12.9	5.2	4.3	14.6	0.0
Prop In Lane				0.12		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				584	558	621	449	1646	1236	109	968	433
V/C Ratio(X)				0.91	0.83	0.39	0.93	0.45	0.26	0.78	0.66	0.00
Avail Cap(c_a), veh/h				604	577	638	476	1727	1272	204	1185	530
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				30.2	29.1	20.9	33.5	16.6	2.8	42.5	29.6	0.0
Incr Delay (d2), s/veh				17.4	9.4	0.4	23.5	0.2	0.1	11.2	1.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.6	12.2	4.5	13.2	6.4	5.5	2.5	7.3	0.0
LnGrp Delay(d),s/veh				47.6	38.5	21.3	57.0	16.8	2.9	53.7	30.5	0.0
LnGrp LOS				D	D	C	E	B	A	D	C	
Approach Vol, veh/h					1235			1476			720	
Approach Delay, s/veh					39.0			25.1			33.3	
Approach LOS					D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	10.2	47.8			27.8	30.2		34.0
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	10.6	44.9			24.7	30.8		30.0
Max Q Clear Time (g_c+I1), s	6.3	14.9			23.0	16.6		27.3
Green Ext Time (p_c), s	0.1	13.0			0.3	8.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	31.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	159	0	1394	649	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	167	0	1467	683	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1417	342	683	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	734	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	128	654	906	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	654	906	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	436	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	906	-	654	-	-
HCM Lane V/C Ratio	-	-	0.256	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[11.8]

****

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	446		83		439	268		0		0		0		0	0		0		836
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02		1.02		1.02	1.02		1.02		1.02
Initial Bse:	0	455		85		448	273		0		0		0		0	0		0		853
Added Vol:	0	6		0		5	1		0		0		0		0	0		0		58
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	461		85		453	274		0		0		0		0	0		0		911
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		0.00
PHF Adj:	0.94	0.94		0.94		0.94	0.94		0.94		0.94		0.94		0.94	0.94		0.94		0.00
PHF Volume:	0	490		90		481	292		0		0		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	490		90		481	292		0		0		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		580	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		490
Potent Cap.:	xxxx	xxxx		xxxxx		1004	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		582
Move Cap.:	xxxx	xxxx		xxxxx		1004	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		582
Volume/Cap:	xxxx	xxxx		xxxx		0.48	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.00
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		2.7	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx		11.8	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	*	*		*		B	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:		*					*						*					*		

****

Note: Queue reported is the number of cars per lane.

****

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	467	0	0	983	212	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.99	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3413	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3413	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	508	0	0	1068	230	20
RTOR Reduction (vph)	0	0	0	0	13	0
Lane Group Flow (vph)	508	0	0	1068	237	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	20.0			20.0	6.3	
Effective Green, g (s)	20.0			20.0	6.3	
Actuated g/C Ratio	0.56			0.56	0.18	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1977			1977	600	
v/s Ratio Prot	0.14			c0.30	c0.07	
v/s Ratio Perm						
v/c Ratio	0.26			0.54	0.39	
Uniform Delay, d1	4.1			5.0	13.1	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.1			0.3	0.4	
Delay (s)	4.1			5.3	13.5	
Level of Service	A			A	B	
Approach Delay (s)	4.1			5.3	13.5	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	6.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	35.8	Sum of lost time (s)	9.5
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	44	85	56	40	180	16	8	203	55	104	291	25
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	45	87	57	41	184	16	8	207	56	106	297	26
Added Vol:	0	0	63	0	0	0	0	41	0	9	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	87	120	41	184	16	8	248	56	115	311	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	55	105	146	50	223	20	10	301	68	140	378	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	105	146	50	223	20	10	301	68	140	378	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	105	146	50	223	20	10	301	68	140	378	31
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.34	0.48	1.00	0.92	0.08	1.00	0.82	0.18	1.00	0.92	0.08
Final Sat.:	285	551	764	1600	1469	131	1600	1305	295	1600	1479	121
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.03	0.15	0.15	0.01	0.23	0.23	0.09	0.26	0.26
Crit Moves:		****				****		****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #12 Caliornia Ave/Valley Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

****

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	2	2	1	208	4	112	55	1045	6	4	1514	124
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	2	2	1	212	4	114	56	1066	6	4	1544	126
Added Vol:	0	0	0	2	0	8	52	18	0	0	25	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	2	1	214	4	122	108	1084	6	4	1569	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	2	2	1	233	4	133	117	1178	7	4	1706	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	1	233	4	133	117	1178	7	4	1706	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	1	233	4	133	118	1178	7	4	1706	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.40	0.20	1.26	0.02	0.72	1.00	2.98	0.02	1.00	2.76	0.24
Final Sat.:	640	640	320	2013	38	1149	1600	4773	27	1600	4411	389
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.12	0.07	0.25	0.25	0.00	0.39	0.39
Crit Moves:			****		****		****				****	

****

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	7	21	3	143	1	265	258	856	14	2	1436	183
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	7	21	3	146	1	270	263	873	14	2	1465	187
Added Vol:	0	0	0	4	0	2	16	44	0	0	28	29
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	21	3	150	1	272	279	917	14	2	1493	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	8	23	3	158	1	286	294	964	15	2	1570	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	23	3	158	1	286	294	964	15	2	1570	227
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	23	3	158	1	286	294	964	15	2	1570	227
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.68	0.10	0.35	0.01	0.64	1.00	2.95	0.05	1.00	2.62	0.38
Final Sat.:	361	1084	155	567	4	1030	1600	4726	74	1600	4194	606
Capacity Analysis Module:												
Vol/Sat:	0.00	0.02	0.02	0.10	0.28	0.28	0.18	0.20	0.20	0.00	0.37	0.37
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

****

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	192	0	105	0	0	0	0	1149	260	15	1417	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	196	0	107	0	0	0	0	1172	265	15	1445	0
Added Vol:	0	0	0	0	0	0	0	60	0	0	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	0	107	0	0	0	0	1232	265	15	1475	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	220	0	120	0	0	0	0	1384	298	17	1658	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	0	120	0	0	0	0	1384	298	17	1658	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	220	0	120	0	0	0	0	1384	298	17	1658	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.02	1.98	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	33	3167	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.08	0.00	0.00	0.00	0.00	0.43	0.19	0.01	0.52	0.00
Crit Moves:	****						****				****	

****

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	1.096
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

****

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	12	2	54	184	8	443	330	1225	47	8	1303	256
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	12	2	55	188	8	452	337	1250	48	8	1329	261
Added Vol:	0	0	0	0	0	0	0	60	0	0	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	2	55	188	8	452	337	1310	48	8	1359	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	2	55	188	8	452	337	1310	48	8	1359	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	2	55	188	8	452	337	1310	48	8	1359	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	2	55	188	8	452	337	1310	48	8	1359	261
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.03	0.79	0.29	0.01	0.70	1.00	2.89	0.11	1.00	2.52	0.48
Final Sat.:	282	47	1271	464	20	1116	1600	4630	170	1600	4026	774
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.40	0.40	0.40	0.21	0.28	0.28	0.01	0.34	0.34
Crit Moves:		****			****		****				****	

****

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	446	1389	0	0	2060	92	77	447	332	56	0	1214
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	474	1478	0	0	2191	98	82	476	353	60	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	729	3080	0	0	2260	101	87	505	507	0	0	0
Arrive On Green	0.21	0.61	0.00	0.00	0.36	0.36	0.32	0.32	0.32	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6596	283	272	1577	1583		0	
Grp Volume(v), veh/h	474	1478	0	0	1662	627	558	0	353		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1813	1849	0	1583			
Q Serve(g_s), s	16.9	21.7	0.0	0.0	45.7	45.8	39.5	0.0	26.2			
Cycle Q Clear(g_c), s	16.9	21.7	0.0	0.0	45.7	45.8	39.5	0.0	26.2			
Prop In Lane	1.00		0.00	0.00		0.16	0.15		1.00			
Lane Grp Cap(c), veh/h	729	3080	0	0	1715	647	592	0	507			
V/C Ratio(X)	0.65	0.48	0.00	0.00	0.97	0.97	0.94	0.00	0.70			
Avail Cap(c_a), veh/h	837	3221	0	0	1715	647	613	0	525			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	48.5	14.7	0.0	0.0	42.5	42.6	44.5	0.0	40.0			
Incr Delay (d2), s/veh	1.5	0.1	0.0	0.0	15.1	27.9	22.9	0.0	3.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.2	10.2	0.0	0.0	22.5	27.8	23.9	0.0	12.0			
LnGrp Delay(d),s/veh	49.9	14.9	0.0	0.0	57.6	70.5	67.4	0.0	43.9			
LnGrp LOS	D	B			E	E	E		D			
Approach Vol, veh/h		1952			2289			911				
Approach Delay, s/veh		23.4			61.1			58.3				
Approach LOS		C			E			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		48.0		86.5			33.5	53.0
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		44.6		85.2			32.7	* 48
Max Q Clear Time (g_c+I1), s		41.5		23.7			18.9	47.8
Green Ext Time (p_c), s		1.5		20.9			9.6	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1094	129	0	1399	22	828
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1202	142	0	1537	24	910

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1202	0	1971	-
Stage 1	-	-	-	-	1202	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.6	-
Pot Cap-1 Maneuver	-	0	576	-	54	0
Stage 1	-	0	-	-	245	0
Stage 2	-	0	-	-	412	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	576	-	54	-
Mov Cap-2 Maneuver	-	-	-	-	54	-
Stage 1	-	-	-	-	245	-
Stage 2	-	-	-	-	412	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	117.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	54	-	-	576	-
HCM Lane V/C Ratio	0.448	-	-	-	-
HCM Control Delay (s)	117.3	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	285	0	0	368	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	0	0	400	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	710	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1250	-	400	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	400	730
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1250	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	285	0	0	368	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	0	0	400	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	710	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1250	-	400	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	400	730
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1250	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	285	0	0	368	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	0	0	400	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	710	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1250	-	400	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	400	730
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1250	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	285	0	0	368	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	0	0	400	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	310	0	710	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1250	-	400	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1250	-	400	730
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1250	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.044
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	169	1325	161	96	718	115	244	837	119	101	418	100
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	172	1352	164	98	732	117	249	854	121	103	426	102
Added Vol:	6	53	0	0	14	0	0	6	1	0	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	1405	164	98	746	117	249	860	122	103	454	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	183	1438	168	100	764	120	255	880	125	105	465	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	1438	168	100	764	120	255	880	125	105	465	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	1438	168	100	764	120	255	880	125	105	465	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.73	0.27	1.00	1.75	0.25	1.00	1.63	0.37
Final Sat.:	1600	2865	335	1600	2765	435	1600	2801	399	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.11	0.50	0.50	0.06	0.28	0.28	0.16	0.31	0.31	0.07	0.18	0.18
Crit Moves:		****		****				****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.973
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	62	1596	84	36	824	31	62	132	155	40	123	86
Added Vol:	1	28	3	3	11	2	13	9	9	24	1	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	1624	87	39	835	33	75	141	164	64	124	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	66	1696	90	40	872	34	79	147	171	67	130	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1696	90	40	872	34	79	147	171	67	130	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	1696	90	40	872	34	79	147	171	67	130	108
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.92	0.08	0.20	0.37	0.43	0.22	0.43	0.35
Final Sat.:	1600	3038	162	1600	3080	120	317	592	691	350	682	568
Capacity Analysis Module:												
Vol/Sat:	0.04	0.56	0.56	0.03	0.28	0.28	0.05	0.25	0.25	0.04	0.19	0.19
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.066
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	148	815	50	279	619	120	471	1238	134	109	752	392
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	151	831	51	285	631	122	480	1263	137	111	767	400
Added Vol:	10	19	6	0	29	14	14	30	18	42	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	850	57	285	660	136	494	1293	155	153	802	400
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	165	872	58	292	677	140	507	1326	159	157	823	410
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	872	58	292	677	140	507	1326	159	157	823	410
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	872	58	292	677	140	507	1326	159	157	823	410
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.87	0.13	2.00	2.49	0.51	1.00	2.68	0.32	1.00	2.00	1.00
Final Sat.:	2880	2999	201	2880	3978	822	1600	4287	513	1600	3203	1597
Capacity Analysis Module:												
Vol/Sat:	0.06	0.29	0.29	0.10	0.17	0.17	0.32	0.31	0.31	0.10	0.26	0.26
Crit Moves:		****		****			****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	70	976	146	53	717	118	64	152	97	104	80	80
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	71	996	149	54	731	120	65	155	99	106	82	82
Added Vol:	0	35	0	0	89	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1031	149	54	820	120	65	155	99	106	82	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	75	1087	157	57	865	127	69	164	104	112	86	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1087	157	57	865	127	69	164	104	112	86	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	1087	157	57	865	127	69	164	104	112	86	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.74	0.26	1.00	1.22	0.78	1.00	1.00	1.00
Final Sat.:	1600	2796	404	1600	2791	409	1600	1953	1247	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.39	0.39	0.04	0.31	0.31	0.04	0.08	0.08	0.07	0.05	0.05
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #5 7th Ave/Don Julian Rd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

****

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	152	945	90	45	807	76	157	346	284	109	211	56
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	155	964	92	46	823	78	160	353	290	111	215	57
Added Vol:	0	11	4	4	79	6	1	1	0	23	8	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	975	96	50	902	84	161	354	290	134	223	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	169	1064	105	54	985	91	176	386	316	146	244	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	1064	105	54	985	91	176	386	316	146	244	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	1064	105	54	985	91	176	386	316	146	244	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.83	0.17	1.00	1.10	0.90	1.00	1.47	0.53
Final Sat.:	1600	2914	286	1600	2929	271	1600	1760	1440	1600	2355	845
Capacity Analysis Module:												
Vol/Sat:	0.11	0.37	0.37	0.03	0.34	0.34	0.11	0.22	0.22	0.09	0.10	0.10
Crit Moves:	****				****			****		****		

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	104	1089	55	85	1163	57	39	54	59	52	49	80
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	106	1111	56	87	1186	58	40	55	60	53	50	82
Added Vol:	0	15	0	0	102	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	1126	56	87	1288	58	40	55	60	53	50	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	110	1164	58	90	1332	60	41	57	62	55	52	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1164	58	90	1332	60	41	57	62	55	52	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1164	58	90	1332	60	41	57	62	55	52	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.91	0.09	1.00	0.48	0.52	1.00	0.38	0.62
Final Sat.:	1600	3048	152	1600	3062	138	1600	765	835	1600	608	992
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.06	0.44	0.44	0.03	0.07	0.07	0.03	0.09	0.09
Crit Moves:	****				****		****				****	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	121	615	471	150	771	647	175	415	777
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				127	647	496	158	812	681	184	437	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				179	962	731	193	1336	1099	226	1402	627
Arrive On Green				0.32	0.32	0.32	0.11	0.38	0.38	0.13	0.40	0.00
Sat Flow, veh/h				565	3039	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				412	362	496	158	812	681	184	437	0
Grp Sat Flow(s),veh/h/ln				1835	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				16.1	14.3	19.5	7.1	15.0	18.7	8.2	6.9	0.0
Cycle Q Clear(g_c), s				16.1	14.3	19.5	7.1	15.0	18.7	8.2	6.9	0.0
Prop In Lane				0.31		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				581	560	731	193	1336	1099	226	1402	627
V/C Ratio(X)				0.71	0.65	0.68	0.82	0.61	0.62	0.81	0.31	0.00
Avail Cap(c_a), veh/h				678	654	818	212	1595	1215	413	1996	893
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				24.5	23.8	18.0	35.4	20.4	6.7	34.5	16.9	0.0
Incr Delay (d2), s/veh				2.9	1.7	2.0	20.2	0.5	0.8	7.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.6	7.2	9.2	4.6	7.4	15.4	4.4	3.4	0.0
LnGrp Delay(d),s/veh				27.3	25.6	19.9	55.6	20.9	7.5	41.5	17.0	0.0
LnGrp LOS				C	C	B	E	C	A	D	B	
Approach Vol, veh/h					1270			1651			621	
Approach Delay, s/veh					23.9			18.7			24.3	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	14.8	35.7			13.3	37.2		30.7
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	18.9	36.6			9.7	45.8		30.0
Max Q Clear Time (g_c+I1), s	10.2	20.7			9.1	8.9		21.5
Green Ext Time (p_c), s	0.3	9.9			0.0	15.7		4.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	12.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	659	0	1576	570	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	686	0	1642	594	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1415	297	594	0	-	0
Stage 1	594	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	128	699	978	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	393	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	699	978	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	393	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	978	-	699	-	-
HCM Lane V/C Ratio	-	-	0.982	-	-
HCM Control Delay (s)	0	-	54	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0	-	15.3	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.4]

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Street Name:	7th Ave						SR60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Lanes:	0 0	1 0	1	1 0	2 0	0	0 0	0 0	0	0 0	0 0	1
Volume Module:												
Base Vol:	0	223	31	216	851	0	0	0	0	0	0	1250
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	227	32	220	868	0	0	0	0	0	0	1275
Added Vol:	0	1	0	37	6	0	0	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	228	32	257	874	0	0	0	0	0	0	1291
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.00
PHF Volume:	0	235	32	264	898	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	235	32	264	898	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	267	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	235
Potent Cap.:	xxxx	xxxx	xxxxx	1308	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	809
Move Cap.:	xxxx	xxxx	xxxxx	1308	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	809
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

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Note: Queue reported is the number of cars per lane.

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	817	0	0	752	443	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.98	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3390	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3390	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	869	0	0	800	471	80
RTOR Reduction (vph)	0	0	0	0	38	0
Lane Group Flow (vph)	869	0	0	800	513	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	14.0			14.0	10.3	
Effective Green, g (s)	14.0			14.0	10.3	
Actuated g/C Ratio	0.41			0.41	0.30	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1465			1465	1033	
v/s Ratio Prot	c0.25			0.23	c0.15	
v/s Ratio Perm						
v/c Ratio	0.59			0.55	0.50	
Uniform Delay, d1	7.7			7.5	9.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.6			0.4	0.4	
Delay (s)	8.3			7.9	10.0	
Level of Service	A			A	B	
Approach Delay (s)	8.3			7.9	10.0	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	33.8	Sum of lost time (s)	9.5
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.929
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	98	380	175	29	116	11	20	185	38	55	147	22
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	100	388	179	30	118	11	20	189	39	56	150	22
Added Vol:	0	0	9	0	0	0	0	15	0	65	43	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	388	188	30	118	11	20	204	39	121	193	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	113	440	213	34	134	13	23	231	44	137	219	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	440	213	34	134	13	23	231	44	137	219	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	440	213	34	134	13	23	231	44	137	219	25
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.57	0.28	1.00	0.91	0.09	1.00	0.84	0.16	1.00	0.90	0.10
Final Sat.:	237	919	444	1600	1461	139	1600	1344	256	1600	1433	167
Capacity Analysis Module:												
Vol/Sat:	0.48	0.48	0.48	0.02	0.09	0.09	0.01	0.17	0.17	0.09	0.15	0.15
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	9	8	5	136	2	100	284	1404	14	6	1149	359
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	9	8	5	139	2	102	290	1432	14	6	1172	366
Added Vol:	0	0	0	12	0	54	8	29	0	0	23	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	8	5	151	2	156	298	1461	14	6	1195	368
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	10	9	5	161	2	167	319	1564	15	7	1279	394
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	9	5	161	2	167	319	1564	15	7	1279	394
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	9	5	161	2	167	319	1564	15	7	1279	394
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.36	0.23	1.00	0.01	0.99	1.00	2.97	0.03	1.00	2.29	0.71
Final Sat.:	655	582	364	1600	21	1579	1600	4754	46	1600	3669	1131
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.10	0.11	0.11	0.20	0.33	0.33	0.00	0.35	0.35
Crit Moves:		****			****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #13 Orange Ave/Valley Blvd

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	D

****

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	28	17	112	4	148	432	1619	5	11	874	245
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	13	29	17	114	4	151	441	1651	5	11	891	250
Added Vol:	0	0	0	30	0	17	2	32	0	0	55	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	29	17	144	4	168	443	1683	5	11	946	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	14	30	18	153	4	178	468	1781	5	12	1002	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	30	18	153	4	178	468	1781	5	12	1002	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	30	18	153	4	178	468	1781	5	12	1002	269
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.49	0.29	0.46	0.01	0.53	1.00	2.99	0.01	1.00	2.37	0.63
Final Sat.:	359	772	469	730	21	850	1600	4786	14	1600	3785	1015
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.10	0.21	0.21	0.29	0.37	0.37	0.01	0.26	0.26
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.858
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	319	0	365	0	0	0	0	1557	168	2	1032	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	325	0	372	0	0	0	0	1588	171	2	1053	0
Added Vol:	0	0	0	0	0	0	0	35	0	0	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	325	0	372	0	0	0	0	1623	171	2	1125	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	333	0	381	0	0	0	0	1660	175	2	1150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	333	0	381	0	0	0	0	1660	175	2	1150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	333	0	381	0	0	0	0	1660	175	2	1150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.01	1.99	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	6	3194	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.24	0.00	0.00	0.00	0.00	0.52	0.11	0.00	0.36	0.00
Crit Moves:			****					****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	5	53	163	7	312	342	1602	60	20	934	382
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	13	5	54	166	7	318	349	1634	61	20	953	390
Added Vol:	0	0	0	0	0	0	0	35	0	0	72	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	5	54	166	7	318	349	1669	61	20	1025	390
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	5	54	166	7	318	349	1669	61	20	1025	390
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	5	54	166	7	318	349	1669	61	20	1025	390
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	5	54	166	7	318	349	1669	61	20	1025	390
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.07	0.75	0.34	0.01	0.65	1.00	2.89	0.11	1.00	2.17	0.83
Final Sat.:	293	113	1194	541	23	1036	1600	4630	170	1600	3478	1322
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.31	0.31	0.31	0.22	0.36	0.36	0.01	0.29	0.29
Crit Moves:			****		****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	500	2009	0	0	1582	94	38	581	273	98	0	946
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	532	2137	0	0	1683	100	40	618	290	104	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	585	2619	0	0	1842	109	44	673	611	0	0	0
Arrive On Green	0.17	0.51	0.00	0.00	0.30	0.30	0.39	0.39	0.39	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6494	370	113	1744	1583		0	
Grp Volume(v), veh/h	532	2137	0	0	1298	485	658	0	290		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1797	1857	0	1583			
Q Serve(g_s), s	15.3	35.4	0.0	0.0	26.2	26.2	33.9	0.0	13.9			
Cycle Q Clear(g_c), s	15.3	35.4	0.0	0.0	26.2	26.2	33.9	0.0	13.9			
Prop In Lane	1.00		0.00	0.00		0.21	0.06		1.00			
Lane Grp Cap(c), veh/h	585	2619	0	0	1420	531	716	0	611			
V/C Ratio(X)	0.91	0.82	0.00	0.00	0.91	0.91	0.92	0.00	0.47			
Avail Cap(c_a), veh/h	585	2707	0	0	1432	536	778	0	664			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	41.0	20.4	0.0	0.0	34.2	34.2	29.4	0.0	23.3			
Incr Delay (d2), s/veh	18.4	2.0	0.0	0.0	9.2	20.2	15.2	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	16.9	0.0	0.0	12.8	15.9	20.4	0.0	6.1			
LnGrp Delay(d),s/veh	59.4	22.4	0.0	0.0	43.5	54.4	44.6	0.0	23.8			
LnGrp LOS	E	C			D	D	D		C			
Approach Vol, veh/h		2669			1783			948				
Approach Delay, s/veh		29.8			46.5			38.3				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		43.8		56.9			22.1	34.8
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		42.2		53.6			17.1	* 30
Max Q Clear Time (g_c+I1), s		35.9		37.4			17.3	28.2
Green Ext Time (p_c), s		2.9		13.8			0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1582	118	0	1099	15	1018
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1665	124	0	1157	16	1072

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1665	0	2243	-
Stage 1	-	-	-	-	1665	-
Stage 2	-	-	-	-	578	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	382	-	36	0
Stage 1	-	0	-	-	139	0
Stage 2	-	0	-	-	524	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	382	-	36	-
Mov Cap-2 Maneuver	-	-	-	-	36	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	167.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	36	-	-	382	-
HCM Lane V/C Ratio	0.439	-	-	-	-
HCM Control Delay (s)	167.6	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	280	0	0	292	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	0	0	317	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	621	304
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1257	-	451	736
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1257	-	451	736
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1257	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	280	0	0	292	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	0	0	317	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	621	304
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1257	-	451	736
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1257	-	451	736
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1257	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	280	0	0	292	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	0	0	317	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	621	304
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1257	-	451	736
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1257	-	451	736
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1257	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	280	0	0	292	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	0	0	317	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	304	0	621	304
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	317	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1257	-	451	736
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1257	-	451	736
Mov Cap-2 Maneuver	-	-	-	-	451	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1257	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Appendix H – Opening Year 2018 With Project Conditions Intersection Analysis Worksheets

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Sunset Ave/Temple Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.988
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	117	443	40	54	1162	116	93	384	188	206	748	66
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	119	452	41	55	1185	118	95	392	192	210	763	67
Added Vol:	1	11	0	0	58	0	0	26	8	0	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	463	41	55	1243	118	95	418	200	210	769	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	130	498	44	59	1338	127	102	450	215	226	828	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	498	44	59	1338	127	102	450	215	226	828	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	498	44	59	1338	127	102	450	215	226	828	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.83	0.17	1.00	1.35	0.65	1.00	1.84	0.16
Final Sat.:	1600	2941	259	1600	2922	278	1600	2165	1035	1600	2942	258
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.04	0.46	0.46	0.06	0.21	0.21	0.14	0.28	0.28
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.994
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	91	579	67	30	1437	94	24	133	192	106	193	54
Added Vol:	8	6	81	28	25	12	2	1	1	18	8	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	585	148	58	1462	106	26	134	193	124	201	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	104	616	156	61	1538	111	28	140	203	130	211	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	616	156	61	1538	111	28	140	203	130	211	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	616	156	61	1538	111	28	140	203	130	211	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.87	0.13	0.07	0.38	0.55	0.32	0.53	0.15
Final Sat.:	1600	2553	647	1600	2984	216	120	606	874	517	837	246
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.04	0.52	0.52	0.02	0.23	0.23	0.08	0.25	0.25
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Mitigation Measures

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.976
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	89	568	66	29	1409	92	24	130	188	104	189	53
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	91	579	67	30	1437	94	24	133	192	106	193	54
Added Vol:	8	6	81	28	25	12	2	1	1	18	8	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	585	148	58	1462	106	26	134	193	124	201	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	104	616	156	61	1538	111	28	140	203	130	211	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	616	156	61	1538	111	28	140	203	130	211	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	616	156	61	1538	111	28	140	203	130	211	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.87	0.13	1.00	0.41	0.59	1.00	0.77	0.23
Final Sat.:	1600	2553	647	1600	2984	216	1600	655	945	1600	1236	364
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.04	0.52	0.52	0.02	0.21	0.21	0.08	0.17	0.17
Crit Moves:	****				****			****		****		

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	172	379	51	325	924	340	134	702	147	124	1204	234
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	175	387	52	332	942	347	137	716	150	126	1228	239
Added Vol:	17	63	40	2	26	15	23	29	9	6	27	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	450	92	334	968	362	160	745	159	132	1255	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	203	474	97	352	1022	382	168	786	168	140	1324	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	474	97	352	1022	382	168	786	168	140	1324	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	203	474	97	352	1022	382	168	786	168	140	1324	261
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.66	0.34	2.00	2.18	0.82	1.00	2.47	0.53	1.00	2.51	0.49
Final Sat.:	2880	2656	544	2880	3495	1305	1600	3956	844	1600	4009	791
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.12	0.29	0.29	0.11	0.20	0.20	0.09	0.33	0.33
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	85	548	82	96	922	218	30	72	56	59	113	59
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	87	559	84	98	940	222	31	73	57	60	115	60
Added Vol:	0	120	0	0	42	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	679	84	98	982	222	31	73	57	60	115	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	93	730	90	105	1056	239	33	79	61	65	124	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	730	90	105	1056	239	33	79	61	65	124	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	730	90	105	1056	239	33	79	61	65	124	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.78	0.22	1.00	1.63	0.37	1.00	1.13	0.87	1.00	1.31	0.69
Final Sat.:	1600	2849	351	1600	2609	591	1600	1800	1400	1600	2102	1098
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.07	0.40	0.40	0.02	0.04	0.04	0.04	0.06	0.06
Crit Moves:	****				****			****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	171	564	110	58	899	108	60	176	203	65	327	63
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	174	575	112	59	917	110	61	180	207	66	334	64
Added Vol:	0	107	21	21	18	2	10	7	0	3	1	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	174	682	133	80	935	112	71	187	207	69	335	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	177	691	135	81	947	114	72	189	210	70	339	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	691	135	81	947	114	72	189	210	70	339	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	691	135	81	947	114	72	189	210	70	339	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.79	0.21	1.00	1.00	1.00	1.00	1.67	0.33
Final Sat.:	1600	2677	523	1600	2857	343	1600	1600	1600	1600	2664	536
Capacity Analysis Module:												
Vol/Sat:	0.11	0.26	0.26	0.05	0.33	0.33	0.05	0.12	0.13	0.04	0.13	0.13
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 7th Ave/Clark Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.685
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	33	721	45	92	1036	26	52	51	117	47	39	185
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	34	735	46	94	1057	27	53	52	119	48	40	189
Added Vol:	0	128	0	0	22	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	863	46	94	1079	27	53	52	119	48	40	189
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	36	931	50	101	1164	29	57	56	129	52	43	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	931	50	101	1164	29	57	56	129	52	43	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	931	50	101	1164	29	57	56	129	52	43	204
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.95	0.05	1.00	0.30	0.70	1.00	0.17	0.83
Final Sat.:	1600	3038	162	1600	3123	77	1600	486	1114	1600	279	1321
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.31	0.06	0.37	0.37	0.04	0.12	0.12	0.03	0.15	0.15
Crit Moves:	****				****		****				****	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	62	881	243	395	719	307	81	607	517
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				65	927	256	416	757	323	85	639	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				71	1069	620	449	1650	1237	109	972	435
Arrive On Green				0.32	0.32	0.32	0.25	0.47	0.47	0.06	0.27	0.00
Sat Flow, veh/h				227	3394	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				531	461	256	416	757	323	85	639	0
Grp Sat Flow(s),veh/h/ln				1851	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				25.4	22.3	10.6	21.1	13.4	5.2	4.4	14.8	0.0
Cycle Q Clear(g_c), s				25.4	22.3	10.6	21.1	13.4	5.2	4.4	14.8	0.0
Prop In Lane				0.12		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				583	558	620	449	1650	1237	109	972	435
V/C Ratio(X)				0.91	0.83	0.41	0.93	0.46	0.26	0.78	0.66	0.00
Avail Cap(c_a), veh/h				602	575	637	475	1717	1267	206	1181	528
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				30.4	29.3	21.2	33.6	16.7	2.8	42.7	29.6	0.0
Incr Delay (d2), s/veh				17.7	9.5	0.4	23.7	0.2	0.1	11.2	1.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.8	12.4	4.9	13.2	6.6	5.5	2.5	7.3	0.0
LnGrp Delay(d),s/veh				48.0	38.8	21.7	57.3	16.9	2.9	53.9	30.6	0.0
LnGrp LOS				D	D	C	E	B	A	D	C	
Approach Vol, veh/h					1248			1496			724	
Approach Delay, s/veh					39.2			25.1			33.3	
Approach LOS					D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	10.2	48.0			27.9	30.4		34.1
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	10.7	44.8			24.7	30.8		30.0
Max Q Clear Time (g_c+I1), s	6.4	15.4			23.1	16.8		27.4
Green Ext Time (p_c), s	0.1	13.1			0.2	8.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	159	0	1413	653	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	167	0	1487	687	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1431	344	687	0	-	0
Stage 1	687	-	-	-	-	-
Stage 2	744	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	125	652	903	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	125	652	903	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	903	-	652	-	-
HCM Lane V/C Ratio	-	-	0.257	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[11.9]

****

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	446		83		439	268		0		0		0		0	0		0		836
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	0	455		85		448	273		0		0		0		0	0		0		853
Added Vol:	0	10		0		8	2		0		0		0		0	0		0		72
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	465		85		456	275		0		0		0		0	0		0		925
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Adj:	0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.00	
PHF Volume:	0	494		90		484	293		0		0		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	494		90		484	293		0		0		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		584	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		494	
Potent Cap.:	xxxx	xxxx		xxxxx		1000	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		579	
Move Cap.:	xxxx	xxxx		xxxxx		1000	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		579	
Volume/Cap:	xxxx	xxxx		xxxx		0.48	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		2.7	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		11.9	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
LOS by Move:	*	*		*		B	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:		*					*					*					*			

****

Note: Queue reported is the number of cars per lane.

****

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	467	0	0	983	224	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.99	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3415	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3415	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	508	0	0	1068	243	20
RTOR Reduction (vph)	0	0	0	0	12	0
Lane Group Flow (vph)	508	0	0	1068	251	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	19.2			19.2	8.5	
Effective Green, g (s)	19.2			19.2	8.5	
Actuated g/C Ratio	0.52			0.52	0.23	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1826			1826	780	
v/s Ratio Prot	0.14			c0.30	c0.07	
v/s Ratio Perm						
v/c Ratio	0.28			0.58	0.32	
Uniform Delay, d1	5.1			6.2	12.0	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.1			0.5	0.2	
Delay (s)	5.2			6.7	12.2	
Level of Service	A			A	B	
Approach Delay (s)	5.2			6.7	12.2	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	37.2	Sum of lost time (s)	9.5
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	44	85	56	40	180	16	8	203	55	104	291	25
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	45	87	57	41	184	16	8	207	56	106	297	26
Added Vol:	0	0	63	0	0	0	0	42	0	9	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	87	120	41	184	16	8	249	56	115	316	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
PHF Volume:	55	105	146	50	223	20	10	303	68	140	384	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	105	146	50	223	20	10	303	68	140	384	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	105	146	50	223	20	10	303	68	140	384	31
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.34	0.48	1.00	0.92	0.08	1.00	0.82	0.18	1.00	0.93	0.07
Final Sat.:	285	551	764	1600	1469	131	1600	1306	294	1600	1480	120
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.03	0.15	0.15	0.01	0.23	0.23	0.09	0.26	0.26
Crit Moves:		****				****		****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	2	2	1	208	4	112	55	1045	6	4	1514	124
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	2	2	1	212	4	114	56	1066	6	4	1544	126
Added Vol:	0	0	0	2	0	8	52	20	0	0	34	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	2	1	214	4	122	108	1086	6	4	1578	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	2	2	1	233	4	133	117	1180	7	4	1716	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	2	1	233	4	133	117	1180	7	4	1716	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	2	1	233	4	133	118	1180	7	4	1716	151
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.40	0.40	0.20	1.26	0.02	0.72	1.00	2.98	0.02	1.00	2.76	0.24
Final Sat.:	640	640	320	2013	38	1149	1600	4773	27	1600	4413	387
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.12	0.07	0.25	0.25	0.00	0.39	0.39
Crit Moves:			****		****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	7	21	3	143	1	265	258	856	14	2	1436	183
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	7	21	3	146	1	270	263	873	14	2	1465	187
Added Vol:	0	0	0	4	0	2	16	57	0	0	31	29
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	21	3	150	1	272	279	930	14	2	1496	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	8	23	3	158	1	286	294	978	15	2	1573	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	23	3	158	1	286	294	978	15	2	1573	227
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	23	3	158	1	286	294	978	15	2	1573	227
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.68	0.10	0.35	0.01	0.64	1.00	2.95	0.05	1.00	2.62	0.38
Final Sat.:	361	1084	155	567	4	1030	1600	4727	73	1600	4195	605
Capacity Analysis Module:												
Vol/Sat:	0.00	0.02	0.02	0.10	0.28	0.28	0.18	0.21	0.21	0.00	0.37	0.37
Crit Moves:	****				****		****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	192	0	105	0	0	0	0	1149	260	15	1417	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	196	0	107	0	0	0	0	1172	265	15	1445	0
Added Vol:	0	0	0	0	0	0	0	74	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	0	107	0	0	0	0	1246	265	15	1478	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	220	0	120	0	0	0	0	1400	298	17	1661	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	0	120	0	0	0	0	1400	298	17	1661	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	220	0	120	0	0	0	0	1400	298	17	1661	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.02	1.98	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	33	3167	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.08	0.00	0.00	0.00	0.00	0.44	0.19	0.01	0.52	0.00
Crit Moves:	****						****				****	

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.097
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	12	2	54	184	8	443	330	1225	47	8	1303	256
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	12	2	55	188	8	452	337	1250	48	8	1329	261
Added Vol:	0	0	0	0	0	0	0	74	0	0	33	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	2	55	188	8	452	337	1324	48	8	1362	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	2	55	188	8	452	337	1324	48	8	1362	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	2	55	188	8	452	337	1324	48	8	1362	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	2	55	188	8	452	337	1324	48	8	1362	261
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.03	0.79	0.29	0.01	0.70	1.00	2.90	0.10	1.00	2.52	0.48
Final Sat.:	282	47	1271	464	20	1116	1600	4632	168	1600	4028	772
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.40	0.40	0.40	0.21	0.29	0.29	0.01	0.34	0.34
Crit Moves:		****			****		****				****	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	446	1400	0	0	2063	92	77	447	335	56	0	1214
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	474	1489	0	0	2195	98	82	476	356	60	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	730	3081	0	0	2260	101	87	505	506	0	0	0
Arrive On Green	0.21	0.61	0.00	0.00	0.36	0.36	0.32	0.32	0.32	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6597	283	272	1577	1583		0	
Grp Volume(v), veh/h	474	1489	0	0	1665	628	558	0	356		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1813	1849	0	1583			
Q Serve(g_s), s	16.9	22.0	0.0	0.0	45.9	45.9	39.6	0.0	26.6			
Cycle Q Clear(g_c), s	16.9	22.0	0.0	0.0	45.9	45.9	39.6	0.0	26.6			
Prop In Lane	1.00		0.00	0.00		0.16	0.15		1.00			
Lane Grp Cap(c), veh/h	730	3081	0	0	1714	647	591	0	506			
V/C Ratio(X)	0.65	0.48	0.00	0.00	0.97	0.97	0.94	0.00	0.70			
Avail Cap(c_a), veh/h	836	3219	0	0	1714	647	613	0	525			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	48.5	14.8	0.0	0.0	42.6	42.6	44.6	0.0	40.2			
Incr Delay (d2), s/veh	1.5	0.1	0.0	0.0	15.4	28.4	22.9	0.0	4.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.2	10.2	0.0	0.0	22.6	28.1	23.9	0.0	12.1			
LnGrp Delay(d),s/veh	49.9	14.9	0.0	0.0	58.0	71.0	67.5	0.0	44.2			
LnGrp LOS	D	B			E	E	E		D			
Approach Vol, veh/h		1963			2293			914				
Approach Delay, s/veh		23.4			61.6			58.4				
Approach LOS		C			E			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		48.0		86.5			33.5	53.0
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		44.6		85.2			32.7	* 48
Max Q Clear Time (g_c+I1), s		41.6		24.0			18.9	47.9
Green Ext Time (p_c), s		1.5		21.1			9.6	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1096	129	0	1400	22	836
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1204	142	0	1538	24	919

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1204	0	1973	-
Stage 1	-	-	-	-	1204	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	575	-	54	0
Stage 1	-	0	-	-	247	0
Stage 2	-	0	-	-	418	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	575	-	54	-
Mov Cap-2 Maneuver	-	-	-	-	54	-
Stage 1	-	-	-	-	247	-
Stage 2	-	-	-	-	418	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	117.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	54	-	-	575	-
HCM Lane V/C Ratio	0.448	-	-	-	-
HCM Control Delay (s)	117.3	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	341	13	0	378	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	371	14	0	411	9	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	385	0	789	378
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	411	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1173	-	359	669
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1173	-	359	669
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	693	-
Stage 2	-	-	-	-	669	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	359	-	-	1173	-
HCM Lane V/C Ratio	0.024	-	-	-	-
HCM Control Delay (s)	15.3	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	332	9	0	373	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	361	10	0	405	5	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	371	0	771	366
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1188	-	368	679
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1188	-	368	679
Mov Cap-2 Maneuver	-	-	-	-	368	-
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	368	-	-	1188	-
HCM Lane V/C Ratio	0.015	-	-	-	-
HCM Control Delay (s)	14.9	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	316	16	4	370	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	343	17	4	402	2	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	361	0	763	352
Stage 1	-	-	-	-	352	-
Stage 2	-	-	-	-	411	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1198	-	372	692
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	669	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1198	-	371	692
Mov Cap-2 Maneuver	-	-	-	-	371	-
Stage 1	-	-	-	-	712	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	371	-	-	1198	-
HCM Lane V/C Ratio	0.006	-	-	0.004	-
HCM Control Delay (s)	14.8	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	285	31	0	373	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	310	34	0	405	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	343	0	732	327
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1216	-	388	714
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	673	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1216	-	388	714
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	673	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	458	-	-	1216	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	12.9	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #1 Sunset Ave/Temple Ave

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Cycle (sec):	100	Critical Vol./Cap.(X):	1.048
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

****

Street Name:	Sunset Ave						Temple Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Prot+Permit			Prot+Permit			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	169	1325	161	96	718	115	244	837	119	101	418	100
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	172	1352	164	98	732	117	249	854	121	103	426	102
Added Vol:	8	62	0	0	17	0	0	6	2	0	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	1414	164	98	749	117	249	860	123	103	454	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	185	1447	168	100	767	120	255	880	126	105	465	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	1447	168	100	767	120	255	880	126	105	465	104
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	185	1447	168	100	767	120	255	880	126	105	465	104
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.73	0.27	1.00	1.75	0.25	1.00	1.63	0.37
Final Sat.:	1600	2867	333	1600	2767	433	1600	2798	402	1600	2613	587
Capacity Analysis Module:												
Vol/Sat:	0.12	0.50	0.50	0.06	0.28	0.28	0.16	0.31	0.31	0.07	0.18	0.18
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	1.018
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	62	1596	84	36	824	31	62	132	155	40	123	86
Added Vol:	1	28	23	6	11	2	13	9	9	81	1	29
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	1624	107	42	835	33	75	141	164	121	124	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	66	1696	111	44	872	34	79	147	171	126	130	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1696	111	44	872	34	79	147	171	126	130	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	1696	111	44	872	34	79	147	171	126	130	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.92	0.08	0.20	0.37	0.43	0.33	0.35	0.32
Final Sat.:	1600	3003	197	1600	3080	120	317	592	691	537	553	510
Capacity Analysis Module:												
Vol/Sat:	0.04	0.56	0.56	0.03	0.28	0.28	0.05	0.25	0.25	0.08	0.23	0.23
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Mitigation Measures

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Sunset Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.969
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	Sunset Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	61	1565	82	35	808	30	61	129	152	39	121	84
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	62	1596	84	36	824	31	62	132	155	40	123	86
Added Vol:	1	28	23	6	11	2	13	9	9	81	1	29
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	1624	107	42	835	33	75	141	164	121	124	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	66	1696	111	44	872	34	79	147	171	126	130	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1696	111	44	872	34	79	147	171	126	130	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	1696	111	44	872	34	79	147	171	126	130	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	1.92	0.08	1.00	0.46	0.54	1.00	0.52	0.48
Final Sat.:	1600	3003	197	1600	3080	120	1600	738	862	1600	833	767
Capacity Analysis Module:												
Vol/Sat:	0.04	0.56	0.56	0.03	0.28	0.28	0.05	0.20	0.20	0.08	0.16	0.16
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Sunset Ave-7th Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.076
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	F

Street Name:	Sunset Ave-7th Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	2 0	2 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	148	815	50	279	619	120	471	1238	134	109	752	392
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	151	831	51	285	631	122	480	1263	137	111	767	400
Added Vol:	10	31	6	9	64	28	19	30	18	42	35	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	862	57	294	695	150	499	1293	155	153	802	403
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	165	884	58	301	713	154	512	1326	159	157	823	413
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	884	58	301	713	154	512	1326	159	157	823	413
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	884	58	301	713	154	512	1326	159	157	823	413
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	0.90	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.88	0.12	2.00	2.47	0.53	1.00	2.68	0.32	1.00	2.00	1.00
Final Sat.:	2880	3002	198	2880	3946	854	1600	4287	513	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.29	0.29	0.10	0.18	0.18	0.32	0.31	0.31	0.10	0.26	0.26
Crit Moves:		****		****			****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 7th Ave/Proctor Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	7th Ave						Proctor Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	70	976	146	53	717	118	64	152	97	104	80	80
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	71	996	149	54	731	120	65	155	99	106	82	82
Added Vol:	0	47	0	0	124	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1043	149	54	855	120	65	155	99	106	82	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	75	1100	157	57	902	127	69	164	104	112	86	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1100	157	57	902	127	69	164	104	112	86	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	75	1100	157	57	902	127	69	164	104	112	86	86
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.75	0.25	1.00	1.22	0.78	1.00	1.00	1.00
Final Sat.:	1600	2800	400	1600	2805	395	1600	1953	1247	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.39	0.39	0.04	0.32	0.32	0.04	0.08	0.08	0.07	0.05	0.05
Crit Moves:		****		****				****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 7th Ave/Don Julian Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.865
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	7th Ave						Don Julian Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	152	945	90	45	807	76	157	346	284	109	211	56
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	155	964	92	46	823	78	160	353	290	111	215	57
Added Vol:	0	22	4	4	110	10	2	1	0	23	8	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	986	96	50	933	88	162	354	290	134	223	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	169	1076	105	54	1019	96	177	386	316	146	244	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	1076	105	54	1019	96	177	386	316	146	244	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	1076	105	54	1019	96	177	386	316	146	244	87
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.83	0.17	1.00	1.10	0.90	1.00	1.47	0.53
Final Sat.:	1600	2917	283	1600	2926	274	1600	1760	1440	1600	2355	845
Capacity Analysis Module:												
Vol/Sat:	0.11	0.37	0.37	0.03	0.35	0.35	0.11	0.22	0.22	0.09	0.10	0.10
Crit Moves:	****				****			****			****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #6 7th Ave/Clark Ave

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

****

Street Name:	7th Ave						Clark Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	104	1089	55	85	1163	57	39	54	59	52	49	80
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	106	1111	56	87	1186	58	40	55	60	53	50	82
Added Vol:	0	25	0	0	133	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	1136	56	87	1319	58	40	55	60	53	50	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	110	1175	58	90	1364	60	41	57	62	55	52	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1175	58	90	1364	60	41	57	62	55	52	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	1175	58	90	1364	60	41	57	62	55	52	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.92	0.08	1.00	0.48	0.52	1.00	0.38	0.62
Final Sat.:	1600	3049	151	1600	3065	135	1600	765	835	1600	608	992
Capacity Analysis Module:												
Vol/Sat:	0.07	0.39	0.39	0.06	0.45	0.45	0.03	0.07	0.07	0.03	0.09	0.09
Crit Moves:	****				****		****				****	

****

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	121	615	475	150	777	647	175	431	792
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1937	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h				127	647	500	158	818	681	184	454	0
Adj No. of Lanes				0	2	1	1	2	1	1	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	2	2	2	2
Cap, veh/h				173	929	711	192	1440	1128	224	1502	672
Arrive On Green				0.31	0.31	0.31	0.11	0.41	0.41	0.13	0.42	0.00
Sat Flow, veh/h				565	3039	1647	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h				412	362	500	158	818	681	184	454	0
Grp Sat Flow(s),veh/h/ln				1835	1770	1647	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s				18.1	16.0	22.2	7.8	16.0	19.5	9.1	7.6	0.0
Cycle Q Clear(g_c), s				18.1	16.0	22.2	7.8	16.0	19.5	9.1	7.6	0.0
Prop In Lane				0.31		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h				561	541	711	192	1440	1128	224	1502	672
V/C Ratio(X)				0.74	0.67	0.70	0.82	0.57	0.60	0.82	0.30	0.00
Avail Cap(c_a), veh/h				613	591	758	247	2109	1428	435	2484	1111
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				27.9	27.2	20.8	39.2	20.5	6.5	38.2	17.1	0.0
Incr Delay (d2), s/veh				4.2	2.6	2.7	15.7	0.4	0.5	7.4	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.8	8.2	10.5	4.7	7.9	16.8	4.9	3.7	0.0
LnGrp Delay(d),s/veh				32.1	29.8	23.6	54.9	20.9	7.0	45.6	17.2	0.0
LnGrp LOS				C	C	C	D	C	A	D	B	
Approach Vol, veh/h					1274			1657			638	
Approach Delay, s/veh					28.1			18.4			25.4	
Approach LOS					C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	15.8	41.5			14.2	43.1		32.4
Change Period (Y+Rc), s	4.5	5.0			4.5	5.0		5.0
Max Green Setting (Gmax), s	22.0	53.5			12.5	63.0		30.0
Max Q Clear Time (g_c+I1), s	11.1	21.5			9.8	9.6		24.2
Green Ext Time (p_c), s	0.4	15.0			0.1	17.9		3.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	12.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	659	0	1583	586	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	686	0	1649	610	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1434	305	610	0	-	0
Stage 1	610	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Critical Hdwy	6.84	6.8	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	125	699	965	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	125	699	965	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	391	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	965	-	699	-	-
HCM Lane V/C Ratio	-	-	0.982	-	-
HCM Control Delay (s)	0	-	54	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0	-	15.3	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.5]

****

Street Name:	7th Ave						SR60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Lanes:	0 0 1 0 1			1 0 2 0 0			0 0 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	223	31	216	851	0	0	0	0	0	0	1250
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	0	227	32	220	868	0	0	0	0	0	0	1275
Added Vol:	0	2	0	48	10	0	0	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	229	32	268	878	0	0	0	0	0	0	1296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.00
PHF Volume:	0	236	32	276	902	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	236	32	276	902	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	268	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	236
Potent Cap.:	xxxx	xxxx	xxxxx	1307	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	808
Move Cap.:	xxxx	xxxx	xxxxx	1307	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	808
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	817	0	0	752	447	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			5.0	4.5	
Lane Util. Factor	0.95			0.95	0.97	
Frt	1.00			1.00	0.98	
Flt Protected	1.00			1.00	0.96	
Satd. Flow (prot)	3539			3539	3391	
Flt Permitted	1.00			1.00	0.96	
Satd. Flow (perm)	3539			3539	3391	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	869	0	0	800	476	80
RTOR Reduction (vph)	0	0	0	0	38	0
Lane Group Flow (vph)	869	0	0	800	518	0
Turn Type	NA			NA	Prot	
Protected Phases	4			8	2	
Permitted Phases						
Actuated Green, G (s)	14.0			14.0	10.4	
Effective Green, g (s)	14.0			14.0	10.4	
Actuated g/C Ratio	0.41			0.41	0.31	
Clearance Time (s)	5.0			5.0	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	1461			1461	1040	
v/s Ratio Prot	c0.25			0.23	c0.15	
v/s Ratio Perm						
v/c Ratio	0.59			0.55	0.50	
Uniform Delay, d1	7.7			7.5	9.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			0.4	0.4	
Delay (s)	8.4			8.0	10.0	
Level of Service	A			A	A	
Approach Delay (s)	8.4			8.0	10.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	33.9	Sum of lost time (s)	9.5
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 California Ave/Nelson Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.932
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

Street Name:	California Ave						Nelson Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Permitted			Permit+Prot		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	98	380	175	29	116	11	20	185	38	55	147	22
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	100	388	179	30	118	11	20	189	39	56	150	22
Added Vol:	0	0	9	0	0	0	0	19	0	65	44	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	388	188	30	118	11	20	208	39	121	194	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	113	440	213	34	134	13	23	236	44	137	220	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	440	213	34	134	13	23	236	44	137	220	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	440	213	34	134	13	23	236	44	137	220	25
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.57	0.28	1.00	0.91	0.09	1.00	0.84	0.16	1.00	0.90	0.10
Final Sat.:	237	919	444	1600	1461	139	1600	1348	252	1600	1434	166
Capacity Analysis Module:												
Vol/Sat:	0.48	0.48	0.48	0.02	0.09	0.09	0.01	0.17	0.17	0.09	0.15	0.15
Crit Moves:	****				****			****			****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Caliornia Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	California Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	1 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	9	8	5	136	2	100	284	1404	14	6	1149	359
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	9	8	5	139	2	102	290	1432	14	6	1172	366
Added Vol:	0	0	0	12	0	54	8	37	0	0	26	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	8	5	151	2	156	298	1469	14	6	1198	368
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	10	9	5	161	2	167	319	1573	15	7	1283	394
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	9	5	161	2	167	319	1573	15	7	1283	394
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	9	5	161	2	167	319	1573	15	7	1283	394
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.41	0.36	0.23	1.00	0.01	0.99	1.00	2.97	0.03	1.00	2.29	0.71
Final Sat.:	655	582	364	1600	21	1579	1600	4754	46	1600	3672	1128
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.10	0.11	0.11	0.20	0.33	0.33	0.00	0.35	0.35
Crit Moves:		****			****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Orange Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	D

Street Name:	Orange Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	28	17	112	4	148	432	1619	5	11	874	245
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	13	29	17	114	4	151	441	1651	5	11	891	250
Added Vol:	0	0	0	30	0	17	2	37	0	0	69	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	29	17	144	4	168	443	1688	5	11	960	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	14	30	18	153	4	178	468	1787	5	12	1016	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	30	18	153	4	178	468	1787	5	12	1016	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	30	18	153	4	178	468	1787	5	12	1016	269
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.22	0.49	0.29	0.46	0.01	0.53	1.00	2.99	0.01	1.00	2.37	0.63
Final Sat.:	359	772	469	730	21	850	1600	4786	14	1600	3796	1004
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.10	0.21	0.21	0.29	0.37	0.37	0.01	0.27	0.27
Crit Moves:	****				****		****				****	

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Puente Ave-Workman Mill Rd/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Puente Ave-Workman MIll Rd						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	0 1	1 0	0
Volume Module:												
Base Vol:	319	0	365	0	0	0	0	1557	168	2	1032	0
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	325	0	372	0	0	0	0	1588	171	2	1053	0
Added Vol:	0	0	0	0	0	0	0	40	0	0	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	325	0	372	0	0	0	0	1628	171	2	1139	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	333	0	381	0	0	0	0	1665	175	2	1164	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	333	0	381	0	0	0	0	1665	175	2	1164	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	333	0	381	0	0	0	0	1665	175	2	1164	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	0.01	1.99	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	6	3194	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.24	0.00	0.00	0.00	0.00	0.52	0.11	0.00	0.36	0.00
Crit Moves:			****					****		****		

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #15 Vineland Ave-2nd Ave/Valley Blvd

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.968
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	E

****

Street Name:	Vineland Ave-2nd Ave						Valley Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	13	5	53	163	7	312	342	1602	60	20	934	382
Growth Adj:	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Initial Bse:	13	5	54	166	7	318	349	1634	61	20	953	390
Added Vol:	0	0	0	0	0	0	0	40	0	0	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	5	54	166	7	318	349	1674	61	20	1039	390
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	5	54	166	7	318	349	1674	61	20	1039	390
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	5	54	166	7	318	349	1674	61	20	1039	390
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	5	54	166	7	318	349	1674	61	20	1039	390
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.07	0.75	0.34	0.01	0.65	1.00	2.89	0.11	1.00	2.18	0.82
Final Sat.:	293	113	1194	541	23	1036	1600	4631	169	1600	3491	1309
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.31	0.31	0.31	0.22	0.36	0.36	0.01	0.30	0.30
Crit Moves:			****		****		****				****	

****

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	500	2013	0	0	1596	94	38	581	274	98	0	946
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863	1863	0	1863
Adj Flow Rate, veh/h	532	2141	0	0	1698	100	40	618	291	104	0	0
Adj No. of Lanes	2	3	0	0	4	0	0	1	1	1	0	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	617	2675	0	0	1868	110	43	662	601	0	0	0
Arrive On Green	0.18	0.53	0.00	0.00	0.30	0.30	0.38	0.38	0.38	0.00	0.00	0.00
Sat Flow, veh/h	3442	5253	0	0	6497	367	113	1744	1583		0	
Grp Volume(v), veh/h	532	2141	0	0	1308	490	658	0	291		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1798	1857	0	1583			
Q Serve(g_s), s	15.9	36.4	0.0	0.0	27.7	27.7	36.0	0.0	14.8			
Cycle Q Clear(g_c), s	15.9	36.4	0.0	0.0	27.7	27.7	36.0	0.0	14.8			
Prop In Lane	1.00		0.00	0.00		0.20	0.06		1.00			
Lane Grp Cap(c), veh/h	617	2675	0	0	1439	538	705	0	601			
V/C Ratio(X)	0.86	0.80	0.00	0.00	0.91	0.91	0.93	0.00	0.48			
Avail Cap(c_a), veh/h	622	2675	0	0	1454	544	741	0	632			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	42.1	20.5	0.0	0.0	35.7	35.7	31.5	0.0	24.9			
Incr Delay (d2), s/veh	11.9	1.8	0.0	0.0	8.7	19.2	18.4	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.6	17.3	0.0	0.0	13.4	16.6	22.1	0.0	6.6			
LnGrp Delay(d),s/veh	54.0	22.3	0.0	0.0	44.4	54.9	49.9	0.0	25.6			
LnGrp LOS	D	C			D	D	D		C			
Approach Vol, veh/h		2673			1798			949				
Approach Delay, s/veh		28.6			47.2			42.4				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		45.1		60.6			24.0	36.7
Change Period (Y+Rc), s		5.0		5.0			5.0	* 5
Max Green Setting (Gmax), s		42.2		55.6			19.1	* 32
Max Q Clear Time (g_c+I1), s		38.0		38.4			17.9	29.7
Green Ext Time (p_c), s		2.1		14.5			1.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1582	118	0	1101	15	1021
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1665	124	0	1159	16	1075

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1665	0	2244	-
Stage 1	-	-	-	-	1665	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	382	-	36	0
Stage 1	-	0	-	-	139	0
Stage 2	-	0	-	-	524	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	382	-	36	-
Mov Cap-2 Maneuver	-	-	-	-	36	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	167.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	36	-	-	382	-
HCM Lane V/C Ratio	0.439	-	-	-	-
HCM Control Delay (s)	167.6	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	299	5	0	330	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	325	5	0	359	34	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	330	0	687	328
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1229	-	413	713
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	707	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1229	-	413	713
Mov Cap-2 Maneuver	-	-	-	-	413	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	413	-	-	1229	-
HCM Lane V/C Ratio	0.082	-	-	-	-
HCM Control Delay (s)	14.5	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	296	3	0	309	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	322	3	0	336	22	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	325	0	659	323
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	336	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1235	-	429	718
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	724	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1235	-	429	718
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	724	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	429	-	-	1235	-
HCM Lane V/C Ratio	0.051	-	-	-	-
HCM Control Delay (s)	13.8	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	290	6	2	301	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	315	7	2	327	10	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	322	0	650	318
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1238	-	434	723
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	727	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1238	-	433	723
Mov Cap-2 Maneuver	-	-	-	-	433	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	433	-	-	1238	-
HCM Lane V/C Ratio	0.023	-	-	0.002	-
HCM Control Delay (s)	13.5	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	280	11	0	293	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	304	12	0	318	10	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	316	0	628	310
Stage 1	-	-	-	-	310	-
Stage 2	-	-	-	-	318	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1244	-	447	730
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1244	-	447	730
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	508	-	-	1244	-
HCM Lane V/C Ratio	0.028	-	-	-	-
HCM Control Delay (s)	12.3	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Appendix I – Freeway Off-Ramp Queuing Analysis Worksheets

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	156	0	1305	630	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	1374	663	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1350	332	663	0	-	0
Stage 1	663	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	142	664	922	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	142	664	922	-	-	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	922	-	664	-	-
HCM Lane V/C Ratio	-	-	0.247	-	-
HCM Control Delay (s)	0	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	646	0	1529	517	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	673	0	1593	539	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1335	269	539	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Critical Hdwy	6.84	7.1	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	145	720	1025	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	145	720	1025	-	-	-
Mov Cap-2 Maneuver	145	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	405	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1025	-	720	-	-
HCM Lane V/C Ratio	-	-	0.935	-	-
HCM Control Delay (s)	0	-	43.4	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	13.2	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	156	0	1324	634	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	164	0	1394	667	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1364	334	667	0	-	0
Stage 1	667	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	139	662	919	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	139	662	919	-	-	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	919	-	662	-	-
HCM Lane V/C Ratio	-	-	0.248	-	-
HCM Control Delay (s)	0	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	646	0	1536	533	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	673	0	1600	555	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1355	278	555	0	-	0
Stage 1	555	-	-	-	-	-
Stage 2	800	-	-	-	-	-
Critical Hdwy	6.84	7	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	2.22	-	-	-
Pot Cap-1 Maneuver	141	720	1011	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	720	1011	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	403	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1011	-	720	-	-
HCM Lane V/C Ratio	-	-	0.935	-	-
HCM Control Delay (s)	0	-	43.4	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	13.2	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	159	0	1394	649	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	167	0	1467	683	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1417	342	683	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	734	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	128	654	906	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	654	906	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	436	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	906	-	654	-	-
HCM Lane V/C Ratio	-	-	0.256	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Intersection	
Int Delay, s/veh	12.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	659	0	1576	570	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	686	0	1642	594	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1415	297	594	0	-	0
Stage 1	594	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	128	699	978	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	393	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	699	978	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	393	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	978	-	699	-	-
HCM Lane V/C Ratio	-	-	0.982	-	-
HCM Control Delay (s)	0	-	54	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0	-	15.3	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	159	0	1413	653	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	167	0	1487	687	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1431	344	687	0	-	0
Stage 1	687	-	-	-	-	-
Stage 2	744	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	125	652	903	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	125	652	903	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	903	-	652	-	-
HCM Lane V/C Ratio	-	-	0.257	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

Intersection	
Int Delay, s/veh	12.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	659	0	1583	586	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	686	0	1649	610	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1434	305	610	0	-	0
Stage 1	610	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Critical Hdwy	6.84	6.8	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	125	699	965	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	391	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	125	699	965	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	391	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	965	-	699	-	-
HCM Lane V/C Ratio	-	-	0.982	-	-
HCM Control Delay (s)	0	-	54	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0	-	15.3	-	-

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[11.5]

****

Street Name:	7th Ave								SR60 EB Ramps							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Ignore			
Lanes:	0 0	1 0	1		1 0	2 0	0		0 0	0 0	0		0 0	0 0	1	
Volume Module:																
Base Vol:	0	446	83		439	268	0		0	0	0		0	0	836	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	0	446	83		439	268	0		0	0	0		0	0	836	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.00	
PHF Volume:	0	474	88		467	285	0		0	0	0		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	474	88		467	285	0		0	0	0		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		562	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	474	
Potent Cap.:	xxxx	xxxx	xxxxx		1019	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	595	
Move Cap.:	xxxx	xxxx	xxxxx		1019	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	595	
Volume/Cap:	xxxx	xxxx	xxxx		0.46	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.00	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		2.4	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		11.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		B	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

****

Note: Queue reported is the number of cars per lane.

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing 2016 Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #9 7th Ave/SR60 EB Ramps

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[8.3]

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0	1250	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	0	223		31		216	851		0		0		0		0	0		0	1250	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00	0.00	
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97		0.97		0.97	0.97		0.97	0.00	
PHF Volume:	0	229		32		222	875		0		0		0		0	0		0	0	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	229		32		222	875		0		0		0		0	0		0	0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		261	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	229	
Potent Cap.:	xxxx	xxxx		xxxxx		1315	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	815	
Move Cap.:	xxxx	xxxx		xxxxx		1315	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	815	
Volume/Cap:	xxxx	xxxx		xxxx		0.17	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx	0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.6	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		8.3	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*	*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx	xxxxx	
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*	*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

Note: Queue reported is the number of cars per lane.

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[11.6]

****

Street Name:	7th Ave						SR60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Ignore		
Lanes:	0 0 1	0	1	1 0 2	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	446	83	439	268	0	0	0	0	0	0	836
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	446	83	439	268	0	0	0	0	0	0	836
Added Vol:	0	4	0	3	1	0	0	0	0	0	0	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	450	83	442	269	0	0	0	0	0	0	851
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.00
PHF Volume:	0	478	88	470	286	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	478	88	470	286	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	566	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	478
Potent Cap.:	xxxx	xxxx	xxxxx	1016	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	591
Move Cap.:	xxxx	xxxx	xxxxx	1016	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	591
Volume/Cap:	xxxx	xxxx	xxxx	0.46	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	2.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	11.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Existing Plus Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[8.3]

****

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0	1250	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	223		31		216	851		0		0		0		0	0		0	1250	
Added Vol:	0	2		0		12	4		0		0		0		0	0		0	5	
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0	0	
Initial Fut:	0	225		31		228	855		0		0		0		0	0		0	1255	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97	0.97		0.97		0.97	0.97		0.00	
PHF Volume:	0	231		32		234	879		0		0		0		0	0		0	0	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	231		32		234	879		0		0		0		0	0		0	0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		263	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		231	
Potent Cap.:	xxxx	xxxx		xxxxx		1313	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		813	
Move Cap.:	xxxx	xxxx		xxxxx		1313	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		813	
Volume/Cap:	xxxx	xxxx		xxxx		0.18	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.6	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		8.3	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
LOS by Move:	*	*		*		A	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

****

Note: Queue reported is the number of cars per lane.

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[11.8]

****

Street Name:	7th Ave								SR60 EB Ramps							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Ignore			
Lanes:	0 0	1 0	1		1 0	2 0	0		0 0	0 0	0		0 0	0 0	1	
Volume Module:																
Base Vol:	0	446	83		439	268	0		0	0	0		0	0	836	
Growth Adj:	1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02		1.02	1.02	1.02	
Initial Bse:	0	455	85		448	273	0		0	0	0		0	0	853	
Added Vol:	0	6	0		5	1	0		0	0	0		0	0	58	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	461	85		453	274	0		0	0	0		0	0	911	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00	
PHF Adj:	0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.94		0.94	0.94	0.00	
PHF Volume:	0	490	90		481	292	0		0	0	0		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	490	90		481	292	0		0	0	0		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	6.2	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		580	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	490	
Potent Cap.:	xxxx	xxxx	xxxxx		1004	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	582	
Move Cap.:	xxxx	xxxx	xxxxx		1004	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	582	
Volume/Cap:	xxxx	xxxx	xxxx		0.48	xxxx	xxxx		xxxx	xxxx	xxxx		xxxx	xxxx	0.00	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		2.7	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		11.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		B	*	*		*	*	*		*	*	*	
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				xxxxxx			
ApproachLOS:	*				*				*				*			

****

Note: Queue reported is the number of cars per lane.

****

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Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative Without Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.4]

****

Street Name:	7th Ave									SR60 EB Ramps								
Approach:	North Bound					South Bound					East Bound					West Bound		
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0	1250	
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02	
Initial Bse:	0	227		32		220	868		0		0		0		0	0		0	1275	
Added Vol:	0	1		0		37	6		0		0		0		0	0		0	16	
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0	0	
Initial Fut:	0	228		32		257	874		0		0		0		0	0		0	1291	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97	0.97		0.97		0.97	0.97		0.00	
PHF Volume:	0	235		32		264	898		0		0		0		0	0		0	0	
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0	0	
FinalVolume:	0	235		32		264	898		0		0		0		0	0		0	0	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.2	
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		267	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		235	
Potent Cap.:	xxxx	xxxx		xxxxx		1308	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		809	
Move Cap.:	xxxx	xxxx		xxxxx		1308	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		809	
Volume/Cap:	xxxx	xxxx		xxxx		0.20	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.00	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.8	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx		8.4	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
LOS by Move:	*	*		*		A	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

****

Note: Queue reported is the number of cars per lane.

****

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RBF CONSULTING, IRVINE

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[11.9]

****

Street Name:	7th Ave									SR60 EB Ramps												
Approach:	North Bound					South Bound					East Bound					West Bound						
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign						
Rights:	Include					Include					Include					Ignore						
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1		
Volume Module:																						
Base Vol:	0	446		83		439	268		0		0		0		0	0		0		836		
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02		1.02	1.02		1.02			
Initial Bse:	0	455		85		448	273		0		0		0		0	0		0		853		
Added Vol:	0	10		0		8	2		0		0		0		0	0		0		72		
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0		
Initial Fut:	0	465		85		456	275		0		0		0		0	0		0		925		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00			
PHF Adj:	0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.94		0.94	0.94		0.00			
PHF Volume:	0	494		90		484	293		0		0		0		0	0		0		0		
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0		
FinalVolume:	0	494		90		484	293		0		0		0		0	0		0		0		
Critical Gap Module:																						
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.2			
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3			
Capacity Module:																						
Cnflict Vol:	xxxx	xxxx		xxxxx		584	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		494			
Potent Cap.:	xxxx	xxxx		xxxxx		1000	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		579			
Move Cap.:	xxxx	xxxx		xxxxx		1000	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		579			
Volume/Cap:	xxxx	xxxx		xxxx		0.48	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.00			
Level Of Service Module:																						
2Way95thQ:	xxxx	xxxx		xxxxx		2.7	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			
Control Del:	xxxxx	xxxx		xxxxx		11.9	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			
LOS by Move:	*	*		*		B	*		*		*	*		*		*	*		*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT		
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx			
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx			
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*			
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx						
ApproachLOS:	*					*					*					*						

****

Note: Queue reported is the number of cars per lane.

****

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RBF CONSULTING, IRVINE

Nelson Business Park Warehouse at 14700 Nelson Avenue in City of Industry
Opening Year 2018 Plus Cumulative With Project Conditions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 7th Ave/SR60 EB Ramps

****

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.5]

****

Street Name:	7th Ave								SR60 EB Ramps											
Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Ignore				
Lanes:	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	223		31		216	851		0		0		0		0	0		0		1250
Growth Adj:	1.02	1.02		1.02		1.02	1.02		1.02		1.02		1.02		1.02	1.02		1.02		1.02
Initial Bse:	0	227		32		220	868		0		0		0		0	0		0		1275
Added Vol:	0	2		0		48	10		0		0		0		0	0		0		21
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	229		32		268	878		0		0		0		0	0		0		1296
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		0.00
PHF Adj:	0.97	0.97		0.97		0.97	0.97		0.97		0.97		0.97		0.97	0.97		0.97		0.00
PHF Volume:	0	236		32		276	902		0		0		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	236		32		276	902		0		0		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		268	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		236
Potent Cap.:	xxxx	xxxx		xxxxx		1307	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		808
Move Cap.:	xxxx	xxxx		xxxxx		1307	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		808
Volume/Cap:	xxxx	xxxx		xxxx		0.21	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.00
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.8	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx		8.5	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	*					*					*					*				

****

Note: Queue reported is the number of cars per lane.

****

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Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	497	1043	209
v/c Ratio	0.23	0.47	0.25
Control Delay	4.8	6.2	12.7
Queue Delay	0.0	0.0	0.0
Total Delay	4.8	6.2	12.7
Queue Length 50th (ft)	23	59	15
Queue Length 95th (ft)	46	110	43
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	3132	3132	2049
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.16	0.33	0.10

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	845	780	535
v/c Ratio	0.59	0.54	0.50
Control Delay	10.1	9.6	10.6
Queue Delay	0.0	0.0	0.0
Total Delay	10.1	9.6	10.6
Queue Length 50th (ft)	55	50	37
Queue Length 95th (ft)	115	104	67
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	1738	1738	1540
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.49	0.45	0.35

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	497	1043	222
v/c Ratio	0.23	0.47	0.26
Control Delay	4.8	6.3	12.9
Queue Delay	0.0	0.0	0.0
Total Delay	4.8	6.3	12.9
Queue Length 50th (ft)	23	60	16
Queue Length 95th (ft)	47	113	46
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	3117	3117	2035
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.16	0.33	0.11

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	845	780	540
v/c Ratio	0.59	0.55	0.50
Control Delay	10.1	9.6	10.6
Queue Delay	0.0	0.0	0.0
Total Delay	10.1	9.6	10.6
Queue Length 50th (ft)	55	50	38
Queue Length 95th (ft)	115	104	68
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	1735	1735	1537
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.49	0.45	0.35

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	508	1068	250
v/c Ratio	0.23	0.48	0.29
Control Delay	4.9	6.4	13.5
Queue Delay	0.0	0.0	0.0
Total Delay	4.9	6.4	13.5
Queue Length 50th (ft)	24	64	19
Queue Length 95th (ft)	50	121	53
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	3051	3051	1995
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.17	0.35	0.13

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	869	800	551
v/c Ratio	0.60	0.55	0.52
Control Delay	10.2	9.7	10.9
Queue Delay	0.0	0.0	0.0
Total Delay	10.2	9.7	10.9
Queue Length 50th (ft)	58	52	40
Queue Length 95th (ft)	118	107	69
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	1702	1702	1508
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.51	0.47	0.37

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	508	1068	263
v/c Ratio	0.28	0.59	0.34
Control Delay	5.6	7.9	14.1
Queue Delay	0.0	0.0	0.0
Total Delay	5.6	7.9	14.1
Queue Length 50th (ft)	25	65	21
Queue Length 95th (ft)	51	123	56
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	3035	3035	1756
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.17	0.35	0.15

Intersection Summary

Lane Group	EBT	WBT	NBL
Lane Group Flow (vph)	869	800	556
v/c Ratio	0.60	0.55	0.52
Control Delay	10.2	9.7	10.9
Queue Delay	0.0	0.0	0.0
Total Delay	10.2	9.7	10.9
Queue Length 50th (ft)	58	52	40
Queue Length 95th (ft)	118	107	70
Internal Link Dist (ft)	277	680	734
Turn Bay Length (ft)			
Base Capacity (vph)	1699	1699	1505
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.51	0.47	0.37

Intersection Summary

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	465	1407	2213	546	326	59	1266
v/c Ratio	0.60	0.48	1.08	1.03	0.64	0.86	1.05
Control Delay	55.5	19.2	94.6	98.6	40.5	142.5	61.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	19.2	94.6	98.6	40.5	142.5	61.5
Queue Length 50th (ft)	211	283	~703	~570	209	59	~422
Queue Length 95th (ft)	271	321	#775	#803	322	#151	#576
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	780	2935	2040	530	513	69	1209
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.48	1.08	1.03	0.64	0.86	1.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	521	2063	1672	645	282	102	986
v/c Ratio	0.98	0.92	1.09	0.99	0.44	0.89	0.71
Control Delay	77.4	34.7	88.4	67.6	16.0	106.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.4	34.7	88.4	67.6	16.0	106.1	4.4
Queue Length 50th (ft)	172	442	~350	405	72	66	0
Queue Length 95th (ft)	#278	#527	#427	#642	146	#166	29
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	532	2237	1533	649	635	115	1382
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.92	1.09	0.99	0.44	0.89	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	465	1419	2216	546	329	59	1266
v/c Ratio	0.60	0.48	1.09	1.03	0.64	0.86	1.05
Control Delay	55.5	19.3	94.8	98.6	40.8	142.5	61.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	19.3	94.8	98.6	40.8	142.5	61.5
Queue Length 50th (ft)	211	287	~704	~570	213	59	~422
Queue Length 95th (ft)	271	326	#776	#803	326	#151	#576
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	780	2935	2042	530	513	69	1209
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.48	1.09	1.03	0.64	0.86	1.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	521	2067	1687	645	283	102	986
v/c Ratio	0.95	0.90	1.05	0.96	0.44	0.89	0.71
Control Delay	76.8	37.0	79.1	63.8	19.9	115.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	37.0	79.1	63.8	19.9	115.2	4.4
Queue Length 50th (ft)	208	535	~415	480	100	80	0
Queue Length 95th (ft)	#316	610	#493	#717	179	#189	31
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	551	2293	1610	690	654	114	1392
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.90	1.05	0.93	0.43	0.89	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	474	1478	2289	558	353	60	1291
v/c Ratio	0.63	0.51	1.12	1.01	0.67	0.90	1.08
Control Delay	57.6	20.5	107.8	93.5	41.7	152.8	72.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	20.5	107.8	93.5	41.7	152.8	72.3
Queue Length 50th (ft)	219	311	~748	~563	235	60	~450
Queue Length 95th (ft)	280	352	#819	#807	353	#155	#603
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	748	2888	2042	550	529	67	1197
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.51	1.12	1.01	0.67	0.90	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	532	2137	1783	658	290	104	1006
v/c Ratio	0.95	0.92	1.09	0.98	0.45	1.03	0.73
Control Delay	76.3	37.2	91.7	68.7	20.1	152.1	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.3	37.2	91.7	68.7	20.1	152.1	5.4
Queue Length 50th (ft)	207	538	~439	487	102	~84	5
Queue Length 95th (ft)	#313	615	#517	#735	182	#198	36
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	560	2329	1637	669	639	101	1374
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.92	1.09	0.98	0.45	1.03	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	474	1489	2293	558	356	60	1291
v/c Ratio	0.63	0.52	1.12	1.01	0.67	0.90	1.08
Control Delay	57.6	20.6	108.5	93.5	42.1	152.8	72.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	20.6	108.5	93.5	42.1	152.8	72.3
Queue Length 50th (ft)	219	315	~750	~563	238	60	~450
Queue Length 95th (ft)	280	355	#821	#807	357	#155	#603
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	748	2888	2042	550	529	67	1197
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.52	1.12	1.01	0.67	0.90	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR	SBL	SBR
Lane Group Flow (vph)	532	2141	1798	658	291	104	1006
v/c Ratio	0.97	0.91	1.06	1.01	0.47	0.92	0.74
Control Delay	83.1	36.8	80.7	76.3	21.5	121.6	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.1	36.8	80.7	76.3	21.5	121.6	6.0
Queue Length 50th (ft)	213	549	~442	~515	108	82	11
Queue Length 95th (ft)	#326	625	#520	#763	192	#192	42
Internal Link Dist (ft)		363	3331	766			
Turn Bay Length (ft)	450						100
Base Capacity (vph)	546	2356	1702	653	624	113	1356
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.91	1.06	1.01	0.47	0.92	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1056	126	0	1349	22	788
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	138	0	1482	24	866

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1160	0	1901	-
Stage 1	-	-	-	-	1160	-
Stage 2	-	-	-	-	741	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.6	-
Pot Cap-1 Maneuver	-	0	598	-	60	0
Stage 1	-	0	-	-	257	0
Stage 2	-	0	-	-	426	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	598	-	60	-
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	100.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	60	-	-	598	-
HCM Lane V/C Ratio	0.403	-	-	-	-
HCM Control Delay (s)	100.7	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1524	116	0	1051	15	994
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1604	122	0	1106	16	1046

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1604	0	2157	-
Stage 1	-	-	-	-	1604	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	404	-	41	0
Stage 1	-	0	-	-	150	0
Stage 2	-	0	-	-	540	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	404	-	41	-
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	139.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	41	-	-	404	-
HCM Lane V/C Ratio	0.385	-	-	-	-
HCM Control Delay (s)	139.8	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1058	126	0	1350	22	797
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1163	138	0	1484	24	876

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1163	0	1905	-
Stage 1	-	-	-	-	1163	-
Stage 2	-	-	-	-	742	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	596	-	60	0
Stage 1	-	0	-	-	260	0
Stage 2	-	0	-	-	432	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	596	-	60	-
Mov Cap-2 Maneuver	-	-	-	-	60	-
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	432	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	100.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	60	-	-	596	-
HCM Lane V/C Ratio	0.403	-	-	-	-
HCM Control Delay (s)	100.7	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1525	116	0	1053	15	997
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1605	122	0	1108	16	1049

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1605	0	2159	-
Stage 1	-	-	-	-	1605	-
Stage 2	-	-	-	-	554	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	403	-	41	0
Stage 1	-	0	-	-	150	0
Stage 2	-	0	-	-	539	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	403	-	41	-
Mov Cap-2 Maneuver	-	-	-	-	41	-
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	139.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	41	-	-	403	-
HCM Lane V/C Ratio	0.385	-	-	-	-
HCM Control Delay (s)	139.8	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.3	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1094	129	0	1399	22	828
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1202	142	0	1537	24	910

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1202	0	1971	-
Stage 1	-	-	-	-	1202	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.6	-
Pot Cap-1 Maneuver	-	0	576	-	54	0
Stage 1	-	0	-	-	245	0
Stage 2	-	0	-	-	412	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	576	-	54	-
Mov Cap-2 Maneuver	-	-	-	-	54	-
Stage 1	-	-	-	-	245	-
Stage 2	-	-	-	-	412	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	117.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	54	-	-	576	-
HCM Lane V/C Ratio	0.448	-	-	-	-
HCM Control Delay (s)	117.3	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1582	118	0	1099	15	1018
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1665	124	0	1157	16	1072

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1665	0	2243	-
Stage 1	-	-	-	-	1665	-
Stage 2	-	-	-	-	578	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	382	-	36	0
Stage 1	-	0	-	-	139	0
Stage 2	-	0	-	-	524	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	382	-	36	-
Mov Cap-2 Maneuver	-	-	-	-	36	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	167.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	36	-	-	382	-
HCM Lane V/C Ratio	0.439	-	-	-	-
HCM Control Delay (s)	167.6	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1096	129	0	1400	22	836
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1204	142	0	1538	24	919

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1204	0	1973	-
Stage 1	-	-	-	-	1204	-
Stage 2	-	-	-	-	769	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	575	-	54	0
Stage 1	-	0	-	-	247	0
Stage 2	-	0	-	-	418	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	575	-	54	-
Mov Cap-2 Maneuver	-	-	-	-	54	-
Stage 1	-	-	-	-	247	-
Stage 2	-	-	-	-	418	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	117.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	54	-	-	575	-
HCM Lane V/C Ratio	0.448	-	-	-	-
HCM Control Delay (s)	117.3	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.7	-	-	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	1582	118	0	1101	15	1021
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1665	124	0	1159	16	1075

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	1665	0	2244	-
Stage 1	-	-	-	-	1665	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	-	-	4.14	-	6.84	-
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	-
Pot Cap-1 Maneuver	-	0	382	-	36	0
Stage 1	-	0	-	-	139	0
Stage 2	-	0	-	-	524	0
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	382	-	36	-
Mov Cap-2 Maneuver	-	-	-	-	36	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	167.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	36	-	-	382	-
HCM Lane V/C Ratio	0.439	-	-	-	-
HCM Control Delay (s)	167.6	0	-	0	-
HCM Lane LOS	F	A	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Appendix J – Transit Service

Ramona
Valley
488
M-190
San Bernardino Fwy
SILVER STREAK
496
498
499
699
497
495
493
282
Baldwin Park
Temple
486
Puente
274
Queen of the Valley Hospital
281
Amar
Orange
Sunset
488
California
Hacienda
605
Valley
Workman Mill
274
3rd
Don Julian
7th
Crossroads Pkwy N.
60
Crossroads Pkwy S.
497
495
493
Industry
Industry City Hall Park & Ride
P
Temple
Glendora
Turnbull Canyon
Gale
497
Stafford
185
282
60
Gale
Pomona Fwy
Hacienda Heights
Halliburton
To Puente Hills Mall
Colima
La Habra Heights
Hacienda
East Whittier

Exhibit C
Mitigation Monitoring and Reporting Program

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CITY OF INDUSTRY

NELSON AVENUE BUSINESS PARK

MITIGATION MONITORING AND REPORTING PROGRAM

Lead Agency:

CITY OF INDUSTRY
15625 E. STAFFORD STREET, SUITE 100
INDUSTRY, CA 91744

OCTOBER 2016

1. INTRODUCTION

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Nelson Avenue Business Park project. An MMRP is required for the proposed project because the Initial Study/Mitigated Negative Declaration has identified potentially significant adverse impacts, and measures have been identified to mitigate those impacts. This MMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and 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."

2. MITIGATION MONITORING AND REPORTING PROGRAM

As the lead agency, the City of Industry will be responsible for monitoring compliance with all mitigation measures. Different City departments are responsible for various aspects of the project. The MMRP identifies the department with the responsibility for ensuring the measure is completed; however, it is expected that one or more departments will coordinate efforts to ensure compliance.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below.

- **Mitigation Measure:** The mitigation measures are taken from the Initial Study/Mitigated Negative Declaration (IS/MND), in the same order they appear in the IS/MND.
- **Timing:** Identifies at which stage of the project the mitigation must be completed.
- **Monitoring Responsibility:** Identifies the department in the City with responsibility for mitigation monitoring.
- **Verification (Date and Initials):** Provides a contact who reviewed the mitigation measure and the date the measure was determined complete.

MITIGATION MONITORING AND REPORTING PROGRAM MATRIX

CITY OF INDUSTRY
NELSON AVENUE BUSINESS PARK

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
AIR QUALITY				
AQ-1	Prior to the certificate of occupancy issuance, the project applicant shall demonstrate to the satisfaction of the City of Industry Planning Department that the following measures would be implemented during project operations. • Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations. • All service equipment (e.g., forklifts) used within the site shall be electric or compressed natural gas-powered.	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	
CULTURAL RESOURCES				
CUL-1	During project construction, if any archeological or paleontological resources (i.e., fossils) are found, the project applicant and/or its contractor shall cease all work within 25 feet of the discovery and notify the City of Industry Planning Department immediately. The project applicant and/or its contractor shall retain a qualified archeologist or paleontologist to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered archeological or paleontological resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures.	During all ground-disturbing construction activities	City of Industry Planning Department	
CUL-2	During project construction, if human remains are discovered, the project applicant and/or its contractor shall cease all work within 25 feet of the find and notify the City of Industry Planning Department and the county coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours.	During all ground-disturbing construction activities	City of Industry Planning Department	

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
GEOLOGY AND SOILS			
GEO-1 The applicant must comply with design recommendations 7.0 through 7.11: • 7.1 Fill Blanket Recommendations: Due to the potential for differential settlement of foundations placed on compacted fill and the native soils, all foundations must be underlain by a uniform, compacted fill blanket at least 2 feet in thickness. This fill blanket shall extend at least 5 horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater. • 7.2 Temporary Excavations: Temporary un-surcharged excavations may not be made in existing site materials more than 4 feet high, and must be halted if cohesion-less soils are encountered. • 7.3 Foundation Design: All foundations should be designed using safe bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths: **Table 4.6-1** **Allowable Safe Bearing Capacity Per Square Foot** • 7.4 Settlement Analysis: Resultant pressure curves for the consolidation tests shall be reviewed. Computations showed that foundations will experience settlements on the order of three-quarters inch and differential settlements of one-quarter inch. • 7.5 Lateral Resistance: The following values may be used in resisting lateral loads imposed on the structure. Requirements of the latest Building Code must be adhered to when the coefficient of friction and passive pressures are combined for approved compacted fill soils: o Coefficient of Friction: 0.35 o Equivalent Passive Fluid Pressure: 200 lbs/cubic foot o Maximum Passive Pressure: 2,000 lbs/cubic foot • 7.6 Retaining Wall Design Parameters: The active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. The following values are acceptable for select granular backfill material placed behind the walls at various ground slopes above the walls. An equivalent fluid pressure of 45 pounds per cubic foot may be used for the restrained wall condition with a level grade behind the wall.	During final design and construction	City of Building and Safety staff	

Width (ft)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
Table 4.6-2			

Fluid Densities

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb/cubic foot)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The subsurface drainage system shall consist of a 4-inch diameter perforated PVC pipe encased with gravel and wrapped with filter fabric.

- 7.7 Slab Design: All concrete slabs shall be at least 6 inches in the proposed warehouse area and 4 inches in hardscape and office areas, all reinforced using bars at 16-inch spacing in each direction and positioned in the center of the slab. A vapor retarder (10-mil minimum thickness) should be utilized in areas which are sensitive to the infiltration of moisture.
- 7.8 Pavement Section Design: All concrete slabs to be used for pavement shall be a minimum of 6 inches in thickness and placed on approved subgrade soils. All pavement areas shall have positive drainage toward an approved outlet from the site. Any approved base material shall consist of a Class II aggregate or equivalent and shall be compacted to a minimum of 95 percent relative compaction.
- 7.9 Utility Trench and Excavation Backfill: Trenches from installation of utility lines and other excavations shall be backfilled with on-site soils or approved imported soils compacted to a minimum of 90 percent relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.
- 7.10 Corrosion Design Criteria: Type II cement shall be used for building foundations.
- 7.11 Expansive Soil: The *Expansive Soil Guidelines* attached to **Appendix B** of the Initial Study shall be reviewed by the engineers, architects, owner, maintenance personnel, and other interested parties and must be considered during the design of the project and future property maintenance.

HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1 If hazardous materials are encountered during construction or accidentally released as a result of construction activities, the following procedures shall be implemented:	During all ground-disturbing construction activities	City of Industry Planning Department	

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
	• The contractor shall stop all work within 100 feet of any discovered contamination or release. • A certified hazardous materials manager shall determine the scope and immediacy of the problem and recommend remediation measures. • The certified hazardous materials manager and the contractor shall coordinate with the responsible agencies (for instance, Department of Toxic Substances Control and/or the US Environmental Protection Agency) within 10 days of the determination. • The contractor shall commence the necessary investigation and remediation activities to resolve the situation before continuing construction work.			
NOISE				
NOI-1	In order to reduce construction noise, a temporary noise barrier or enclosure shall be used to break the line of sight between the construction equipment and the nearest residences, whether they are existing or future residences. The temporary noise barrier shall have a sound transmission class of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. To achieve this, the barrier may consist of steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch-thick fiberglass blanket, a half-inch-thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. In addition, to avoid objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with American Society for Testing and Materials Test Method C423.	Prior to ground-disturbing construction activities	City of Industry Planning Department	
NOI-2	The project improvement and building plans shall include the following requirements for construction activities: 1. Construction shall be restricted to the hours of 7:00 AM to 7:00 PM Monday through Saturday and shall be prohibited at any time on Sunday or a federal holiday. 2. Stationary, noise-generating equipment (e.g., generators and compressors) shall be located at least 200 feet from the nearest residential property. 3. If stationary, noise-generating equipment must be located closer than 200 feet from existing residential properties for extended periods of time, then such equipment shall have temporary acoustical enclosures, blanketing, or barriers to reduce the noise emissions.	Prior to ground-disturbing construction activities	City of Industry Planning Department	
TRANSPORTATION/TRAFFIC				
TRAF-1	Off-site roadway improvements at intersection 2, Sunset Avenue and Nelson Avenue, will mitigate the traffic impact to a less than significant impact by adding an eastbound left-turn lane and a westbound left-	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	

	Mitigation Measure	Timing	Monitoring Responsibility	Verification (Date and Initials)
	turn lane.			
TRAF-2	On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 18, driveway 1 at Nelson Avenue.	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	
TRAF-3	On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 19, driveway 2 at Nelson Avenue.	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	
TRAF-4	On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 20, driveway 3 at Nelson Avenue.	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	
TRAF-5	On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 21, driveway 4 at Nelson Avenue.	Prior to the issuance of a Certificate of Occupancy	City of Industry Planning Department	

Attachment 10
Resolution No. CC 2016-74

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RESOLUTION NO. CC 2016-74

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF INDUSTRY, CALIFORNIA, APPROVING DEVELOPMENT PLAN NO. 16-1 AND LOT LINE ADJUSTMENT 80 FOR THE CONSTRUCTION OF TWO INDUSTRIAL BUILDINGS LOCATED AT 14700 NELSON AVENUE IN THE CITY OF INDUSTRY, CALIFORNIA

RECITALS

WHEREAS, on January 20, 2016, S & C Property Development Inc., ("Applicant") filed a complete application requesting the approval of Development Plan ("DP") No. 16-1 and Lot Line Adjustment ("LLA") No. 80 described herein ("Application"); and

WHEREAS, the Application applies to a 11.49 acre property at 14700 Nelson Avenue, City of Industry, California, Assessor's Parcel Numbers 8208-066-900, 901 and 902 ("Property"); and

WHEREAS, the Applicant desires to construct two industrial warehouse buildings on two parcels within the "I"- Industrial Zone (the "Project"). The building on parcel 1 will be on 3.12 acres (135,707 square feet). The building on parcel 2 will be on 8.38 aces (365,010) square feet. 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 Project is consistent with the General Plan as the construction of an industrial building is similar to other industrial and manufacturing buildings in the same 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, it was determined that the Application could have a significant impact on the environment, and an a Initial Study/Mitigated Negative Declaration was 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 October 7, 2016, through, and including, October 26, 2016; and

WHEREAS, the Initial Study/Mitigated Negative Declaration concluded that implementation of the Project could result in a significant effect on the environment and identified mitigation measures that would reduce the significant effects to a less-than-

significant level. The mitigation measures address Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Noise, and Transportation/Traffic, but each of those potential impacts is mitigated to less than significant with the mitigation measures identified in the proposed Mitigated Negative Declaration; and

WHEREAS, on October 27, 2016, at a duly noticed public meeting, the City Council adopted Resolution No. CC 2016-73, approving the Initial Study/Negative Declaration; and

WHEREAS, on October 27, 2016, 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 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 meetings 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 27, 2016 public meeting, including public testimony and written and oral staff reports, and which includes without limitation, CEQA, the CEQA Guidelines, the 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 and Lot Line Adjustment because the Property is 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 industrial 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 approximately 1,078 vehicle trips, which equates to approximately 91 AM peak hour trips and 98 PM peak hour trips, which would not significantly impact road capacity. In addition, the proposed project provides the

necessary setback of the buildings and loading areas, adequately screens the loading areas, and presents a professional and coordinated architectural and landscape design. In addition, the attached conditions of approval set operational and management standards that ensure the businesses 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 Development Plan and Lot Line Adnustment, the project complies with development standards in regards to lot size, lot frontage, drainage, building setbacks, height, parking, access, screening, 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 and lots for industrial uses; and

E. Based on the foregoing, the City Council approves Development Plan No. 16-1 and Lot Line Adjustment No. 80, subject to the Conditions of Approval, attached hereto as Exhibit A, and incorporated herein by reference.

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 27, 2016 by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

Mark D. Radecki, Mayor

ATTEST:

Diane Schlichting, Chief 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: **Development Plan 16-1 and Lot Line Adjustment 80**

Applicant: **S & C Property Development Inc.**

Location: **14700 Nelson Avenue (APN 8208-066-900, 901 and 902)**

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 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. The Applicant shall comply with all provisions set forth in the Purchase Agreement between the Successor Agency to the Industry Urban-Development Agency and the Applicant, dated May 22, 2015, amended October 8, 2015 and amended November 17, 2015.

7. The Applicant shall provide bicycle parking for 6 bicycles for parcel 1 and 11 bicycles for parcel 2.

Mitigation Measures

8. **MM AQ-1** Prior to the certificate of occupancy issuance, the project applicant shall demonstrate to the satisfaction of the City of Industry Planning Department that the following measures would be implemented during project operations.
   - Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.
   - All service equipment (e.g., forklifts) used within the site shall be electric or compressed natural gas-powered.

9. **MM CUL-1 Treatment of previously unidentified archaeological deposits**. During project construction, if any archeological or paleontological resources (i.e., fossils) are found, the project applicant and/or its contractor shall cease all work within 25 feet of the discovery and notify the City of Industry Planning Department immediately. The project applicant and/or its contractor shall retain a qualified archeologist or paleontologist to evaluate the finds and recommend appropriate mitigation measures for the inadvertently discovered archeological or paleontological resources. The City and the applicant shall consider the mitigation recommendations and agree on implementation of the measure(s) that are feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, or other appropriate measures.

10. **MM CUL-2 Treatment of previously unidentified human remains.** During project construction, if human remains are discovered, the project applicant and/or its contractor shall cease all work within 25 feet of the find and notify the City of Industry Planning Department and the county coroner, according to California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours.

11. **MM GEO-1 Compliance with Geotechnical Recommendations:** The applicant must comply with design recommendations 7.0 through 7.11:

    - **7.1 Fill Blanket Recommendations**: Due to the potential for differential settlement of foundations placed on compacted fill and the native soils, all foundations must be underlain by a uniform, compacted fill blanket at least 2 feet in thickness. This fill blanket shall extend at least 5 horizontal feet outside the edges of foundations or equidistant to the depth of fill placed, whichever is greater.

    - **7.2 Temporary Excavations**: Temporary un-surcharged excavations may not be made in existing site materials more than 4 feet high, and must be halted if cohesion-less soils are encountered.

- **7.3 Foundation Design**: All foundations should be designed using safe bearing capacities for an embedded depth of 24 inches into approved engineered fill with the corresponding widths:

TABLE 4.6-1
ALLOWABLE SAFE BEARING CAPACITY PER SQUARE FOOT

Width (ft)	Continuous Foundation	Isolated Foundation
1.5	2000	2500
2.0	2075	2575
4.0	2375	2875
6.0	2500	3000

- **7.4 Settlement Analysis**: Resultant pressure curves for the consolidation tests shall be reviewed. Computations showed that foundations will experience settlements on the order of three-quarters inch and differential settlements of one-quarter inch.

- **7.5 Lateral Resistance**: The following values may be used in resisting lateral loads imposed on the structure. Requirements of the latest Building Code must be adhered to when the coefficient of friction and passive pressures are combined for approved compacted fill soils:
  - Coefficient of Friction: 0.35
  - Equivalent Passive Fluid Pressure: 200 lbs/cubic foot
  - Maximum Passive Pressure: 2,000 lbs/cubic foot

- **7.6 Retaining Wall Design Parameters**: The active earth pressures against retaining walls will be equal to the pressures developed by the following fluid densities. The following values are acceptable for select granular backfill material placed behind the walls at various ground slopes above the walls. An equivalent fluid pressure of 45 pounds per cubic foot may be used for the restrained wall condition with a level grade behind the wall.

TABLE 4.6-2
FLUID DENSITIES

Surface Slope of Retained Materials (Horizontal to Vertical)	Equivalent Fluid Density (lb/cubic foot)
Level	30
5 to 1	35
4 to 1	38
3 to 1	40
2 to 1	45

All walls shall be waterproofed as needed and protected from hydrostatic pressure by a reliable permanent subdrain system. The subsurface drainage system shall consist of a 4-inch diameter perforated PVC pipe encased with gravel and wrapped with filter fabric.

- **7.7 Slab Design**: All concrete slabs shall be at least 6 inches in the proposed warehouse area and 4 inches in hardscape and office areas, all reinforced using bars at 16-inch spacing in each direction and positioned in the center of the slab. A vapor retarder (10-mil minimum thickness) should be utilized in areas which are sensitive to the infiltration of moisture.

- **7.8 Pavement Section Design:** All concrete slabs to be used for pavement shall be a minimum of 6 inches in thickness and placed on approved subgrade soils. All pavement areas shall have

positive drainage toward an approved outlet from the site. Any approved base material shall consist of a Class II aggregate or equivalent and shall be compacted to a minimum of 95 percent relative compaction.

- **7.9 Utility Trench and Excavation Backfill**: Trenches from installation of utility lines and other excavations shall be backfilled with on-site soils or approved imported soils compacted to a minimum of 90 percent relative compaction. All utility lines shall be properly bedded with clean sand having a sand equivalency rating of 30 or more. This bedding material shall be thoroughly water jetted around the pipe structure prior to placement of compacted backfill soils.

- **7.10 Corrosion Design Criteria**: Type II cement shall be used for building foundations.

- **7.11 Expansive Soil**: The *Expansive Soil Guidelines* attached to **Appendix B** shall be reviewed by the engineers, architects, owner, maintenance personnel, and other interested parties and must be considered during the design of the project and future property maintenance.

12. **MM HAZ-1** If hazardous materials are encountered during construction or accidentally released as a result of construction activities, the following procedures shall be implemented:
    - The contractor shall stop all work within 100 feet of any discovered contamination or release.
    - A certified hazardous materials manager shall determine the scope and immediacy of the problem and recommend remediation measures.
    - The certified hazardous materials manager and the contractor shall coordinate with the responsible agencies (for instance, Department of Toxic Substances Control and/or the US Environmental Protection Agency) within 10 days of the determination.
    - The contractor shall commence the necessary investigation and remediation activities to resolve the situation before continuing construction work.

14. **MM NOI-1** In order to reduce construction noise, a temporary noise barrier or enclosure shall be used to break the line of sight between the construction equipment and the nearest residences, whether they are existing or future residences. The temporary noise barrier shall have a sound transmission class of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least 2 pounds per square foot to ensure adequate transmission loss characteristics. To achieve this, the barrier may consist of steel tubular framing, welded joints, a layer of 18-ounce tarp, a 2-inch-thick fiberglass blanket, a half-inch-thick weatherwood asphalt sheathing, and 7/16-inch sturdy board siding. In addition, to avoid objectionable noise reflections, the source side of the noise barrier shall be lined with an acoustic absorption material meeting a noise reduction coefficient rating of 0.70 or greater in accordance with American Society for Testing and Materials Test Method C423.

15. **MM NOI-2** The project improvement and building plans will include the following requirements for construction activities:
    1) Construction shall be restricted to the hours of 7:00 AM to 7:00 PM Monday through Saturday and prohibited at any time on Sunday or a federal holiday.
    2) Stationary, noise-generating equipment (e.g., generators and compressors) shall be located at least 200 feet from the nearest residential property.
    3) If stationary, noise-generating equipment must be located closer than 200 feet from existing residential properties for extended periods of time, then such equipment shall have temporary acoustical enclosures, blanketing, or barriers to reduce the noise emissions.

16. **MM TRAF-1** Off-site roadway improvements at intersection 2, Sunset Avenue and Nelson Avenue, will mitigate the traffic impact to a less than significant impact by adding an eastbound left-turn lane and a westbound left-turn lane.

17. **MM TRAF-2** On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 18, driveway 1 at Nelson Avenue.

18. **MM TRAF-3** On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 19, driveway 2 at Nelson Avenue.

19. **MM TRAF-4** On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 20, driveway 3 at Nelson Avenue.

20. **MM TRAF-5** On-site improvements are needed to accommodate the four project driveways. Potential impacts will be reduced to a less than significant impact by constructing a northbound stop sign and a northbound all-way lane at intersection 21, driveway 4 at Nelson Avenue.

21. Applicant shall comply with all mitigation measures set forth in the MMRP.

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. 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).

15. Hours of Construction are limited to 7:00 am to 7:00 pm Monday through Saturday with no construction on Sundays.

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 Department 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.

2. The Applicant and Property Owner shall submit to the City written consent to all of the conditions referenced herein within 10 days of approval. The Applicant understands that Resolution No. CC- 2016-74 will be of no force or effect unless such written consent is submitted to the City.

CITY COUNCIL

ITEM NO. 6.9

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: Alex Gonzalez, Director of Development Services and Administration
Troy Helling, Senior Planner

Prepared By: Tammy Seale, Associate Vice President, Michael Baker International

Date: October 27, 2016

Subject: Climate Action Plan Introduction and Measures

Overview

A Climate Action Plan (CAP) is a roadmap providing guidance for the activities that the City will undertake to reduce greenhouse gas (GHG) emissions. The need to prepare a CAP originates from Assembly Bill 32 and, subsequently, the Environmental Impact Report (EIR) prepared for the update to the City's General Plan in June 2014.

The City has retained Michael Baker International (Michael Baker) to review and update the City's draft CAP. Staff proposes to update the draft CAP, including the GHG reduction measures, to ensure the CAP includes an appropriate and feasible strategy to reduce emissions and support local economic development goals and programs.

Updating and Completing the Climate Action Plan

The City retained Michael Baker to provide assistance with the completion of the CAP after determining that the proposed GHG reduction measures in the September 2015 version of the Draft CAP do not fully recognize the City's existing and ongoing efforts to support GHG emissions reductions in concert with local economic growth objectives. The Michael Baker team has prepared over 50 climate action plans for cities and counties throughout California. Staff and the Michael Baker team discussed the draft CAP, the City's existing projects, and future goals and determined that the following approach will provide the City with an appropriate and implementable CAP.

1. Conduct a peer review GHG emissions inventory, forecasts and targets for consistency with recommended protocols, state regulations, best practice, and guidance from the Governor's Office of Planning. Update or revise calculations following peer review and discussions with City staff.
2. Revise GHG reduction measures to reflect existing and proposed projects and policies in the City that provide economic development and GHG reduction opportunities. Potential projects to

be included in the CAP could include anticipated renewable energy projects in the City, traffic ciculation improvements, and inorganic waste recycling, among others. Adding City-funded or facilitated projects as quantified GHG reductions to the CAP could allow the removal of existing draft reduction measures that result in new mandates or requirements for private projects in the City.

3. Engage key stakeholders in review and updates to the reduction measures and implementation program. It is important that the CAP include measures and strategies that are appropriate, feasible, and practical for implementation in the City of Industry. Engagement of City staff, regional agency staff (such as Air District or SCAG), and private and public partners is essential to review and refinement of the reduction measures. Conversations with staff and partners ensure that the CAP reflects existing and planned economic development and other activities that provide GHG reduction benefits, ensuring a CAP that reflects Industry. Meetings with partners also provide an opportunity to review the implementation process and the role of GHG reduction measures. We will collaborate with staff to identity the number and type of meetings within the proposed budget.
4. Develop and provide a monitoring tool and CAP consistency checklist for tracking and reporting of CAP implementation. The CAP consistency checklist can be used for new projects to demonstrate their consistency with the CAP as applicable. The monitoring tool supports citywide implementation and allows an efficient process for preparation of updates to the Council on progress toward the GHG reduction target.
5. Conduct an environmental review of the CAP for consistency with CEQA Guidelines. CAPs are projects subject to the California Environmental Quality Act. We will conduct the environmental review of the CAP to support the CAP's use as a Greenhouse Gas Reduction Strategy. The nature of the environmental review will be dependent on the content of the reduction measures.

Recommendation

At this time, Staff is requesting that the City Council discuss the suggested approach to updating and completing the CAP and provide direction to Staff.

Attachments

- Attachment 1: Michael Baker International Climate Action Plan Recommendations

Attachment 1

Michael Baker International Memo

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Michael Baker
INTERNATIONAL

We Make a Difference

MEMO

To: Alex Gonzalez, Director of Development Services and Administration
City of Industry

From: Tammy L. Seale, John Bellas

Cc: Trayci Nelson

Date: September 8, 2016

Re: Draft Climate Action Plan Recommendations

The Michael Baker International team has reviewed the City's Draft Climate Action Plan (CAP) and discussed preliminary recommendations with staff. As a follow-up to our discussion with staff, we have identified the following benefits of the CAP to the City and recommendations for revisions to the CAP.

MOTIVATIONS FOR LOCAL CLIMATE ACTION PLANNING

Local governments throughout California, the United States, and the world have been preparing and implementing local climate action plans as their primary comprehensive policy mechanism for the reduction of greenhouse gas (GHG) emissions and management of risks posed by climate change. Climate action planning is an opportunity for communities to directly control their future in the face of a changing climate in a manner consistent with local economic development and resource conservation goals.

Local CAPs have also become more common in California due to the multiple co-benefits they provide to communities. In addition to the local environmental benefits of reducing GHGs, CAPs have the potential to reduce short and long term costs from consumption of resources such as energy, water, fuel, and waste) at the household, business, institutional, and municipal levels. Local savings from the reduction in costs of energy or transportation fuel have been demonstrated to stay in the community and redirect to other local uses, supporting economic growth. Low carbon strategies have the potential to stimulate new economic sectors in a community and provide new opportunities to residents, employers, and workers. Many communities also prioritize CAPs to support achievement of short and long-term goals for improvements to public health and quality of life.

STATE GOALS AND REGULATIONS

Although there many benefits of a CAP, local climate action planning activities in California have been focused on adopting and implementing CAPs in support of the state's only adopted GHG emissions reduction target established in The Global Warming Solutions Act of 2006 (AB 32) as well as GHG reduction goals presented in executive orders signed by Governor Schwarzenegger (Executive Order S-03-05) and Governor Brown (Executive Order B-3-15) as summarized below.

- AB 32 directs the state to reduce statewide emissions to 1990 levels by the year 2020. The California Air Resources Board's (ARB) AB 32 Scoping Plan (2008) and First Update (2014)

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identify the state programs necessary to meet the 2020 target. The Scoping Plans also identify local governments as key partners in the achievement of the state's GHG reduction targets.

- Governor Schwarzenegger issued Executive Order S-03-05 in 2005, declaring that California was vulnerable to the effects of increased GHG emissions and the impacts of climate change. It sets the following GHG reduction goals for the state: reduce emissions to 2000 levels by 2010, reduce emissions to 1990 levels by 2020, and reduce emissions to 80% below 1990 levels by 2050.

- Governor Brown issued executive Order B-30-15 in 2015. This executive order builds on the actions of Executive Order S-03-05 and AB 32 and establishes a 2030 GHG reduction goal for the state of 40% below 1990 levels. It directs state agencies to take a number of actions to reduce GHG emissions. In addition, AB 197 and SB 32 were recently passed in the state Senate and Assembly on August 23rd and 24th, 2016 and are waiting for the Governors signature.

Following adoption of AB 32, the California Environmental Quality Act (CEQA) was updated to require the consideration of GHG emissions in environmental documents. CEQA Guidelines offer two common options for lead agency evaluation of GHG emissions impacts in CEQA documents: 1) projects can tier off a "qualified" GHG Reduction Plan ("qualified" as defined in CEQA Guidelines Section 15183.5) or 2) projects can determine significance by calculating GHG emissions and assess their significance (CEQA Guidelines Section 15064.4) against locally determined thresholds.

CEQA Guidelines Section 15183.5 allows lead agencies to "analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a...plan to reduce greenhouse gas emissions" (i.e., a CAP) and then use that plan to streamline the analysis of GHG emissions in future CEQA documents. Qualified GHG Reduction strategies or CAPs must meet six requirements, as identified in the State CEQA Guidelines Section 15183.5(b). These requirements are outlined below:

1. Quantify GHG emissions, both existing and projected over a specific period, resulting from activities within a defined geographic area.

2. Establish a level, based on substantive evidence, below which the contribution of emissions from activities covered by the plan would not be cumulatively considerable.

3. Identify and analyze the emissions resulting from specific actions or categories of actions anticipated within the geographic area.

4. Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

5. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.

6. Be adopted in a public process following environmental review.

BENEFITS OF CAP TO PROJECT LEVEL ENVIRONMENTAL REVIEW

Given the pattern of judicial review of GHG analyses, notably the November 2015 California Supreme Court ruling in the *Center for Biological Diversity vs. California Department of Fish and Wildlife* (commonly referred to as Newhall Ranch) case, local governments that have an adopted CAP (or equivalent qualified GHG reduction plan) provide the most streamlined, certain, and defensible approach for considering GHG emissions at the community-wide and project level in CEQA documents.

A CAP that inventories and forecasts community-wide emissions and identifies strategies to reduce emissions to achieve 2020 and post 2020 targets provides certainty, transparency, and consistency to review and mitigation of project level GHG emissions. Project applicants are able to use a CAP in the planning and costing phases of their projects and to integrate project features that address climate change and GHGs consistent with the direction of the CAP and the City's expectations. This benefit is available to private and public projects subject to CEQA, provided the uses, intensity, and density of the projects are considered in the GHG emissions forecast and the GHG reduction strategies in the CAP.

CAPs provide a community-wide and programmatic approach to reduce GHG emissions that is tailored to the City's types, amounts, and sources of GHG emissions. The programmatic and comprehensive approach of a CAP allows the City to direct its path toward and achievement of local and state GHG reduction targets and ensure that the strategies are appropriate and consistent with the City's communitywide goals. Project by project assessment and mitigation of GHG emissions may not result in a path that reduces communitywide emissions or that is consistent and predictable for project applicants.

TASKS RECOMMENDED TO COMPLETE THE CLIMATE ACTION PLAN

1. Conduct a peer review GHG emissions inventory, forecasts and targets for consistency with recommended protocols, state regulations, best practice, and guidance from the Governor's Office of Planning. Update or revise calculations following peer review and discussions with City staff.

The reduction targets recommended in the Draft CAP are not consistent with best practice and potentially inconsistent with AB 32. AB 32 provides the State's adopted GHG reduction target for 2020, which is to reduce statewide GHG emissions to 1990 levels. The best practice for the local government equivalent target is to reduce GHG emissions 15% below 2005 – 2008 levels by 2020. The draft CAP recommends a 6% reduction from 2012 levels by 2020. Additional review of the assumptions and analysis for the draft target is recommended to confirm consistency with best practices. In addition, the November 2015 California Supreme Court ruling in the *Center for Biological Diversity vs. California Department of Fish and Wildlife* (commonly referred to as Newhall Ranch) case also raised new questions regarding approaches and evidence to support GHG reduction targets, thresholds, and forecasts.

Labor and Cost estimate: 20 - 40 hours

2. Revise GHG reduction measures to reflect existing and proposed projects and policies in the City that provide economic development and GHG reduction opportunities.

We understand that the City anticipates public and private projects that would support further reductions in GHGs in the community as well as to the region. Potential projects to be included in the

CAP could include anticipated renewable energy projects in the city, traffic circulation improvements, and inorganic waste recycling, among others. Adding City-funded or facilitated projects as quantified GHG reductions to the CAP could allow the removal of existing draft reduction measures that result in new mandates or requirements for private projects in the City. The CAP can also be updated to be more reflective of the City's character, needs, intentions, and goals for economic development and growth.

Labor and Cost estimate: 80 hours

3. Engage key stakeholders in review and updates to the reduction measures and implementation program

It is important that the CAP include measures and strategies that are appropriate, feasible, and practical for implementation in Industry. Engagement of City staff, regional agency staff (such as Air District or SCAG), and private and public partners is essential to review and refinement of reduction measures. Conversations with staff and partners ensure that the CAP reflects existing and planned economic development and other activities that provide GHG reduction benefits, ensuring a CAP that reflects Industry. Meetings with partners also provide an opportunity to review the implementation process and the role of GHG reduction measures. We would collaborate with staff to identity the number of type of meetings within the proposed budget.

Labor estimate: 70 hours

4. Develop and provide a monitoring tool to the City for tracking and reporting of CAP implementation

We recommend preparation of a monitoring tool and CAP consistency checklist to support staff with implementation of the CAP. The CAP consistency checklist can be used for new projects to demonstrate their consistency with the CAP as applicable. This checklist is recommended even when CAP measures are not mandates. The monitoring tool supports citywide implementation and allows an efficient process for preparation of updates to the Council on progress toward the GHG reduction target. The tool is an Excel-based tool. We would train and support City staff on the use of it.

Labor and Cost estimate: 60 hours

5. Conduct an environmental review of the CAP for consistency with CEQA Guidelines

CAPs are projects subject to the California Environmental Quality Act. We will conduct the environmental review of the CAP to support the CAP's use as a Greenhouse Gas Reduction Strategy. The nature of the environmental review will be dependent on the content of the reduction measures.

Labor and Cost estimate: 200-300 hours (assume IS/MND)

The estimated fee is $48,800 to provide the minimum tasks summarized above and to participate in meetings with City staff and decision makers. A detailed budget is provided on the next page. All fees are estimates for discussion purposes. After discussions with staff, tasks and rates could change.

Proposed Budget

Michael Baker
INTERNATIONAL

Budget

Industry Climate Action Plan Update

Tasks	Project Manager/ Principal in Charge	Senior Environmental Planner	Asst Project Manager, Sr Planner	Planners	Tech Editor/Graphics	Admin	Total Hours	Total Labor	Direct Costs	Budget
	$200	$165	$120	$100	$90	$65				
1. Project Coordination and Meetings	**20**		**16**				**36**	**$ 5,920**	**$ 250**	**$ 6,170**
1.1 Project Team Meetings (4)	8		8				16	$ 2,560		$ 2,560
1.2 Public Hearings (2)	12		8				20	$ 3,360	$ 250	$ 3,610
2. Review and Update GHG Inventory, Forecast, and Target	**4**		**16**	**20**			**40**	**$ 4,720**	**$ -**	**$ 4,720**
2.1 Conduct peer review of GHG baseline inventories, forecasts, and targets	2		16				18	$ 2,320		$ 2,320
2.2 Update inventories, forecasts, and targets	2			20			22	$ 2,400		$ 2,400
3. Update GHG Reduction Measures	**6**		**16**	**54**	**2**	**2**	**80**	**$ 8,830**	**$ -**	**$ 8,830**
3.3 Update GHG reduction measures	4		8	20	2	2	36	$ 4,070	$ -	$ 4,070
3.3 Update quantification of GHG reduction measures	2		8	34			44	$ 4,760	$ -	$ 4,760
4. Stakeholder Engagement	**16**		**24**	**10**	**8**	**4**	**62**	**$ 8,060**	**$ 500**	**$ 8,560**
4.1 City and Agency staff meetings to review and confirm measures and implementation	8		12	5	4	2	31	$ 4,030	$ 250	$ 4,280
4.2 Stakeholder Meetings to review and confirm measures	8		12	5	4	2	31	$ 4,030	$ 250	$ 4,280
5. Prepare Monitoring and Reporting tool	**3**		**10**	**43**	**4**		**60**	**$ 6,460**	**$ -**	**$ 6,460**
5.1 Prepare monitoring tool	2		8	35	4		49	$ 5,220		$ 5,220
5.2 Conduct monitoring training	1		2	8			11	$ 1,240		$ 1,240
6. Conduct Environmental Review	**6**	**28**		**70**	**8**	**8**	**120**	**$ 14,060**	**$ -**	**$ 14,060**
6.1 Prepare initial study	2	16		40	8	8	74	$ 8,280		$ 8,280
6.2 Prepare negative declaration	4	12		30			46	$ 5,780		$ 5,780
Total Hours/ Budget	55	28	82	197	22	14	398	$ 48,050	$ 750	$ 48,800