

# Appendix A

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## Air Quality and Greenhouse Gas Calculations



Highline Transport Solutions - Lamberton Avenue - Los Angeles-South Coast County, Annual

**Highline Transport Solutions - Lamberton Avenue**  
**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	13.05	1000sqft	0.30	13,053.00	0
Other Asphalt Surfaces	91.92	1000sqft	2.11	91,920.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	628.13	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

Project Characteristics - CO2 Intensity Factor adjusted based on 2017 Power Content Label. See Section 1.0 Project Characteristics.

Land Use - Per applicant information. The Project would retain/repurpose the existing 13,053 sqft office/warehouse building located on-site.

Construction Phase - See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Per applicant provided information. See 3.0 Construction Detail.

Trips and VMT - Default values rounded up to even number of trip rates.

On-road Fugitive Dust - Default values.

Demolition - Per applicant provided information.

Grading - Per applicant provided information.

Architectural Coating - Default values.

Vehicle Trips - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Road Dust - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	524.00
tblGrading	MaterialImported	0.00	859.00
tblLandUse	LandUseSquareFeet	13,050.00	13,053.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	628.13
tblTripsAndVMT	HaulingTripNumber	107.00	108.00
tblTripsAndVMT	HaulingTripNumber	0.00	138.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-15-2019	9-30-2019	0.1446	0.1446
		Highest	0.1446	0.1446

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0606	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Energy	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	15.1101	15.1101	6.8000e-004	1.5000e-004	15.1717
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	2.4907	0.0000	2.4907	0.1472	0.0000	6.1706
Water						0.0000	0.0000		0.0000	0.0000	0.9574	11.1957	12.1531	0.0989	2.4300e-003	15.3482
<b>Total</b>	<b>0.0606</b>	<b>5.7000e-004</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>3.4481</b>	<b>26.3084</b>	<b>29.7565</b>	<b>0.2467</b>	<b>2.5800e-003</b>	<b>36.6933</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**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	0.0606	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Energy	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	15.1101	15.1101	6.8000e-004	1.5000e-004	15.1717
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1.2454	0.0000	1.2454	0.0736	0.0000	3.0853
Water						0.0000	0.0000		0.0000	0.0000	0.9574	11.1957	12.1531	0.0989	2.4300e-003	15.3482
<b>Total</b>	<b>0.0606</b>	<b>5.7000e-004</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>2.2028</b>	<b>26.3084</b>	<b>28.5112</b>	<b>0.1731</b>	<b>2.5800e-003</b>	<b>33.6080</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>36.12</b>	<b>0.00</b>	<b>4.19</b>	<b>29.83</b>	<b>0.00</b>	<b>8.41</b>

**3.0 Construction Detail**

**Construction Phase**



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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/15/2019	10/11/2019	5	20	
2	Site Preparation	Site Preparation	10/12/2019	10/16/2019	5	3	
3	Grading	Grading	10/17/2019	10/24/2019	5	6	
4	Paving	Paving	10/25/2019	11/7/2019	5	10	

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 2.11**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	14.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	66.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	108.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	138.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**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					1.4800e-003	0.0000	1.4800e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
<b>Total</b>	<b>0.0230</b>	<b>0.2268</b>	<b>0.1489</b>	<b>2.4000e-004</b>	<b>1.4800e-003</b>	<b>0.0129</b>	<b>0.0143</b>	<b>2.2000e-004</b>	<b>0.0120</b>	<b>0.0122</b>	<b>0.0000</b>	<b>21.4161</b>	<b>21.4161</b>	<b>5.4500e-003</b>	<b>0.0000</b>	<b>21.5524</b>

**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	7.0000e-005	2.2200e-003	4.7000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5451	0.5451	4.0000e-005	0.0000	0.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	5.8000e-004	6.3600e-003	2.0000e-005	1.5300e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.4747	1.4747	5.0000e-005	0.0000	1.4760
<b>Total</b>	<b>7.7000e-004</b>	<b>2.8000e-003</b>	<b>6.8300e-003</b>	<b>3.0000e-005</b>	<b>1.6500e-003</b>	<b>2.0000e-005</b>	<b>1.6800e-003</b>	<b>4.4000e-004</b>	<b>2.0000e-005</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>2.0198</b>	<b>2.0198</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.0220</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.2 Demolition - 2019**

**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					6.6000e-004	0.0000	6.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
<b>Total</b>	<b>0.0230</b>	<b>0.2268</b>	<b>0.1489</b>	<b>2.4000e-004</b>	<b>6.6000e-004</b>	<b>0.0129</b>	<b>0.0135</b>	<b>1.0000e-004</b>	<b>0.0120</b>	<b>0.0121</b>	<b>0.0000</b>	<b>21.4161</b>	<b>21.4161</b>	<b>5.4500e-003</b>	<b>0.0000</b>	<b>21.5524</b>

**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	7.0000e-005	2.2200e-003	4.7000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5451	0.5451	4.0000e-005	0.0000	0.5460
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	5.8000e-004	6.3600e-003	2.0000e-005	1.5300e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.4747	1.4747	5.0000e-005	0.0000	1.4760
<b>Total</b>	<b>7.7000e-004</b>	<b>2.8000e-003</b>	<b>6.8300e-003</b>	<b>3.0000e-005</b>	<b>1.6500e-003</b>	<b>2.0000e-005</b>	<b>1.6800e-003</b>	<b>4.4000e-004</b>	<b>2.0000e-005</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>2.0198</b>	<b>2.0198</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.0220</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**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					2.4200e-003	0.0000	2.4200e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2900e-003	0.0382	0.0218	4.0000e-005		1.7200e-003	1.7200e-003		1.5900e-003	1.5900e-003	0.0000	3.7563	3.7563	1.1900e-003	0.0000	3.7860
<b>Total</b>	<b>3.2900e-003</b>	<b>0.0382</b>	<b>0.0218</b>	<b>4.0000e-005</b>	<b>2.4200e-003</b>	<b>1.7200e-003</b>	<b>4.1400e-003</b>	<b>2.6000e-004</b>	<b>1.5900e-003</b>	<b>1.8500e-003</b>	<b>0.0000</b>	<b>3.7563</b>	<b>3.7563</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>3.7860</b>

**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	3.1000e-004	0.0104	2.2200e-003	3.0000e-005	5.7000e-004	4.0000e-005	6.0000e-004	1.6000e-004	4.0000e-005	1.9000e-004	0.0000	2.5697	2.5697	1.8000e-004	0.0000	2.5742
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	8.0000e-005	6.0000e-005	6.8000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1580	0.1580	1.0000e-005	0.0000	0.1581
<b>Total</b>	<b>3.9000e-004</b>	<b>0.0105</b>	<b>2.9000e-003</b>	<b>3.0000e-005</b>	<b>7.3000e-004</b>	<b>4.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>4.0000e-005</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.7277</b>	<b>2.7277</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.7323</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.3 Site Preparation - 2019**

**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					1.0900e-003	0.0000	1.0900e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2900e-003	0.0382	0.0218	4.0000e-005		1.7200e-003	1.7200e-003		1.5900e-003	1.5900e-003	0.0000	3.7563	3.7563	1.1900e-003	0.0000	3.7860
<b>Total</b>	<b>3.2900e-003</b>	<b>0.0382</b>	<b>0.0218</b>	<b>4.0000e-005</b>	<b>1.0900e-003</b>	<b>1.7200e-003</b>	<b>2.8100e-003</b>	<b>1.2000e-004</b>	<b>1.5900e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>	<b>3.7563</b>	<b>3.7563</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>3.7860</b>

**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	3.1000e-004	0.0104	2.2200e-003	3.0000e-005	5.7000e-004	4.0000e-005	6.0000e-004	1.6000e-004	4.0000e-005	1.9000e-004	0.0000	2.5697	2.5697	1.8000e-004	0.0000	2.5742
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	8.0000e-005	6.0000e-005	6.8000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1580	0.1580	1.0000e-005	0.0000	0.1581
<b>Total</b>	<b>3.9000e-004</b>	<b>0.0105</b>	<b>2.9000e-003</b>	<b>3.0000e-005</b>	<b>7.3000e-004</b>	<b>4.0000e-005</b>	<b>7.7000e-004</b>	<b>2.0000e-004</b>	<b>4.0000e-005</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.7277</b>	<b>2.7277</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>2.7323</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
<b>Total</b>	<b>6.0900e-003</b>	<b>0.0682</b>	<b>0.0305</b>	<b>6.0000e-005</b>	<b>0.0197</b>	<b>3.2200e-003</b>	<b>0.0229</b>	<b>0.0101</b>	<b>2.9600e-003</b>	<b>0.0131</b>	<b>0.0000</b>	<b>5.5554</b>	<b>5.5554</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.5993</b>

**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	5.1000e-004	0.0171	3.6300e-003	4.0000e-005	9.3000e-004	6.0000e-005	9.9000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	4.2049	4.2049	3.0000e-004	0.0000	4.2123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.3000e-004	1.3600e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3160	0.3160	1.0000e-005	0.0000	0.3163
<b>Total</b>	<b>6.6000e-004</b>	<b>0.0172</b>	<b>4.9900e-003</b>	<b>4.0000e-005</b>	<b>1.2600e-003</b>	<b>6.0000e-005</b>	<b>1.3200e-003</b>	<b>3.4000e-004</b>	<b>6.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.5209</b>	<b>4.5209</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>4.5286</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.4 Grading - 2019**

**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					8.8700e-003	0.0000	8.8700e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
<b>Total</b>	<b>6.0900e-003</b>	<b>0.0682</b>	<b>0.0305</b>	<b>6.0000e-005</b>	<b>8.8700e-003</b>	<b>3.2200e-003</b>	<b>0.0121</b>	<b>4.5500e-003</b>	<b>2.9600e-003</b>	<b>7.5100e-003</b>	<b>0.0000</b>	<b>5.5554</b>	<b>5.5554</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.5993</b>

**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	5.1000e-004	0.0171	3.6300e-003	4.0000e-005	9.3000e-004	6.0000e-005	9.9000e-004	2.5000e-004	6.0000e-005	3.1000e-004	0.0000	4.2049	4.2049	3.0000e-004	0.0000	4.2123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.3000e-004	1.3600e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3160	0.3160	1.0000e-005	0.0000	0.3163
<b>Total</b>	<b>6.6000e-004</b>	<b>0.0172</b>	<b>4.9900e-003</b>	<b>4.0000e-005</b>	<b>1.2600e-003</b>	<b>6.0000e-005</b>	<b>1.3200e-003</b>	<b>3.4000e-004</b>	<b>6.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>4.5209</b>	<b>4.5209</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>4.5286</b>



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.5 Paving - 2019**

**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	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	2.7600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>8.9900e-003</b>	<b>0.0628</b>	<b>0.0593</b>	<b>9.0000e-005</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>		<b>3.3600e-003</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>7.9208</b>	<b>7.9208</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.9823</b>

**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	6.6000e-004	0.0218	4.6400e-003	5.0000e-005	1.1900e-003	8.0000e-005	1.2600e-003	3.3000e-004	7.0000e-005	4.0000e-004	0.0000	5.3729	5.3729	3.8000e-004	0.0000	5.3824
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	4.0000e-004	3.3000e-004	3.6300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8427	0.8427	3.0000e-005	0.0000	0.8434
<b>Total</b>	<b>1.0600e-003</b>	<b>0.0222</b>	<b>8.2700e-003</b>	<b>6.0000e-005</b>	<b>2.0700e-003</b>	<b>9.0000e-005</b>	<b>2.1400e-003</b>	<b>5.6000e-004</b>	<b>8.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.2156</b>	<b>6.2156</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.2258</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**3.5 Paving - 2019**

**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	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	2.7600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>8.9900e-003</b>	<b>0.0628</b>	<b>0.0593</b>	<b>9.0000e-005</b>		<b>3.6500e-003</b>	<b>3.6500e-003</b>		<b>3.3600e-003</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>7.9208</b>	<b>7.9208</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.9823</b>

**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	6.6000e-004	0.0218	4.6400e-003	5.0000e-005	1.1900e-003	8.0000e-005	1.2600e-003	3.3000e-004	7.0000e-005	4.0000e-004	0.0000	5.3729	5.3729	3.8000e-004	0.0000	5.3824
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	4.0000e-004	3.3000e-004	3.6300e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8427	0.8427	3.0000e-005	0.0000	0.8434
<b>Total</b>	<b>1.0600e-003</b>	<b>0.0222</b>	<b>8.2700e-003</b>	<b>6.0000e-005</b>	<b>2.0700e-003</b>	<b>9.0000e-005</b>	<b>2.1400e-003</b>	<b>5.6000e-004</b>	<b>8.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>6.2156</b>	<b>6.2156</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>6.2258</b>

**4.0 Operational Detail - Mobile**

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

**4.4 Fleet Mix**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Unrefrigerated Warehouse-No Rail	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

**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	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	14.5041	14.5041	6.7000e-004	1.4000e-004	14.5621
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	14.5041	14.5041	6.7000e-004	1.4000e-004	14.5621
NaturalGas Mitigated	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6060	0.6060	1.0000e-005	1.0000e-005	0.6096
NaturalGas Unmitigated	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6060	0.6060	1.0000e-005	1.0000e-005	0.6096

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	11356.1	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6060	0.6060	1.0000e-005	1.0000e-005	0.6096
<b>Total</b>		<b>6.0000e-005</b>	<b>5.6000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6060</b>	<b>0.6060</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6096</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	11356.1	6.0000e-005	5.6000e-004	4.7000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6060	0.6060	1.0000e-005	1.0000e-005	0.6096
<b>Total</b>		<b>6.0000e-005</b>	<b>5.6000e-004</b>	<b>4.7000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6060</b>	<b>0.6060</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6096</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	50906.7	14.5041	6.7000e-004	1.4000e-004	14.5621
<b>Total</b>		<b>14.5041</b>	<b>6.7000e-004</b>	<b>1.4000e-004</b>	<b>14.5621</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	50906.7	14.5041	6.7000e-004	1.4000e-004	14.5621
<b>Total</b>		<b>14.5041</b>	<b>6.7000e-004</b>	<b>1.4000e-004</b>	<b>14.5621</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.0606	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
Unmitigated	0.0606	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	7.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0531					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
<b>Total</b>	<b>0.0606</b>	<b>1.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6100e-003</b>	<b>2.6100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.7800e-003</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**6.2 Area by SubCategory**

**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	7.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0531					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e-004	1.0000e-005	1.3500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6100e-003	2.6100e-003	1.0000e-005	0.0000	2.7800e-003
<b>Total</b>	<b>0.0606</b>	<b>1.0000e-005</b>	<b>1.3500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6100e-003</b>	<b>2.6100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.7800e-003</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.1531	0.0989	2.4300e-003	15.3482
Unmitigated	12.1531	0.0989	2.4300e-003	15.3482

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.01781 / 0	12.1531	0.0989	2.4300e-003	15.3482
<b>Total</b>		<b>12.1531</b>	<b>0.0989</b>	<b>2.4300e-003</b>	<b>15.3482</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.01781 / 0	12.1531	0.0989	2.4300e-003	15.3482
<b>Total</b>		<b>12.1531</b>	<b>0.0989</b>	<b>2.4300e-003</b>	<b>15.3482</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.2454	0.0736	0.0000	3.0853
Unmitigated	2.4907	0.1472	0.0000	6.1706

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	12.27	2.4907	0.1472	0.0000	6.1706
<b>Total</b>		<b>2.4907</b>	<b>0.1472</b>	<b>0.0000</b>	<b>6.1706</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.135	1.2454	0.0736	0.0000	3.0853
<b>Total</b>		<b>1.2454</b>	<b>0.0736</b>	<b>0.0000</b>	<b>3.0853</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Annual

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Highline Transport Solutions - Lamberton Avenue - Los Angeles-South Coast County, Summer

**Highline Transport Solutions - Lamberton Avenue**  
**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	13.05	1000sqft	0.30	13,053.00	0
Other Asphalt Surfaces	91.92	1000sqft	2.11	91,920.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	628.13	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

Project Characteristics - CO2 Intensity Factor adjusted based on 2017 Power Content Label. See Section 1.0 Project Characteristics.

Land Use - Per applicant information. The Project would retain/repurpose the existing 13,053 sqft office/warehouse building located on-site.

Construction Phase - See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Per applicant provided information. See 3.0 Construction Detail.

Trips and VMT - Default values rounded up to even number of trip rates.

On-road Fugitive Dust - Default values.

Demolition - Per applicant provided information.

Grading - Per applicant provided information.

Architectural Coating - Default values.

Vehicle Trips - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Road Dust - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	524.00
tblGrading	MaterialImported	0.00	859.00
tblLandUse	LandUseSquareFeet	13,050.00	13,053.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	628.13
tblTripsAndVMT	HaulingTripNumber	107.00	108.00
tblTripsAndVMT	HaulingTripNumber	0.00	138.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Energy	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.3325</b>	<b>3.1500e-003</b>	<b>0.0134</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>3.6833</b>	<b>3.6833</b>	<b>1.3000e-004</b>	<b>7.0000e-005</b>	<b>3.7066</b>

**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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Energy	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.3325</b>	<b>3.1500e-003</b>	<b>0.0134</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>3.6833</b>	<b>3.6833</b>	<b>1.3000e-004</b>	<b>7.0000e-005</b>	<b>3.7066</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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	Demolition	Demolition	9/15/2019	10/11/2019	5	20	
2	Site Preparation	Site Preparation	10/12/2019	10/16/2019	5	3	
3	Grading	Grading	10/17/2019	10/24/2019	5	6	
4	Paving	Paving	10/25/2019	11/7/2019	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 2.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	14.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	66.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	108.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	138.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**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					0.1477	0.0000	0.1477	0.0224	0.0000	0.0224			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.1477</b>	<b>1.2863</b>	<b>1.4339</b>	<b>0.0224</b>	<b>1.2017</b>	<b>1.2241</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

**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	6.5800e-003	0.2144	0.0457	5.6000e-004	0.0122	7.9000e-004	0.0130	3.3500e-003	7.5000e-004	4.1100e-003		60.5158	60.5158	4.1700e-003		60.6200
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	0.0699	0.0514	0.6750	1.7100e-003	0.1565	1.3500e-003	0.1578	0.0415	1.2400e-003	0.0427		169.8134	169.8134	5.8300e-003		169.9592
<b>Total</b>	<b>0.0765</b>	<b>0.2658</b>	<b>0.7207</b>	<b>2.2700e-003</b>	<b>0.1687</b>	<b>2.1400e-003</b>	<b>0.1709</b>	<b>0.0449</b>	<b>1.9900e-003</b>	<b>0.0469</b>		<b>230.3292</b>	<b>230.3292</b>	<b>0.0100</b>		<b>230.5792</b>

Highline Transport Solutions - Lambert Avenue - Los Angeles-South Coast County, Summer

**3.2 Demolition - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0664	0.0000	0.0664	0.0101	0.0000	0.0101			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.0664</b>	<b>1.2863</b>	<b>1.3527</b>	<b>0.0101</b>	<b>1.2017</b>	<b>1.2118</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

**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	6.5800e-003	0.2144	0.0457	5.6000e-004	0.0122	7.9000e-004	0.0130	3.3500e-003	7.5000e-004	4.1100e-003		60.5158	60.5158	4.1700e-003		60.6200
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	0.0699	0.0514	0.6750	1.7100e-003	0.1565	1.3500e-003	0.1578	0.0415	1.2400e-003	0.0427		169.8134	169.8134	5.8300e-003		169.9592
<b>Total</b>	<b>0.0765</b>	<b>0.2658</b>	<b>0.7207</b>	<b>2.2700e-003</b>	<b>0.1687</b>	<b>2.1400e-003</b>	<b>0.1709</b>	<b>0.0449</b>	<b>1.9900e-003</b>	<b>0.0469</b>		<b>230.3292</b>	<b>230.3292</b>	<b>0.0100</b>		<b>230.5792</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6105	0.0000	1.6105	0.1748	0.0000	0.1748			0.0000			0.0000
Off-Road	2.1900	25.4560	14.5534	0.0279		1.1499	1.1499		1.0579	1.0579		2,760.394 3	2,760.394 3	0.8734		2,782.228 3
<b>Total</b>	<b>2.1900</b>	<b>25.4560</b>	<b>14.5534</b>	<b>0.0279</b>	<b>1.6105</b>	<b>1.1499</b>	<b>2.7604</b>	<b>0.1748</b>	<b>1.0579</b>	<b>1.2326</b>		<b>2,760.394 3</b>	<b>2,760.394 3</b>	<b>0.8734</b>		<b>2,782.228 3</b>

**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	0.2067	6.7382	1.4367	0.0176	0.3846	0.0247	0.4094	0.1054	0.0237	0.1291		1,901.925 9	1,901.925 9	0.1310		1,905.200 4
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	0.0500	0.0367	0.4822	1.2200e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		121.2953	121.2953	4.1700e-003		121.3995
<b>Total</b>	<b>0.2567</b>	<b>6.7750</b>	<b>1.9188</b>	<b>0.0188</b>	<b>0.4964</b>	<b>0.0257</b>	<b>0.5221</b>	<b>0.1351</b>	<b>0.0246</b>	<b>0.1596</b>		<b>2,023.221 2</b>	<b>2,023.221 2</b>	<b>0.1352</b>		<b>2,026.599 9</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.3 Site Preparation - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7247	0.0000	0.7247	0.0786	0.0000	0.0786			0.0000			0.0000
Off-Road	2.1900	25.4560	14.5534	0.0279		1.1499	1.1499		1.0579	1.0579	0.0000	2,760.394 3	2,760.394 3	0.8734		2,782.228 3
<b>Total</b>	<b>2.1900</b>	<b>25.4560</b>	<b>14.5534</b>	<b>0.0279</b>	<b>0.7247</b>	<b>1.1499</b>	<b>1.8746</b>	<b>0.0786</b>	<b>1.0579</b>	<b>1.1365</b>	<b>0.0000</b>	<b>2,760.394 3</b>	<b>2,760.394 3</b>	<b>0.8734</b>		<b>2,782.228 3</b>

**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	0.2067	6.7382	1.4367	0.0176	0.3846	0.0247	0.4094	0.1054	0.0237	0.1291		1,901.925 9	1,901.925 9	0.1310		1,905.200 4
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	0.0500	0.0367	0.4822	1.2200e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		121.2953	121.2953	4.1700e-003		121.3995
<b>Total</b>	<b>0.2567</b>	<b>6.7750</b>	<b>1.9188</b>	<b>0.0188</b>	<b>0.4964</b>	<b>0.0257</b>	<b>0.5221</b>	<b>0.1351</b>	<b>0.0246</b>	<b>0.1596</b>		<b>2,023.221 2</b>	<b>2,023.221 2</b>	<b>0.1352</b>		<b>2,026.599 9</b>



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5685	0.0000	6.5685	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>6.5685</b>	<b>1.0730</b>	<b>7.6415</b>	<b>3.3699</b>	<b>0.9871</b>	<b>4.3571</b>		<b>2,041.2539</b>	<b>2,041.2539</b>	<b>0.6458</b>		<b>2,057.3997</b>

**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	0.1692	5.5131	1.1755	0.0144	0.3147	0.0202	0.3349	0.0863	0.0194	0.1056		1,556.1212	1,556.1212	0.1072		1,558.8004
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	0.0500	0.0367	0.4822	1.2200e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		121.2953	121.2953	4.1700e-003		121.3995
<b>Total</b>	<b>0.2191</b>	<b>5.5498</b>	<b>1.6576</b>	<b>0.0156</b>	<b>0.4265</b>	<b>0.0212</b>	<b>0.4477</b>	<b>0.1159</b>	<b>0.0202</b>	<b>0.1362</b>		<b>1,677.4165</b>	<b>1,677.4165</b>	<b>0.1113</b>		<b>1,680.1998</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.4 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9558	0.0000	2.9558	1.5165	0.0000	1.5165			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>2.9558</b>	<b>1.0730</b>	<b>4.0288</b>	<b>1.5165</b>	<b>0.9871</b>	<b>2.5036</b>	<b>0.0000</b>	<b>2,041.2539</b>	<b>2,041.2539</b>	<b>0.6458</b>		<b>2,057.3997</b>

**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	0.1692	5.5131	1.1755	0.0144	0.3147	0.0202	0.3349	0.0863	0.0194	0.1056		1,556.1212	1,556.1212	0.1072		1,558.8004
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	0.0500	0.0367	0.4822	1.2200e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		121.2953	121.2953	4.1700e-003		121.3995
<b>Total</b>	<b>0.2191</b>	<b>5.5498</b>	<b>1.6576</b>	<b>0.0156</b>	<b>0.4265</b>	<b>0.0212</b>	<b>0.4477</b>	<b>0.1159</b>	<b>0.0202</b>	<b>0.1362</b>		<b>1,677.4165</b>	<b>1,677.4165</b>	<b>0.1113</b>		<b>1,680.1998</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.5 Paving - 2019**

**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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.243 2	1,746.243 2	0.5418		1,759.787 0
Paving	0.5528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.7981</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>		<b>1,746.243 2</b>	<b>1,746.243 2</b>	<b>0.5418</b>		<b>1,759.787 0</b>

**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	0.1297	4.2267	0.9012	0.0110	0.2413	0.0155	0.2568	0.0661	0.0148	0.0810		1,193.026 2	1,193.026 2	0.0822		1,195.080 3
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	0.0799	0.0587	0.7715	1.9500e-003	0.1788	1.5400e-003	0.1804	0.0474	1.4200e-003	0.0489		194.0725	194.0725	6.6700e-003		194.2391
<b>Total</b>	<b>0.2096</b>	<b>4.2855</b>	<b>1.6726</b>	<b>0.0130</b>	<b>0.4201</b>	<b>0.0171</b>	<b>0.4372</b>	<b>0.1136</b>	<b>0.0163</b>	<b>0.1298</b>		<b>1,387.098 7</b>	<b>1,387.098 7</b>	<b>0.0888</b>		<b>1,389.319 4</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**3.5 Paving - 2019**

**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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.243 2	1,746.243 2	0.5418		1,759.787 0
Paving	0.5528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.7981</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>	<b>0.0000</b>	<b>1,746.243 2</b>	<b>1,746.243 2</b>	<b>0.5418</b>		<b>1,759.787 0</b>

**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	0.1297	4.2267	0.9012	0.0110	0.2413	0.0155	0.2568	0.0661	0.0148	0.0810		1,193.026 2	1,193.026 2	0.0822		1,195.080 3
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	0.0799	0.0587	0.7715	1.9500e-003	0.1788	1.5400e-003	0.1804	0.0474	1.4200e-003	0.0489		194.0725	194.0725	6.6700e-003		194.2391
<b>Total</b>	<b>0.2096</b>	<b>4.2855</b>	<b>1.6726</b>	<b>0.0130</b>	<b>0.4201</b>	<b>0.0171</b>	<b>0.4372</b>	<b>0.1136</b>	<b>0.0163</b>	<b>0.1298</b>		<b>1,387.098 7</b>	<b>1,387.098 7</b>	<b>0.0888</b>		<b>1,389.319 4</b>

**4.0 Operational Detail - Mobile**

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

**4.4 Fleet Mix**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Unrefrigerated Warehouse-No Rail	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

**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					
Natural Gas Mitigated	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
Natural Gas Unmitigated	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1126	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
<b>Total</b>		<b>3.4000e-004</b>	<b>3.0500e-003</b>	<b>2.5600e-003</b>	<b>2.0000e-005</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>3.6603</b>	<b>3.6603</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>3.6821</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0311126	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
<b>Total</b>		<b>3.4000e-004</b>	<b>3.0500e-003</b>	<b>2.5600e-003</b>	<b>2.0000e-005</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>3.6603</b>	<b>3.6603</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>3.6821</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive 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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Unmitigated	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
<b>Total</b>	<b>0.3322</b>	<b>1.0000e-004</b>	<b>0.0108</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0230</b>	<b>0.0230</b>	<b>6.0000e-005</b>		<b>0.0245</b>



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
<b>Total</b>	<b>0.3322</b>	<b>1.0000e-004</b>	<b>0.0108</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0230</b>	<b>0.0230</b>	<b>6.0000e-005</b>		<b>0.0245</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**Highline Transport Solutions - Lambertson Avenue**  
**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	13.05	1000sqft	0.30	13,053.00	0
Other Asphalt Surfaces	91.92	1000sqft	2.11	91,920.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	628.13	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

Project Characteristics - CO2 Intensity Factor adjusted based on 2017 Power Content Label. See Section 1.0 Project Characteristics.

Land Use - Per applicant information. The Project would retain/repurpose the existing 13,053 sqft office/warehouse building located on-site.

Construction Phase - See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Default values. See 3.0 Construction Detail.

Off-road Equipment - Per applicant provided information. See 3.0 Construction Detail.

Trips and VMT - Default values rounded up to even number of trip rates.

On-road Fugitive Dust - Default values.

Demolition - Per applicant provided information.

Grading - Per applicant provided information.

Architectural Coating - Default values.

Vehicle Trips - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Vehicle Emission Factors - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Road Dust - Operational mobile emissions calculated outside CalEEMod with EMFAC2017 emission factors. See additional spreadsheet calculations in Appendix B.

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Waste Mitigation - Percent Reduction in Waste Disposed: 50%. Waste diversion consistent with Assembly Bill 939.

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	524.00
tblGrading	MaterialImported	0.00	859.00
tblLandUse	LandUseSquareFeet	13,050.00	13,053.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	628.13
tblTripsAndVMT	HaulingTripNumber	107.00	108.00
tblTripsAndVMT	HaulingTripNumber	0.00	138.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00

## 2.0 Emissions Summary

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Energy	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.3325</b>	<b>3.1500e-003</b>	<b>0.0134</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>3.6833</b>	<b>3.6833</b>	<b>1.3000e-004</b>	<b>7.0000e-005</b>	<b>3.7066</b>

**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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Energy	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.3325</b>	<b>3.1500e-003</b>	<b>0.0134</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>2.7000e-004</b>		<b>3.6833</b>	<b>3.6833</b>	<b>1.3000e-004</b>	<b>7.0000e-005</b>	<b>3.7066</b>

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/15/2019	10/11/2019	5	20	
2	Site Preparation	Site Preparation	10/12/2019	10/16/2019	5	3	
3	Grading	Grading	10/17/2019	10/24/2019	5	6	
4	Paving	Paving	10/25/2019	11/7/2019	5	10	

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 3**

**Acres of Paving: 2.11**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	14.00	0.00	14.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	66.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	108.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	138.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

## Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019****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					0.1477	0.0000	0.1477	0.0224	0.0000	0.0224			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.1477</b>	<b>1.2863</b>	<b>1.4339</b>	<b>0.0224</b>	<b>1.2017</b>	<b>1.2241</b>		<b>2,360.7198</b>	<b>2,360.7198</b>	<b>0.6011</b>		<b>2,375.7475</b>

**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	6.7400e-003	0.2173	0.0488	5.5000e-004	0.0122	8.0000e-004	0.0130	3.3500e-003	7.7000e-004	4.1200e-003		59.4895	59.4895	4.3300e-003		59.5976
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	0.0775	0.0569	0.6195	1.6100e-003	0.1565	1.3500e-003	0.1578	0.0415	1.2400e-003	0.0427		159.8983	159.8983	5.5000e-003		160.0358
<b>Total</b>	<b>0.0843</b>	<b>0.2742</b>	<b>0.6683</b>	<b>2.1600e-003</b>	<b>0.1687</b>	<b>2.1500e-003</b>	<b>0.1709</b>	<b>0.0449</b>	<b>2.0100e-003</b>	<b>0.0469</b>		<b>219.3878</b>	<b>219.3878</b>	<b>9.8300e-003</b>		<b>219.6335</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.2 Demolition - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0664	0.0000	0.0664	0.0101	0.0000	0.0101			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
<b>Total</b>	<b>2.2950</b>	<b>22.6751</b>	<b>14.8943</b>	<b>0.0241</b>	<b>0.0664</b>	<b>1.2863</b>	<b>1.3527</b>	<b>0.0101</b>	<b>1.2017</b>	<b>1.2118</b>	<b>0.0000</b>	<b>2,360.7197</b>	<b>2,360.7197</b>	<b>0.6011</b>		<b>2,375.7475</b>

**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	6.7400e-003	0.2173	0.0488	5.5000e-004	0.0122	8.0000e-004	0.0130	3.3500e-003	7.7000e-004	4.1200e-003		59.4895	59.4895	4.3300e-003		59.5976
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	0.0775	0.0569	0.6195	1.6100e-003	0.1565	1.3500e-003	0.1578	0.0415	1.2400e-003	0.0427		159.8983	159.8983	5.5000e-003		160.0358
<b>Total</b>	<b>0.0843</b>	<b>0.2742</b>	<b>0.6683</b>	<b>2.1600e-003</b>	<b>0.1687</b>	<b>2.1500e-003</b>	<b>0.1709</b>	<b>0.0449</b>	<b>2.0100e-003</b>	<b>0.0469</b>		<b>219.3878</b>	<b>219.3878</b>	<b>9.8300e-003</b>		<b>219.6335</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6105	0.0000	1.6105	0.1748	0.0000	0.1748			0.0000			0.0000
Off-Road	2.1900	25.4560	14.5534	0.0279		1.1499	1.1499		1.0579	1.0579		2,760.394 3	2,760.394 3	0.8734		2,782.228 3
<b>Total</b>	<b>2.1900</b>	<b>25.4560</b>	<b>14.5534</b>	<b>0.0279</b>	<b>1.6105</b>	<b>1.1499</b>	<b>2.7604</b>	<b>0.1748</b>	<b>1.0579</b>	<b>1.2326</b>		<b>2,760.394 3</b>	<b>2,760.394 3</b>	<b>0.8734</b>		<b>2,782.228 3</b>

**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	0.2119	6.8281	1.5337	0.0173	0.3846	0.0252	0.4098	0.1054	0.0241	0.1295		1,869.669 3	1,869.669 3	0.1360		1,873.068 7
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	0.0554	0.0407	0.4425	1.1500e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		114.2131	114.2131	3.9300e-003		114.3113
<b>Total</b>	<b>0.2673</b>	<b>6.8688</b>	<b>1.9762</b>	<b>0.0184</b>	<b>0.4964</b>	<b>0.0262</b>	<b>0.5226</b>	<b>0.1351</b>	<b>0.0250</b>	<b>0.1601</b>		<b>1,983.882 4</b>	<b>1,983.882 4</b>	<b>0.1399</b>		<b>1,987.380 0</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.3 Site Preparation - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7247	0.0000	0.7247	0.0786	0.0000	0.0786			0.0000			0.0000
Off-Road	2.1900	25.4560	14.5534	0.0279		1.1499	1.1499		1.0579	1.0579	0.0000	2,760.394 3	2,760.394 3	0.8734		2,782.228 3
<b>Total</b>	<b>2.1900</b>	<b>25.4560</b>	<b>14.5534</b>	<b>0.0279</b>	<b>0.7247</b>	<b>1.1499</b>	<b>1.8746</b>	<b>0.0786</b>	<b>1.0579</b>	<b>1.1365</b>	<b>0.0000</b>	<b>2,760.394 3</b>	<b>2,760.394 3</b>	<b>0.8734</b>		<b>2,782.228 3</b>

**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	0.2119	6.8281	1.5337	0.0173	0.3846	0.0252	0.4098	0.1054	0.0241	0.1295		1,869.669 3	1,869.669 3	0.1360		1,873.068 7
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	0.0554	0.0407	0.4425	1.1500e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		114.2131	114.2131	3.9300e-003		114.3113
<b>Total</b>	<b>0.2673</b>	<b>6.8688</b>	<b>1.9762</b>	<b>0.0184</b>	<b>0.4964</b>	<b>0.0262</b>	<b>0.5226</b>	<b>0.1351</b>	<b>0.0250</b>	<b>0.1601</b>		<b>1,983.882 4</b>	<b>1,983.882 4</b>	<b>0.1399</b>		<b>1,987.380 0</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5685	0.0000	6.5685	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>6.5685</b>	<b>1.0730</b>	<b>7.6415</b>	<b>3.3699</b>	<b>0.9871</b>	<b>4.3571</b>		<b>2,041.2539</b>	<b>2,041.2539</b>	<b>0.6458</b>		<b>2,057.3997</b>

**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	0.1734	5.5867	1.2549	0.0141	0.3147	0.0206	0.3353	0.0863	0.0197	0.1060		1,529.7294	1,529.7294	0.1113		1,532.5107
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	0.0554	0.0407	0.4425	1.1500e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		114.2131	114.2131	3.9300e-003		114.3113
<b>Total</b>	<b>0.2288</b>	<b>5.6273</b>	<b>1.6974</b>	<b>0.0153</b>	<b>0.4265</b>	<b>0.0216</b>	<b>0.4481</b>	<b>0.1159</b>	<b>0.0206</b>	<b>0.1365</b>		<b>1,643.9425</b>	<b>1,643.9425</b>	<b>0.1152</b>		<b>1,646.8220</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.4 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9558	0.0000	2.9558	1.5165	0.0000	1.5165			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
<b>Total</b>	<b>2.0287</b>	<b>22.7444</b>	<b>10.1518</b>	<b>0.0206</b>	<b>2.9558</b>	<b>1.0730</b>	<b>4.0288</b>	<b>1.5165</b>	<b>0.9871</b>	<b>2.5036</b>	<b>0.0000</b>	<b>2,041.2539</b>	<b>2,041.2539</b>	<b>0.6458</b>		<b>2,057.3997</b>

**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	0.1734	5.5867	1.2549	0.0141	0.3147	0.0206	0.3353	0.0863	0.0197	0.1060		1,529.7294	1,529.7294	0.1113		1,532.5107
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	0.0554	0.0407	0.4425	1.1500e-003	0.1118	9.6000e-004	0.1127	0.0296	8.9000e-004	0.0305		114.2131	114.2131	3.9300e-003		114.3113
<b>Total</b>	<b>0.2288</b>	<b>5.6273</b>	<b>1.6974</b>	<b>0.0153</b>	<b>0.4265</b>	<b>0.0216</b>	<b>0.4481</b>	<b>0.1159</b>	<b>0.0206</b>	<b>0.1365</b>		<b>1,643.9425</b>	<b>1,643.9425</b>	<b>0.1152</b>		<b>1,646.8220</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.5 Paving - 2019**

**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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728		1,746.2432	1,746.2432	0.5418		1,759.7870
Paving	0.5528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.7981</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>		<b>1,746.2432</b>	<b>1,746.2432</b>	<b>0.5418</b>		<b>1,759.7870</b>

**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	0.1329	4.2831	0.9621	0.0108	0.2413	0.0158	0.2571	0.0661	0.0151	0.0813		1,172.7926	1,172.7926	0.0853		1,174.9249
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	0.0886	0.0651	0.7080	1.8400e-003	0.1788	1.5400e-003	0.1804	0.0474	1.4200e-003	0.0489		182.7409	182.7409	6.2900e-003		182.8981
<b>Total</b>	<b>0.2215</b>	<b>4.3482</b>	<b>1.6700</b>	<b>0.0127</b>	<b>0.4201</b>	<b>0.0173</b>	<b>0.4375</b>	<b>0.1136</b>	<b>0.0165</b>	<b>0.1301</b>		<b>1,355.5335</b>	<b>1,355.5335</b>	<b>0.0916</b>		<b>1,357.8230</b>



Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**3.5 Paving - 2019**

**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	1.2453	12.5685	11.8507	0.0178		0.7301	0.7301		0.6728	0.6728	0.0000	1,746.243 2	1,746.243 2	0.5418		1,759.787 0
Paving	0.5528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.7981</b>	<b>12.5685</b>	<b>11.8507</b>	<b>0.0178</b>		<b>0.7301</b>	<b>0.7301</b>		<b>0.6728</b>	<b>0.6728</b>	<b>0.0000</b>	<b>1,746.243 2</b>	<b>1,746.243 2</b>	<b>0.5418</b>		<b>1,759.787 0</b>

**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	0.1329	4.2831	0.9621	0.0108	0.2413	0.0158	0.2571	0.0661	0.0151	0.0813		1,172.792 6	1,172.792 6	0.0853		1,174.924 9
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	0.0886	0.0651	0.7080	1.8400e- 003	0.1788	1.5400e- 003	0.1804	0.0474	1.4200e- 003	0.0489		182.7409	182.7409	6.2900e- 003		182.8981
<b>Total</b>	<b>0.2215</b>	<b>4.3482</b>	<b>1.6700</b>	<b>0.0127</b>	<b>0.4201</b>	<b>0.0173</b>	<b>0.4375</b>	<b>0.1136</b>	<b>0.0165</b>	<b>0.1301</b>		<b>1,355.533 5</b>	<b>1,355.533 5</b>	<b>0.0916</b>		<b>1,357.823 0</b>

**4.0 Operational Detail - Mobile**

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Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

**4.4 Fleet Mix**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907
Unrefrigerated Warehouse-No Rail	0.547726	0.045437	0.201480	0.122768	0.016614	0.006090	0.019326	0.029174	0.002438	0.002359	0.005005	0.000677	0.000907

**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	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
NaturalGas Unmitigated	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	31.1126	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
<b>Total</b>		<b>3.4000e-004</b>	<b>3.0500e-003</b>	<b>2.5600e-003</b>	<b>2.0000e-005</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>3.6603</b>	<b>3.6603</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>3.6821</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0311126	3.4000e-004	3.0500e-003	2.5600e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		3.6603	3.6603	7.0000e-005	7.0000e-005	3.6821
<b>Total</b>		<b>3.4000e-004</b>	<b>3.0500e-003</b>	<b>2.5600e-003</b>	<b>2.0000e-005</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>2.3000e-004</b>	<b>2.3000e-004</b>		<b>3.6603</b>	<b>3.6603</b>	<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>3.6821</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive 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	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
Unmitigated	0.3322	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
<b>Total</b>	<b>0.3322</b>	<b>1.0000e-004</b>	<b>0.0108</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0230</b>	<b>0.0230</b>	<b>6.0000e-005</b>		<b>0.0245</b>

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0402					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0100e-003	1.0000e-004	0.0108	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0230	0.0230	6.0000e-005		0.0245
<b>Total</b>	<b>0.3322</b>	<b>1.0000e-004</b>	<b>0.0108</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0230</b>	<b>0.0230</b>	<b>6.0000e-005</b>		<b>0.0245</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

Highline Transport Solutions - Lambertson Avenue - Los Angeles-South Coast County, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Table 1. Truck Route Identification and Distances (Operational Project Mobile Sources)**

Route	Direction from the Site	Description	Percent Traveled (%)	One Way Length (miles)	Average Daily			
					Trips <sup>1</sup> (trips/day)	Peak Daily VMT (VMT/day)	Annual Trips <sup>2</sup> (trips/year)	Annual VMT (VMT/year)
<u>Truck (LHDT1, LHDT2, MHDT, HHDT)</u>								
A	North	Highline Yard to/from SR-91 via Fordyce or Dominguez	5	3.00				
B	West	Highline Yard to/from I-110 N via Fordyce or Dominguez, & Del Amo	5	4.13				
C	West	Highline Yard to/from I-405 N/S via Dominguez, Wilmington & Carson	5	2.12				
D	South	Highline Yard to/from I-405 N/S via Dominguez & Wilmington	5	1.61				
E	South	Highline Yard to/from I-405 via Dominguez, Wilmington, Carson & Alameda	10	2.60				
F	East	Highline Yard to I-710 N/S via Fordyce and Del Amo	70	1.43				
			Weighted Average	1.80	90	162	23,400	42,214
<u>Passenger Vehicles (LDA, LDT1, LDT2)</u>								
A	N/A	Based on CalEEMod Mobile Trip Characteristics Dependent on Location (Los Angeles - South Coast, Urban Trip Length C-W)	100	16.6	90	1,494	23,400	388,440

Notes:

<sup>1</sup> Truck trips and passenger vehicle trips per day based on Traffic Technical Memorandum. Daily estimates assume PM Peak Hour Trips account for 10 percent of daily trips.

<sup>2</sup> Based on 5 days per week and 52 weeks per year.



**Table 2. Operation Mobile Source Emissions Summary - Paved Road Fugitive Emissions**

**Equation:**

$$E = k \times (sL/2)^{0.91} \times (W)1.02 \text{ [maximum day]}$$

Where:

		<b>Units</b>
k	particle size multiplier (PM <sub>10</sub> )	0.00220 lb/VMT
k	particle size multiplier (PM <sub>2.5</sub> )	0.00054 lb/VMT
sL	silt loading (2) average weight (tons) of the vehicle traveling the road	0.1 g/m <sup>2</sup>
W	road	2.4 tons

**Notes/References:**

k = Emission factors from CalEEMod2016.3.1 per AP-42, Section 13.2.1 (Paved Roads).

sL = Silt loading from CalEEMod2016.3.1

For daily emissions it is assumed to have no precipitation.

**Truck Weight Assumptions**

EMFAC Definition	EMFAC Category	GVWR (pounds)	GVWR (tons)	
Heavy Heavy-Duty Truck	HHDT	>33,000	17	<i>Assumed 33,000 pounds</i>
Medium Heavy-Duty Truck	MHDT	14,001-33,000	8	<i>Assumed average of 14,001 &amp; 33,000 pounds</i>
Composite Heavy & Medium Heavy-Duty Truck	HHDT & MHDT	14,001-33,000+	13	<i>Assumed average of HHDT &amp; MHDT pounds</i>

Source: EMFAC 2014

GVWR = Gross Vehicle Weight Rating

1 pound = 0.0005 US tons

**Employee Vehicles Evaluated:**

Employee Type	Average Weight (tons)
Passenger Vehicles	2.4

**Reference:**

Source: CalEEMod2016.3.1 (average vehicle weight = 2.4 tons)

Per AP-42, Section 13.2.1 (Paved Roads): The above equation calls for the average weight of all vehicles traveling the road. For example, if 99 percent of traffic on the road are 2 ton cars/trucks while the remaining 1 percent consists of 20 ton trucks, then the mean weight "W" is 2.2 tons. More specifically, the above equation is not intended to be used to calculate a separate emission factor for each vehicle weight class. Instead, only one emission factor should be calculated to represent the "fleet" average weight of all vehicles traveling the road.

**Emission Factors (lb/VMT)**

	PM10 Paved Road	PM2.5 Paved Road
HHDT & MHDT	0.0037	0.0009
Passenger Vehicles	0.0007	0.0002

**Emissions**

	PM10 Paved Road (lb/day)	PM2.5 Paved Road (lb/day)	PM10 Paved Road (tons/yr)	PM2.5 Paved Road (tons/yr)
HHDT & MHDT	0.6013	0.1476	0.07817	0.01919
Passenger Vehicles	0.9876	0.2424	0.12839	0.03151
<b>Total</b>	<b>1.5890</b>	<b>0.3900</b>	<b>0.2066</b>	<b>0.0507</b>

Table 3. Operation Mobile Source Emissions Summary - EMFAC17

Vehicle Type	EMFAC Class	Average Daily Trip					Emission Factors								
		Length (miles)	Avg. Daily Trips (trips/day)	Avg. Daily VMT (VMT/day)	Annual Trips (trips/year)	Annual VMT (VMT/year)	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
Passenger Vehicles	LDA, LDT1, LDT2	16.60	90	1,494	23,400	388,440	<b>Running Exhaust, Tire Wear, and Break Wear (grams/mile)</b>								
							0.021122	0.075933	1.022754	0.003058	0.002152	0.001982	309.0946	0.005021	0.00688
							<b>Starting Exhaust, Hot Soak, Running Loss Evaporative (grams/trip)</b>								
							0.766407	0.248474	2.398055	0.000606	0.002153	0.00198	61.26261	0.065456	0.029435
							<b>Idling, Resting Loss Evap, Diurnal Loss Evap (grams/vehicle/day)</b>								
							0.141403	0	0	0	0	0	0	0	0
							<b>Subtotal</b>								
Trucks	MHDT, HHDT	1.80	90	162	23,400	42,214	<b>Running Exhaust, Tire Wear, and Break Wear (grams/mile)</b>								
							0.150716	3.764047	0.815126	0.012695	0.183556	0.109367	1363.954	0.04928	0.197727
							<b>Starting Exhaust, Hot Soak, Running Loss Evaporative (grams/trip)</b>								
							0.121734	1.422052	0.723003	5.65E-05	6.99E-05	1.67E-06	0.061396	0.005996	0.004059
							<b>Idling, Resting Loss Evap, Diurnal Loss Evap (grams/vehicle/day)</b>								
							0.272267	3.889432	3.359209	0.006296	0.008357	0.007995	675.603	0.017041	0.106074
							<b>Subtotal</b>								
							<b>Total</b>								

**Emissions - Daily (Pounds/day)**

**Emissions - Annual (Metric Tons/yr)**

ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2e	
0.07	0.25	3.37	0.01	0.01	0.01	1,018.07	0.02	0.02	1,025.16	0.01	0.03	0.40	0.00	0.00	0.00	120.07	0.00	0.00	120.90	
0.15	0.05	0.48	0.00	0.00	0.00	12.16	0.01	0.01	14.18	0.02	0.01	0.06	0.00	0.00	0.00	1.43	0.00	0.00	1.67	
0.03	-	-	-	-	-	-	-	-	-	0.00	-	-	-	-	-	-	-	-	-	
<b>0.25</b>	<b>0.30</b>	<b>3.84</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>1,030.22</b>	<b>0.03</b>	<b>0.03</b>	<b>1,039.34</b>	<b>Total</b>	<b>0.03</b>	<b>0.04</b>	<b>0.45</b>	<b>0.00</b>	<b>0.00</b>	<b>121.50</b>	<b>0.00</b>	<b>0.00</b>	<b>122.57</b>	
0.05	1.35	0.29	0.00	0.07	0.04	488.22	0.02	0.07	509.57	0.01	0.16	0.03	0.00	0.01	0.00	57.58	0.00	0.01	60.10	
0.02	0.28	0.14	0.00	0.00	0.00	0.01	0.00	0.00	0.28	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
0.05	0.77	0.67	0.00	0.00	0.00	134.05	0.00	0.02	140.36	0.01	0.09	0.08	0.00	0.00	0.00	15.81	0.00	0.00	16.55	
<b>0.13</b>	<b>2.40</b>	<b>1.10</b>	<b>0.01</b>	<b>0.07</b>	<b>0.04</b>	<b>622.28</b>	<b>0.02</b>	<b>0.09</b>	<b>650.21</b>	<b>Total</b>	<b>0.02</b>	<b>0.28</b>	<b>0.13</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>73.39</b>	<b>0.00</b>	<b>0.01</b>	<b>76.68</b>
<b>0.38</b>	<b>2.70</b>	<b>4.95</b>	<b>0.02</b>	<b>0.07</b>	<b>0.05</b>	<b>1,652.50</b>	<b>0.05</b>	<b>0.12</b>	<b>1,689.55</b>		<b>0.05</b>	<b>0.32</b>	<b>0.58</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>194.89</b>	<b>0.01</b>	<b>0.01</b>	<b>199.26</b>

Table 4. Operation Mobile Source Emissions Summary - Weighted EMFAC17 Emission Factors

Emission Factors: Summary

Vehicle Class(es)	Fuel	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
		Running Exhaust, Tire Wear, and Break Wear (grams/mile)								
HHDT	Gas,Diesel	0.152	4.585	0.774	0.014	0.157	0.092	1,551.879	0.081	0.246
MHDT	Gas,Diesel	0.149	2.738	0.867	0.011	0.217	0.131	1,129.048	0.009	0.137
<b>HHDT &amp; MHDT Composite</b>		<b>0.151</b>	<b>3.764</b>	<b>0.815</b>	<b>0.013</b>	<b>0.184</b>	<b>0.109</b>	<b>1363.954</b>	<b>0.049</b>	<b>0.198</b>
LDA	Gas, Electric, & Diesel	0.017	0.054	0.864	0.003	0.002	0.002	286.851	0.004	0.006
LDT1	Gas, Electric, & Diesel	0.047	0.161	1.851	0.003	0.003	0.003	336.457	0.010	0.011
LDT2	Gas, Electric, & Diesel	0.027	0.115	1.239	0.004	0.002	0.002	367.677	0.006	0.009
<b>LDA, LDT1 &amp; LDT2 Composite</b>		<b>0.021</b>	<b>0.076</b>	<b>1.023</b>	<b>0.003</b>	<b>0.002</b>	<b>0.002</b>	<b>309.095</b>	<b>0.005</b>	<b>0.007</b>

Vehicle Class(es)	Fuel	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
		Starting Exhaust, Hot Soak, Running Loss Evaporative (grams/trip)								
HHDT	Gas,Diesel	0.003	1.760	0.011	0.0000	0.0000	0.0000	0.111	0.000	0.000
MHDT	Gas,Diesel	0.271	0.999	1.613	0.0001	0.0002	0.0000	0.000	0.013	0.009
<b>HHDT &amp; MHDT Composite</b>		<b>0.122</b>	<b>1.422</b>	<b>0.723</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.061</b>	<b>0.006</b>	<b>0.004</b>
LDA	Gas, Electric, & Diesel	0.620	0.210	2.236	0.001	0.002	0.002	56.491	0.059	0.027
LDT1	Gas, Electric, & Diesel	1.516	0.306	2.453	0.001	0.003	0.003	67.072	0.086	0.031
LDT2	Gas, Electric, & Diesel	0.967	0.346	2.868	0.001	0.002	0.002	73.771	0.079	0.036
<b>LDA, LDT1 &amp; LDT2 Composite</b>		<b>0.766</b>	<b>0.248</b>	<b>2.398</b>	<b>0.001</b>	<b>0.002</b>	<b>0.002</b>	<b>61.263</b>	<b>0.065</b>	<b>0.029</b>

Vehicle Class(es)	Fuel	ROG	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O
		Idling, Resting Loss Evap, Diurnal Loss Evap (grams/vehicle/day)								
HHDT	Gas,Diesel	0.469	6.501	5.731	0.0108	0.0132	0.0127	1,160.012	0.027	0.183
MHDT	Gas,Diesel	0.026	0.624	0.395	0.0007	0.0022	0.0021	70.092	0.004	0.010
<b>HHDT &amp; MHDT Composite</b>		<b>0.272</b>	<b>3.889</b>	<b>3.359</b>	<b>0.006</b>	<b>0.008</b>	<b>0.008</b>	<b>675.603</b>	<b>0.017</b>	<b>0.106</b>
LDA	Gas, Electric, & Diesel	0.119	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LDT1	Gas, Electric, & Diesel	0.282	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LDT2	Gas, Electric, & Diesel	0.162	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>LDA, LDT1 &amp; LDT2 Composite</b>		<b>0.141</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

Notes: Region Type: County  
 Region: Los Angeles  
 Calendar Year: 2020  
 Season: Annual  
 Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
 Starts/day/vehicle 2.44  
 Model Year: Aggregated  
 Speed: Aggregated

Table 5. Operation Mobile Source Emissions Summary - EMFAC17 ROG

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_RESTLOSS	ROG_DIURN	ROG_Combined_g	ROG_Combined_g
							(g/mile)	(g/vehicle/day)	(g/trip)	(g/trip)	(g/trip)	(g/vehicle/day)	(g/vehicle/day)	/trip (Calculated)	/vehicle/day (Calculated)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.726002539	0	0.001284777	0.197421979	1.01070617	0.065646399	0.093867433		
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.14768782	4.757598797	0	0	0	0	0		
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	0.452369079	0.084848788	0	0	0	0	0		
							<b>0.152270</b>	<b>0.469215</b>	<b>0.000003</b>	<b>0.000432</b>	<b>0.002210</b>	<b>0.000007</b>	<b>0.000010</b>	<b>0.002645</b>	<b>0.469232</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.016675384	0	0.279483694	0.11856669	0.23652909	0.275664497	0.299181618		
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.028030159	0	0	0	0	0	0		
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0	0.004888026	0	0.007542135	0.022429133		
							<b>0.016528</b>	<b>-</b>	<b>0.273124</b>	<b>0.115942</b>	<b>0.231147</b>	<b>0.057156</b>	<b>0.062075</b>	<b>0.620213</b>	<b>0.119231</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.046677924	0	0.447229552	0.240944448	0.835308652	0.585943026	0.717321212		
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.209705178	0	0	0	0	0	0		
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0	0.004888026	0	0.007527747	0.022421684		
							<b>0.046580</b>	<b>-</b>	<b>0.445134</b>	<b>0.239836</b>	<b>0.831395</b>	<b>0.126845</b>	<b>0.155297</b>	<b>1.516365</b>	<b>0.282142</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.027068228	0	0.384482334	0.142438249	0.452315241	0.381346323	0.386168785		
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.024438397	0	0	0	0	0	0		
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0	0.004888026	0	0.007537325	0.022426643		
							<b>0.026910</b>	<b>-</b>	<b>0.379838</b>	<b>0.140749</b>	<b>0.446852</b>	<b>0.080461</b>	<b>0.081497</b>	<b>0.967439</b>	<b>0.161958</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.09841788	0.997509176	0.234970918	0.097589727	0.529823036	0.031498672	0.051168208		
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.158834247	0.130284683	0	0	0	0	0		
							<b>0.148772</b>	<b>0.024765</b>	<b>0.073728</b>	<b>0.030621</b>	<b>0.166245</b>	<b>0.000494</b>	<b>0.000802</b>	<b>0.270594244</b>	<b>0.026061</b>

Notes: Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 6. Operation Mobile Source Emissions Summary - EMFAC17 Nox**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	NOx_RUNEX (g/mile)	NOx_IDLEX (g/vehicle/day)	NOx_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	5.085264348	0	0.873042006
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	4.589565773	64.93953093	1.790018751
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	4.19030513	25.53183238	0
						Composite	<b>4.584610</b>	<b>6.501411</b>	<b>1.760290</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.054296816	0	0.214826738
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.115898456	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
						Composite	<b>0.054010</b>	<b>-</b>	<b>0.209938</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.161460798	0	0.307554692
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	1.152175097	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
						Composite	<b>0.161325</b>	<b>-</b>	<b>0.306114</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.116023224	0	0.35030706
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.055984522	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
						Composite	<b>0.115046</b>	<b>-</b>	<b>0.346076</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.662581361	0.08890206	0.385271488
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	3.15316408	8.899781272	1.279996145
						Composite	<b>2.738344</b>	<b>0.624459</b>	<b>0.999254</b>

Notes: Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 7. Operation Mobile Source Emissions Summary - EMFAC17 CO**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	CO_RUNEX (g/mile)	CO_IDLEX (g/vehicle/day)	CO_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	40.29548733	0	5.003608593
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.574067767	57.35291579	0
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	12.93068043	19.68915599	0
Composite							<b>0.773528</b>	<b>5.730521</b>	<b>0.010940</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.880794872	0	2.288219026
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.332198858	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
Composite							<b>0.863909</b>	<b>-</b>	<b>2.236148</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	1.858245426	0	2.464157654
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	1.218571713	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
Composite							<b>1.850937</b>	<b>-</b>	<b>2.452612</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	1.252480451	0	2.902960293
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.186696258	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
Composite							<b>1.239373</b>	<b>-</b>	<b>2.867896</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	2.51974295	14.29896235	5.140891624
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.536865324	2.440054815	0
Composite							<b>0.867124</b>	<b>0.395069</b>	<b>1.613082</b>

Notes: Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 8. Operation Mobile Source Emissions Summary - EMFAC17 SO2**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	SO2_RUNEX (g/mile)	SO2_IDLEX (g/vehicle/day)	SO2_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.021791298	0	0.000500208
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.014402704	0.109588782	0
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	0	0	0
Composite							<b>0.014215</b>	<b>0.010800</b>	<b>0.000001</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.002884813	0	0.00057204
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.002140877	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
Composite							<b>0.002838</b>	-	<b>0.000559</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.003341452	0	0.000666861
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.00449632	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
Composite							<b>0.003329</b>	-	<b>0.000664</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.003661358	0	0.000738952
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.002923421	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
Composite							<b>0.003638</b>	-	<b>0.000730</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.017108935	0.005494929	0.000401343
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.009534155	0.008283513	0
Composite							<b>0.010796</b>	<b>0.000666</b>	<b>0.000126</b>

Notes:

Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated



Table 9. Operation Mobile Source Emissions Summary - EMFAC17 PM10

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_Combined_	
											PM10_PMBW	g/mile (Calculated)
							(g/mile)	(g/vehicle/day)	(g/trip)	(g/mile)	(g/mile)	
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.001552768	0	0.001250529	0.020000006	0.061740018	
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.060669928	0.131956379	0	0.035585735	0.061029536	
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	0.008222434	0.061057525	0	0.03600001	0.061740018	
Composite							<b>0.059915</b>	<b>0.013247</b>	<b>0.000003</b>	<b>0.035578</b>	<b>0.061040</b>	<b>0.156533</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.001975606	0	0.002120609	0.008000002	0.036750011	
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.013989421	0	0	0.008000002	0.036750011	
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0	0.008000002	0.036750011	
Composite							<b>0.002042</b>	<b>-</b>	<b>0.002072</b>	<b>0.008000</b>	<b>0.036750</b>	<b>0.046792</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.003186707	0	0.003103312	0.008000002	0.036750011	
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.158700781	0	0	0.008000002	0.036750011	
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0	0.008000002	0.036750011	
Composite							<b>0.003249</b>	<b>-</b>	<b>0.003089</b>	<b>0.008000</b>	<b>0.036750</b>	<b>0.047999</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.002111895	0	0.002124967	0.008000002	0.036750011	
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.007568036	0	0	0.008000002	0.036750011	
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0	0.008000002	0.036750011	
Composite							<b>0.002134</b>	<b>-</b>	<b>0.002099</b>	<b>0.008000</b>	<b>0.036750</b>	<b>0.046884</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.001137345	0	0.000489477	0.012000003	0.130340037	
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.089754073	0.032053886	0	0.012000003	0.130340037	
Composite							<b>0.074994</b>	<b>0.002244</b>	<b>0.000154</b>	<b>0.012000</b>	<b>0.130340</b>	<b>0.217334</b>

Notes: Region Type: County  
 Region: Los Angeles  
 Calendar Year: 2020  
 Season: Annual  
 Vehicle Classification: EMFAC2007 Categories  
 Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
 Starts/day/vehicle 2.44  
 Model Year: Aggregated  
 Speed: Aggregated

Table 10. Operation Mobile Source Emissions Summary - EMFAC17 PM2.5

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM2.5_Combined_
							(g/mile)	(g/vehicle/day)	(g/trip)	(g/mile)	(g/mile)	g/mile (Calculated)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.001431626	0	0.001159082	0.005000001	0.026460008	
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.058045374	0.126248005	0	0.008896434	0.026155516	
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	0.007866735	0.058416204	0	0.009000003	0.026460008	
							<b>0.057323</b>	<b>0.012674</b>	<b>0.000003</b>	<b>0.008895</b>	<b>0.026160</b>	<b>0.092377</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.001816561	0	0.001950013	0.002000001	0.015750005	
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.013384245	0	0	0.002000001	0.015750005	
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0	0.002000001	0.015750005	
							<b>0.001882</b>	<b>-</b>	<b>0.001906</b>	<b>0.002000</b>	<b>0.015750</b>	<b>0.019632</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.002930366	0	0.002853742	0.002000001	0.015750005	
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.151835455	0	0	0.002000001	0.015750005	
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0	0.002000001	0.015750005	
							<b>0.002990</b>	<b>-</b>	<b>0.002840</b>	<b>0.002000</b>	<b>0.015750</b>	<b>0.020740</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.001941926	0	0.001953966	0.002000001	0.015750005	
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.007240646	0	0	0.002000001	0.015750005	
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0	0.002000001	0.015750005	
							<b>0.001964</b>	<b>-</b>	<b>0.001930</b>	<b>0.002000</b>	<b>0.015750</b>	<b>0.019714</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.001045747	0	0.000450056	0.003000001	0.055860016	
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.085871352	0.030667249	0	0.003000001	0.055860016	
							<b>0.071743</b>	<b>0.002147</b>	<b>0.000141</b>	<b>0.003000</b>	<b>0.055860</b>	<b>0.130603</b>

Notes: Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 11. Operation Mobile Source Emissions Summary - EMFAC17 CO2**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	CO2_RUNEX (g/mile)	CO2_IDLEX (g/vehicle/day)	CO2_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	2202.073007	0	50.54745497
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	1524.498346	11599.76017	0
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	3517.793184	4234.252494	0
Composite							<b>1551.879160</b>	<b>1,160.012153</b>	<b>0.110513</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	291.5186182	0	57.80630977
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	226.4615997	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
Composite							<b>286.850731</b>	<b>-</b>	<b>56.490869</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	337.6633069	0	67.38823381
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	475.6200976	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
Composite							<b>336.456567</b>	<b>-</b>	<b>67.072488</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	369.9906677	0	74.67318494
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	309.2390721	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
Composite							<b>367.676735</b>	<b>-</b>	<b>73.771234</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	1728.906893	555.2782604	40.55683372
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	1009.171792	876.7938117	0
Composite							<b>1129.047596</b>	<b>70.091581</b>	<b>12.725711</b>

Notes:

Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 12. Operation Mobile Source Emissions Summary - EMFAC17 CH4**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	CH4_RUNEX (g/mile)	CH4_IDLEX (g/vehicle/day)	CH4_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.133491255	0	0.000243387
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.006859717	0.220978142	0
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	5.519969526	1.34232149	0
Composite							<b>0.081128</b>	<b>0.027109</b>	<b>0.000001</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.004107624	0	0.060053731
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.001301947	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
Composite							<b>0.004027</b>	-	<b>0.058687</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.010337368	0	0.086509553
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.009740405	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
Composite							<b>0.010298</b>	-	<b>0.086104</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.006413841	0	0.080216133
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.001135117	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
Composite							<b>0.006348</b>	-	<b>0.079247</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.019933111	0.257178624	0.042991549
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.007377439	0.006051386	0
Composite							<b>0.009469</b>	<b>0.004457</b>	<b>0.013490</b>

Notes:

Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated

**Table 13. Operation Mobile Source Emissions Summary - EMFAC17 N2O**

Region	CalYr	VehClass	Fuel	Population	VMT	Trips	N2O_RUNEX (g/mile)	N2O_IDLEX (g/vehicle/day)	N2O_STREX (g/trip)
LOS ANGELES	2020	HHDT	GAS	62.2233814	5724.924108	1244.965415	0.167370305	0	0.024250121
LOS ANGELES	2020	HHDT	DSL	56119.6367	6743706.669	559368.9702	0.23962991	1.823320762	0
LOS ANGELES	2020	HHDT	NG	2261.41947	92031.42275	8819.535939	0.717125153	0.86318007	0
Composite							<b>0.245993</b>	<b>0.183123</b>	<b>0.000053</b>
LOS ANGELES	2020	LDA	GAS	3953775.19	155194409.6	18642464.13	0.005565388	0	0.027681424
LOS ANGELES	2020	LDA	DSL	31076.3151	1254451.721	146424.4239	0.03559661	0	0
LOS ANGELES	2020	LDA	ELEC	57356.6682	2261366.873	287682.1126	0	0	0
Composite							<b>0.005723</b>	-	<b>0.027052</b>
LOS ANGELES	2020	LDT1	GAS	437139.561	16649906.4	2009946.714	0.011186742	0	0.031378154
LOS ANGELES	2020	LDT1	DSL	318.883827	7980.175189	1138.715481	0.074760856	0	0
LOS ANGELES	2020	LDT1	ELEC	1699.39713	63017.51025	8323.15927	0	0	0
Composite							<b>0.011175</b>	-	<b>0.031231</b>
LOS ANGELES	2020	LDT2	GAS	1346078.92	52129905.23	6303493.957	0.008811795	0	0.036476582
LOS ANGELES	2020	LDT2	DSL	7213.21758	323321.6928	35805.94594	0.048608076	0	0
LOS ANGELES	2020	LDT2	ELEC	8126.1517	276685.8029	41262.61742	0	0	0
Composite							<b>0.009010</b>	-	<b>0.036036</b>
LOS ANGELES	2020	MHDT	GAS	14534.1216	804968.7922	290798.7058	0.031144348	0.007245561	0.028893856
LOS ANGELES	2020	MHDT	DSL	64882.6018	4028069.01	635976.5832	0.158627752	0.137819777	0
Composite							<b>0.137395</b>	<b>0.009762</b>	<b>0.009066</b>

Notes: Region Type: County  
Region: Los Angeles  
Calendar Year: 2020  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN  
Starts/day/vehicle 2.44  
Model Year: Aggregated  
Speed: Aggregated



# Appendix B

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Noise





## Appendix B- Noise



# Field Noise Measurement Data Sheets



# FIELD NOISE MEASUREMENT DATA

PROJECT CARSON HIGHLINE TRUCK YARD PROJECT # 10029-08  
 SITE ID \_\_\_\_\_ OBSERVER(S) PETE VITAR  
 SITE ADDRESS \_\_\_\_\_  
 START DATE 6/6/19 END DATE 6/6/19  
 START TIME \_\_\_\_\_ END TIME \_\_\_\_\_

**METEOROLOGICAL CONDITIONS**  
 TEMP 64 F HUMIDITY 81 % R.H. WIND CALM LIGHT MODERATE  
 WINDSPD \_\_\_\_\_ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY  
 SKY SUNNY CLEAR OVERCAST PRTLY CLDY FOG RAIN

**ACOUSTIC MEASUREMENTS**  
 MEAS. INSTRUMENT PICCOLO SLM-2 TYPE 1 2 SERIAL # 140317004  
 CALIBRATOR RSWA CA 114 SERIAL # 980151  
 CALIBRATION CHECK PRE-TEST \_\_\_\_\_ dBA SPL POST-TEST \_\_\_\_\_ dBA SPL WINDSCRN YES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: \_\_\_\_\_

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>ST1</u> <u>2-3</u>	<u>9:31</u>	<u>9:46</u>	<u>70.5</u>	<u>85.0</u>	<u>53.8</u>				

COMMENTS ACROSS SIDE  
READING TAKEN OF 2510 E. DOMINGUEZ ST (RESIDENTIAL);  
PRIMARY NOISE SOURCE IS TRAFFIC ON ALAMEDA ST; READING TAKEN  
APX. 90' FROM EOP ON E. ALAMEDA ST;

**SOURCE INFO AND TRAFFIC COUNTS**  
 PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: \_\_\_\_\_  
 ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: 27' ON E. DOMINGUEZ ST


COUNT 1 (OR RDWY 1)	TRAFFIC COUNT DURATION: <u>15</u> MIN		SPEED		IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE <input checked="" type="checkbox"/>	COUNT 2 (OR RDWY 2)	
	DIRECTION	NB/EB	SB/WB	NB/EB		SB/WB	NB/EB
AUTOS		<u>26</u>				<u>196</u>	
MED TRKS		<u>1</u>				<u>15</u>	
HVY TRKS		<u>6</u>				<u>145</u>	
BUSES		<u>0</u>				<u>0</u>	
MOTRCLS		<u>0</u>				<u>0</u>	

SPEEDS ESTIMATED BY: DRIVING THE PACE  
 POSTED SPEED LIMIT SIGNS SAY: \_\_\_\_\_

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL  
 DIST. KIDS PLAYING DIST. CONVRSTNS/YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE  
 OTHER: \_\_\_\_\_

TRAFFIC COUNT ON E. DOMINGUEZ ST  
TRAFFIC COUNT ON S. ALAMEDA ST

**DESCRIPTION / SKETCH**  
 TERRAIN HARD SOFT MIXED FLAT OTHER: \_\_\_\_\_  
 PHOTOS 4743; 4744; 4745; 4746; 4747; 4748; 4749;  
 OTHER COMMENTS / SKETCH \_\_\_\_\_

# FIELD NOISE MEASUREMENT DATA

PROJECT CARSON HIGHLINE TROUGH FARM PROJECT # 10029-08  
 SITE ID \_\_\_\_\_  
 SITE ADDRESS \_\_\_\_\_ OBSERVER(S) PETE VITAR  
 START DATE 6/6/19 END DATE 6/6/19  
 START TIME \_\_\_\_\_ END TIME \_\_\_\_\_

METEOROLOGICAL CONDITIONS  
 TEMP 66 F HUMIDITY 75 % R.H. WIND CALM LIGHT MODERATE  
 WINDSPD \_\_\_\_\_ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY  
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS  
 MEAS. INSTRUMENT PICCOLO SLM-2 TYPE 1 2 SERIAL # 140317004  
 CALIBRATOR RSWA CA 114 SERIAL # 980151  
 CALIBRATION CHECK PRE-TEST \_\_\_\_\_ dBA SPL POST-TEST \_\_\_\_\_ dBA SPL WINDSCRN YES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: \_\_\_\_\_

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>572</u> 4-5	<u>10:15</u>	<u>10:31</u>	<u>74.0</u>	<u>90.0</u>	<u>60.9</u>				

COMMENTS  
READING TAKEN AT BACK PROPERTY LINE OF 1868 E. DEJWALL DR (RESIDENTIAL), ON E. DEL AMO;  
PRIMARY NOISE SOURCE IS TRAFFIC ON E. DEL AMO BLVD; SECONDARY IS  
DISTANT TRAFFIC FROM S. WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS  
 PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: \_\_\_\_\_  
 ROADWAY TYPE: AS PAV DIST. TO RDWY C/L OR EOP: 2'  
 TRAFFIC COUNT DURATION: 15 MIN SPEED \_\_\_\_\_ MIN SPEED \_\_\_\_\_  
 DIRECTION NB/EB SB/WB NB/EB SB/WB IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE  
 COUNT 1 (OR RDWY 1) AUTOS 190 MED TRKS 17 HVY TRKS 14 BUSES 3 MOTRCLS 0  
 COUNT 2 (OR RDWY 2) \_\_\_\_\_  
 SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE  
 POSTED SPEED LIMIT SIGNS SAY: 45 MPH  
 OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL  
 DIST. KIDS PLAYING DIST. CONVRTNS YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE  
 OTHER: S. WILMINGTON AVE

DESCRIPTION / SKETCH  
 TERRAIN HARD SOFT MIXED FLAT OTHER: \_\_\_\_\_  
 PHOTOS 4751; 4752; 4753; 4754; 4755; 4756;  
 OTHER COMMENTS / SKETCH \_\_\_\_\_




# FIELD NOISE MEASUREMENT DATA

PROJECT CARSON HIGHLINE TRUCK FARM PROJECT # 10029-08  
 SITE ID \_\_\_\_\_ OBSERVER(S) PETE VITAR  
 SITE ADDRESS \_\_\_\_\_  
 START DATE 6/6/19 END DATE 6/6/19  
 START TIME \_\_\_\_\_ END TIME \_\_\_\_\_

**METEOROLOGICAL CONDITIONS**  
 TEMP 67 F HUMIDITY 73 % R.H. WIND CALM LIGHT MODERATE  
 WINDSPD \_\_\_\_\_ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY  
 SKY SUNNY CLEAR OVRCAST PRTLY CLDY FOG RAIN

**ACOUSTIC MEASUREMENTS**  
 MEAS. INSTRUMENT PICCOLO SLM-2 TYPE 1 2 SERIAL # 140317004  
 CALIBRATOR RSWA CA 114 SERIAL # 480151  
 CALIBRATION CHECK PRE-TEST \_\_\_\_\_ dBA SPL POST-TEST \_\_\_\_\_ dBA SPL WINDSCRN YES

SETTINGS A-WTD SLOW FAST FRONTAL RANDOM ANSI OTHER: \_\_\_\_\_

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC)
<u>6-7</u>	<u>10:47</u>	<u>11:02</u>	<u>66.5</u>	<u>80.0</u>	<u>52.5</u>				

STB

**COMMENTS**  
ROADWAY TAKEN IN FRONT OF 1837 E. 215TH PL (RESIDENTIAL), AT THE  
END OF A CUL-DE-SAC. BACK PORTION OF RESIDENCE IS ON S. WILMINGTON AVE;  
PRIMARY NOISE SOURCE IS TRAFFIC ON S. WILMINGTON AVE;

**SOURCE INFO AND TRAFFIC COUNTS**  
 PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER: \_\_\_\_\_  
 ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR EOP: 15' ON 215TH PL CUL-DE-SAC  
 TRAFFIC COUNT DURATION: \_\_\_\_\_ MIN SPEED MIN SPEED  
 DIRECTION NB/EB SB/WB NB/EB SB/WB NB/EB SB/WB NB/EB SB/WB  
 COUNT 1 (OR RDWY 1) AUTOS \_\_\_\_\_ IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE \_\_\_\_\_  
 MED TRKS \_\_\_\_\_ COUNT 2 (OR RDWY 2) \_\_\_\_\_  
 HVY TRKS \_\_\_\_\_  
 BUSES \_\_\_\_\_  
 MOTRCLS \_\_\_\_\_  
 SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE  
 POSTED SPEED LIMIT SIGNS SAY: \_\_\_\_\_  
 OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL  
 DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE  
 OTHER: \_\_\_\_\_

**DESCRIPTION / SKETCH**  
 TERRAIN HARD SOFT MIXED FLAT OTHER: \_\_\_\_\_  
 PHOTOS 4758; 4759; 4760; 4761; 4762; 4763  
 OTHER COMMENTS / SKETCH \_\_\_\_\_








# Construction Noise Model Input / Output



Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/13/2019  
 Case Description: Highline Truck Yard - Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest NSLU - Resi	Residential	70	65	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	670	5
Dozer	No	40		81.7	680	5
Backhoe	No	40		77.6	750	5
Front End Loader	No	40		79.1	800	5
Tractor	No	40	84		800	5

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Concrete Saw	62		55 N/A	N/A	N/A	N/A
Dozer	54		50 N/A	N/A	N/A	N/A
Backhoe	49		45.1 N/A	N/A	N/A	N/A
Front End Loader	50		46 N/A	N/A	N/A	N/A
Tractor	54.9		50.9 N/A	N/A	N/A	N/A
Total	62		57.9 N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/13/2019  
 Case Description: Highline Truck Yard - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest NSLU - Resi	Residential	70	65	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40		85	670	5
Scraper	No	40		83.6	680	5

Tractor	No	40	84	750	5
Slurry Trenching Machine	No	50	80.4	800	5

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	Day			Evening		
*Lmax	Leq	Lmax	Leq	Lmax	Leq	
Grader	57.5	53.5	N/A	N/A	N/A	N/A
Scraper	55.9	51.9	N/A	N/A	N/A	N/A
Tractor	55.5	51.5	N/A	N/A	N/A	N/A
Slurry Trenching Machine	51.3	48.3	N/A	N/A	N/A	N/A
Total	57.5	57.7	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 8/13/2019  
Case Description: Highline Truck Yard - Grading

		---- Receptor #1 ----		
Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest NSLU - Resi	Residential	70	65	60

Description	Equipment	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85	670	5		
Dozer	No	40	81.7	680	5		
Tractor	No	40	84	750	5		
Backhoe	No	40	77.6	800	5		

Equipment	Results					
	Calculated (dBA)			Noise Limits (dBA)		
	Day			Evening		
*Lmax	Leq	Lmax	Leq	Lmax	Leq	
Grader	57.5	53.5	N/A	N/A	N/A	N/A
Dozer	54	50	N/A	N/A	N/A	N/A
Tractor	55.5	51.5	N/A	N/A	N/A	N/A
Backhoe	48.5	44.5	N/A	N/A	N/A	N/A
Total	57.5	56.9	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 8/13/2019

Case Description: Highline Truck Yard - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest NSLU - Resi	Residential	70	65	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	670	5
Paver	No	50		77.2	680	5
Concrete Pump Truck	No	20		81.4	750	5
Roller	No	20		80	800	5
Roller	No	20		80	700	5
Front End Loader	No	40		79.1	750	5

Equipment	Results						
	Calculated (dBA)				Noise Limits (dBA)		
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	
Concrete Mixer Truck	51.3	47.3	N/A	N/A	N/A	N/A	
Paver	49.5	46.5	N/A	N/A	N/A	N/A	
Concrete Pump Truck	52.9	45.9	N/A	N/A	N/A	N/A	
Roller	50.9	43.9	N/A	N/A	N/A	N/A	
Roller	52.1	45.1	N/A	N/A	N/A	N/A	
Front End Loader	50.6	46.6	N/A	N/A	N/A	N/A	
Total	52.9	53.8	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.



# Appendix C

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## Trip Generation Analysis Memorandum





## TECHNICAL MEMORANDUM

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**To:** Manraj G. Bhatia, City of Carson  
**From:** Dennis Pascua, Transportation Services Manager  
Amanda Meroux, EIT, Assistant Transportation Engineer  
**Subject:** Highline Truck Yard Trip Generation Analysis  
**Date:** August 13, 2019  
**cc:** Collin Ramsey, Dudek  
**Attachment(s):** [Figures 1 – 5](#)  
Raw Driveway Counts  
Trip Generation Analysis Worksheet  
Trip Generation Comparison

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The following technical memorandum provides a trip generation analysis of the Highline Truck Yard (proposed project), located at 20915 South Lambertson Avenue in the City of Carson (City). Figure 1 shows the study area and location of the project site.

This analysis was conducted to determine whether a Traffic Impact Analysis (TIA) would be required for the proposed project. The City does not have specific criteria for determining the preparation of a TIA. Therefore, the determination of the need to prepare a TIA is generally based on the study area requirements in Los Angeles County's 2010 *Congestion Management Program* (CMP), which states:

#### ***D.4 Study Area***

*The geographic area examined in the TIA must include the following, at a minimum:*

- *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).*

Therefore, if the proposed project would generate 50 or more trips (adjusted for passenger-car equivalence – PCE) through an intersection of two major streets, a traffic analysis would be required. If the project generates less than 50 peak hour trips through an intersection of two major streets, its impact to the overall street network would likely not be measurable for significant traffic impacts per the City's traffic significance criteria, and therefore, the project would not create a significant traffic impact.

### Project Description

Figure 2 illustrates the project site plan. The project proposes construction and operation of a 2.77-acre truck yard facility and would retain/repurpose the existing 13,053-square foot, single-story, office/warehouse building. On the eastern portion, the project would demolish the existing canopy and buildings to the south of the existing office/warehouse building and would remove the modular structure at the southern driveway on Lambertson Avenue.

The existing driveways on Lamberton Avenue would remain, and new landscaping would be introduced on either side of these driveways. Additionally, a new 8-foot high wrought iron fence with a screen mesh is proposed on either sides of the entrance, and the surface would be paved with new asphalt. Passenger car parking would be provided in the northern portion, with 23, 18-foot parking spaces and two (2) handicap accessible spaces. On the western portion, there would be no demolition. Two existing driveways along Brant Avenue would remain, and new landscaping would be introduced to either sides of these driveways. The entire site would be paved with new asphalt.

The project would provide 44 trailer parking spaces to provide temporary parking and storage for trucks and truck-mounted containers. Trucks and trailers would be parked while waiting to be moved to and from the Ports of Los Angeles and Long Beach (Ports), or other locations. The unloading and reloading of contents of one trailer to another trailer would be permitted on the project site. The general maintenance of truck tractors and equipment would not be allowed. The proposed project would be operational from 8:00 a.m. to 4:00 p.m. Monday through Friday. Trucks may enter or exit from the existing 44-foot wide driveway on Lamberton Avenue, and the two 30-foot wide driveways along Brant Avenue.

## Trip Generation Analysis

This section documents potential traffic-related impacts on the street network within the study area related to the project's trip generation.

### Trip Generation

Dominguez Street and Fordyce Street would serve as access routes to and from the project site. For the purposes of this analysis, the following four driveways were surveyed for vehicle trip generation (passenger-cars, medium trucks, and heavy trucks) on a typical weekday on Tuesday, June 25, 2019 to determine the trip generation based on existing operations at the Highline Truck Yard:

1. Fordyce Avenue Driveway, north of Dominguez Street
2. Fordyce Avenue Driveway, south of 209<sup>th</sup> Street
3. Lamberton Avenue Driveway (North)
4. Lamberton Avenue Driveway (South)

These driveway counts are summarized in Table 1 below, assuming passenger car equivalent (PCE) factors of 1.0 for passenger cars, 2.0 for medium trucks (single-unit trucks), and 3.0 for heavy trucks (semi-tractor trailer trucks). Raw traffic counts are provided in Attachment A, and a worksheet detailing the determination of PCE volumes, as well as AM and PM peak hour volumes, are provided in Attachment B. Driveway AM and PM peak hour volumes are also shown in Figure 3 per vehicle classification.

**Table 1 – Project Trip Generation Summary**

Land Use	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
<b>Project Trip Generation<sup>1</sup></b>						
Passenger Cars	6	2	8	3	6	9
Medium Trucks	1	5	6	1	3	4
Heavy Trucks	1	3	4	3	2	5
<b>Highline Truck Yard Project Total</b>	<b>8</b>	<b>10</b>	<b>18</b>	<b>7</b>	<b>11</b>	<b>18</b>
<b>Project Trip Generation (PCE)<sup>1</sup></b>						
Passenger Cars (1.0 PCE)	6	2	8	3	6	9
Medium Trucks (2.0 PCE)	2	10	12	2	6	8
Heavy Trucks (3.0 PCE)	3	9	12	9	6	15
<b>Highline Truck Yard Project Total PCE</b>	<b>11</b>	<b>21</b>	<b>32</b>	<b>14</b>	<b>18</b>	<b>32</b>

**Notes:** PCE = Passenger Car Equivalents

<sup>1</sup>Estimated project trip generation and in/out splits from driveway counts conducted Tuesday, June 25, 2019.

As shown in Table 1, trip generation based on existing Highline Truck Yard operations is approximately 18 AM peak hour trips (8 inbound, and 10 outbound) and 18 PM peak hour trips (7 inbound, 11 outbound). Adjusting for PCE, trip generation is approximately 32 AM PCE peak hour trips (11 inbound, and 21 outbound) and 32 PM PCE peak hour trips (14 inbound, 18 outbound).

A comparison to rates provided for Warehousing (ITE Code 150) and Intermodal Truck Terminal (ITE Code 30) land uses from the Institute of Transportation Engineers (ITE) 2012, *9<sup>th</sup> Edition Trip Generation Handbook*, found that PCE-adjusted trip generation for these land uses was only slightly higher than the PCE-adjusted trip generation estimated based on driveway counts. Attachment D details this comparison, as well as calculation of the PCE-adjusted rates.

As shown in Attachment D, trip generation using Warehousing rates (ITE 150) is approximately 28 AM peak hour trips (20 inbound, and 8 outbound) and 24 PM peak hour trips (8 inbound, 16 outbound). Adjusting for PCE using the South Coast Air Quality Management District’s (SCAQMD) *Warehousing Truck Trip Study Data Results and Usage* vehicle mix and percentage splits, trip generation for this land use is approximately 42 AM PCE peak hour trips (30 inbound, and 12 outbound) and 36 PM PCE peak hour trips (13 inbound, 23 outbound). Trip generation using Intermodal Truck Terminal rates (ITE 30) is approximately 20 AM peak hour trips (8 inbound, and 12 outbound) and 18 PM peak hour trips (8 inbound, 10 outbound). Adjusting for PCE using the *Fontana Truck Trip Generation Study* truck terminal vehicle mix and percentage splits, trip generation for this land use is approximately 39 AM PCE peak hour trips (16 inbound, and 23 outbound) and 35 PM PCE peak hour trips (15 inbound, 20 outbound).

Although the ITE rates described above are slightly higher than the trip generation estimates shown in Table 1, the surveyed trip generation from driveway counts conducted in June 2019 is within a reasonable range given the size of the project. ITE rates are based on an average of 12-acre and 20-acre operations, for Intermodal Truck Terminal and Warehousing land uses, respectively. Therefore, based on the smaller size of the Highline Truck Yard project (approximately 2.77 acres), the driveway counts conducted at the existing site were determined appropriate for analysis of proposed operations.

## Trip Distribution

Trip distribution to and from the project site was estimated based on review of the driveway count data and truck distribution patterns primarily to/from the Ports via Alameda Street; and secondarily, to/from the surrounding freeways of Interstate 405 (I-405) to the south and west, and State Route 91 (SR-91) to the north. The majority of project traffic (75 percent) was distributed along Fordyce Avenue, which provides the most direct access to Alameda Street and the Ports. 25 percent of project traffic was then distributed along Dominguez street and split to the surrounding roadway network as shown in Figure 4. Trip assignments (showing PCE volumes) are also provided in Figure 4.

The following four intersections adjacent to the site were analyzed with the project's trip assignment to determine whether the proposed project would generate 50 or more peak hour trips through those intersections:

1. Fordyce Avenue Driveway, north of Dominguez Street
2. Fordyce Avenue Driveway, south of 209<sup>th</sup> Street
3. Lamberton Avenue Driveway (North)
4. Lamberton Avenue Driveway (South)

Based on the project trip assignment (Figure 4), the proposed project would not generate more than 50 trips to any of the four surrounding intersections analyzed in this analysis.

## Conclusions

Based on driveway counts conducted in June 2019, the proposed project would generate approximately 18 AM peak hour trips (8 inbound, and 10 outbound) and 18 PM peak hour trips (7 inbound, 11 outbound). Adjusting for PCE, trip generation is approximately 32 AM PCE peak hour trips (11 inbound, and 21 outbound) and 32 PM PCE peak hour trips (14 inbound, 18 outbound). Analysis of the driveway counts conducted at the project site during existing operations found that these surveyed trip generation estimates were within a reasonable range given the size of the project (2.77 acres) compared to calculated estimates using ITE 150 or ITE 30 rates. This determination takes into consideration that these ITE rates are based on average acreages almost four to seven times greater than the size of the proposed Highline Truck Yard project.

Based on the peak hour trip generation and trip distribution reviewed in this analysis, the proposed project would not generate more than 50 trips to any of the four surrounding intersections analyzed in this analysis. Therefore, based on the CMP TIA criteria of 50 or more peak hour trips at an intersection, no further traffic analysis is required for the Highline Truck Yard project.

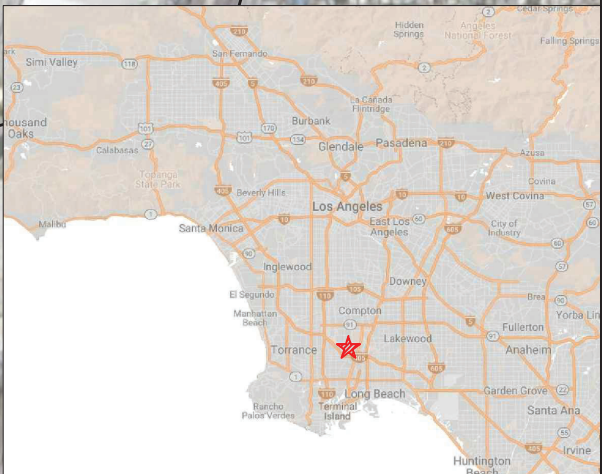
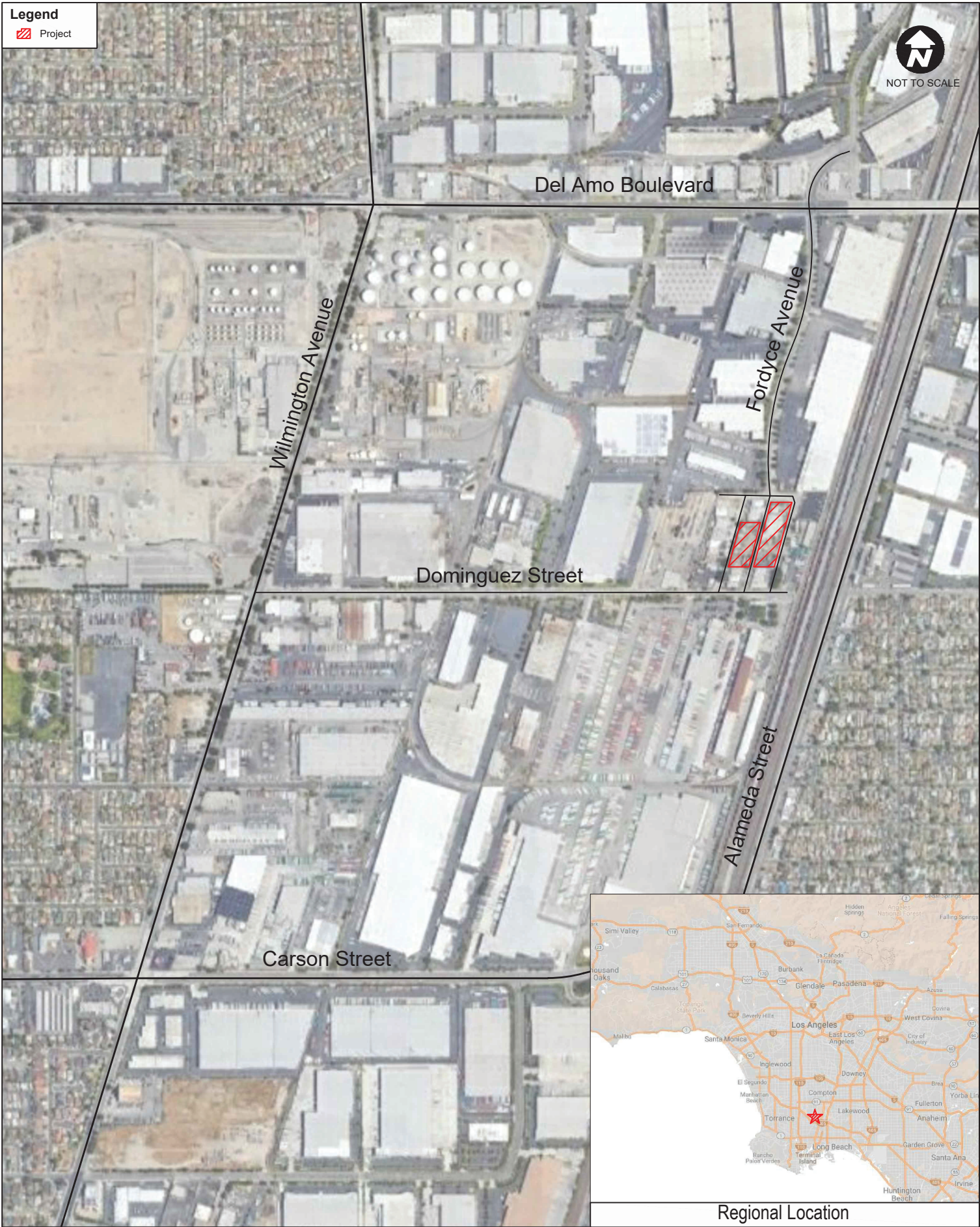


# Attachment A

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Figures 1 – 5

**Legend**  
Project



Regional Location

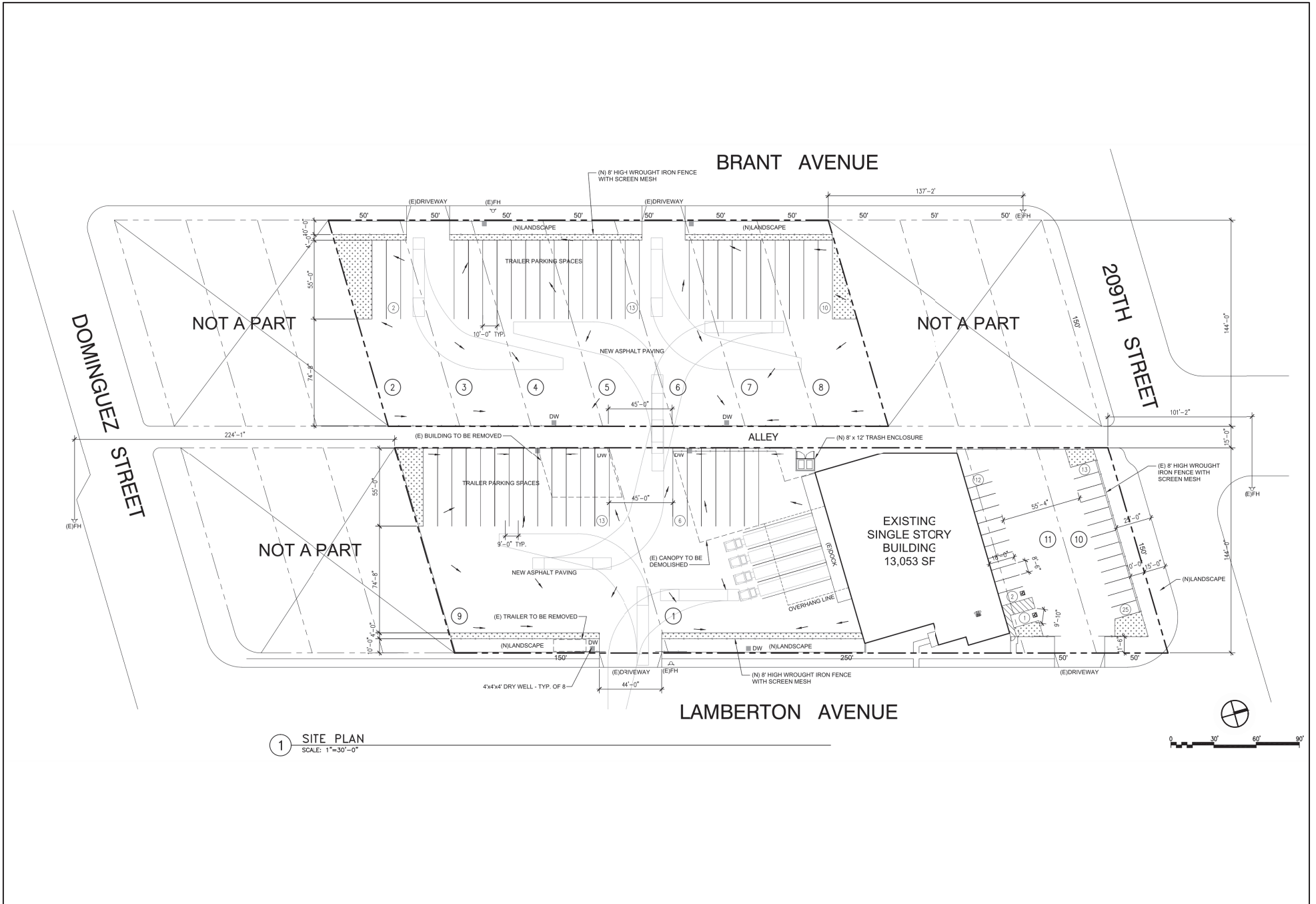
Source: Google Earth 2018

**FIGURE 1**  
Project Location  
Highline Truck Yard Project

Aug 13, 2018 - 9:25am amrcos - P:\300-Environmental\10020 Carson On-Call\Phase 4 - Highline Truck Yard\DUDEK\WORK\PRODUCTS\DOCUMENTS\Traffic\Graphics\Highline.dwg Layout: Fig 1\Location-Portal



Aug 13, 2019 - 9:41am ameroux P:\3000.Environmental\10029 Carson On-Call\Phase 8 - Highline Truck Yard\DUDEK\WORK PRODUCTS\DOCUMENTS\Traffic\Graphic\Highline.dwg Layout: Fig2-Site Plan



Source: KEUN Architecture, Inc. 2018



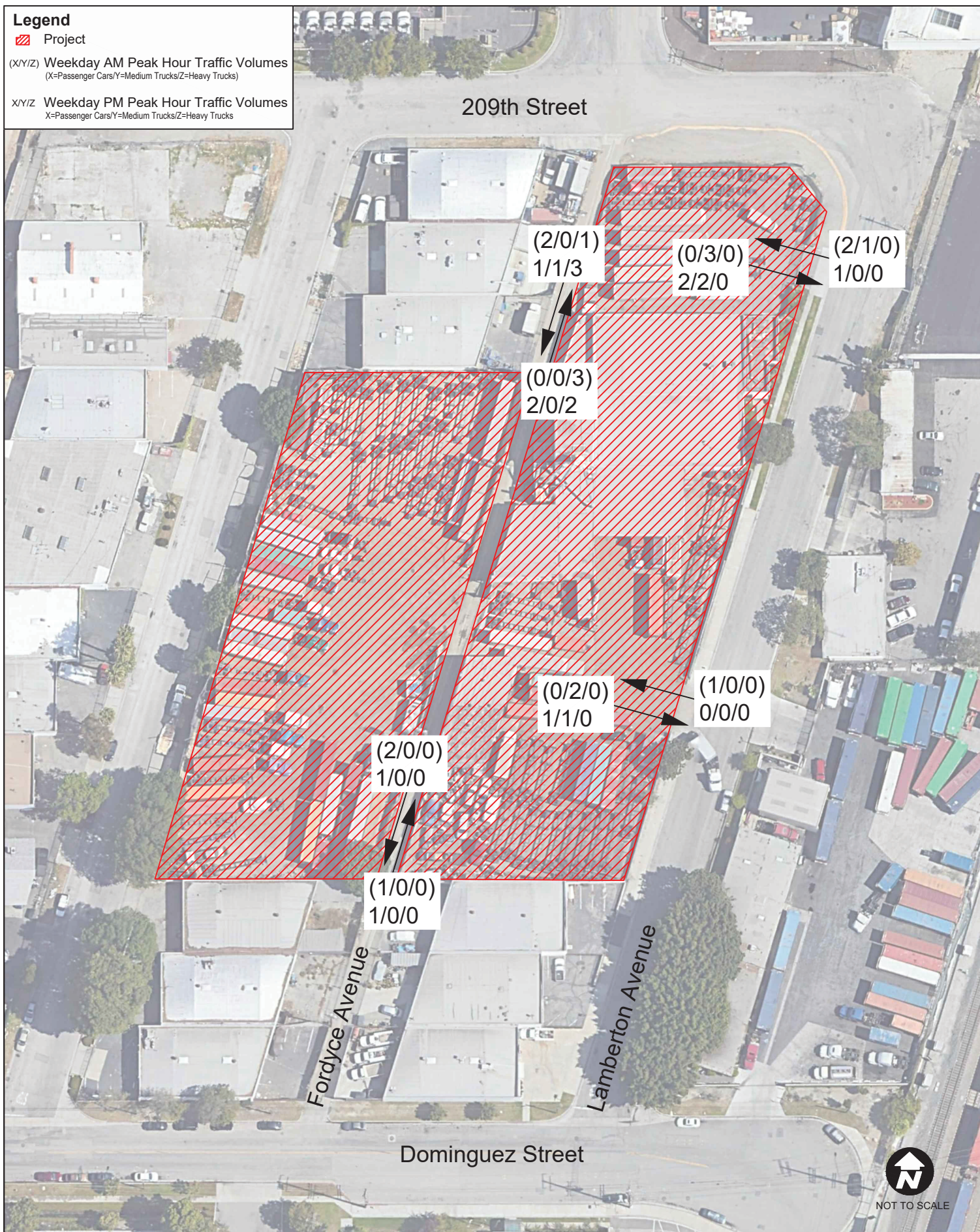
**FIGURE 2**  
**Project Site Plan**  
Highline Truck Yard Project

**Legend**

 Project

(X/Y/Z) Weekday AM Peak Hour Traffic Volumes  
(X=Passenger Cars/Y=Medium Trucks/Z=Heavy Trucks)

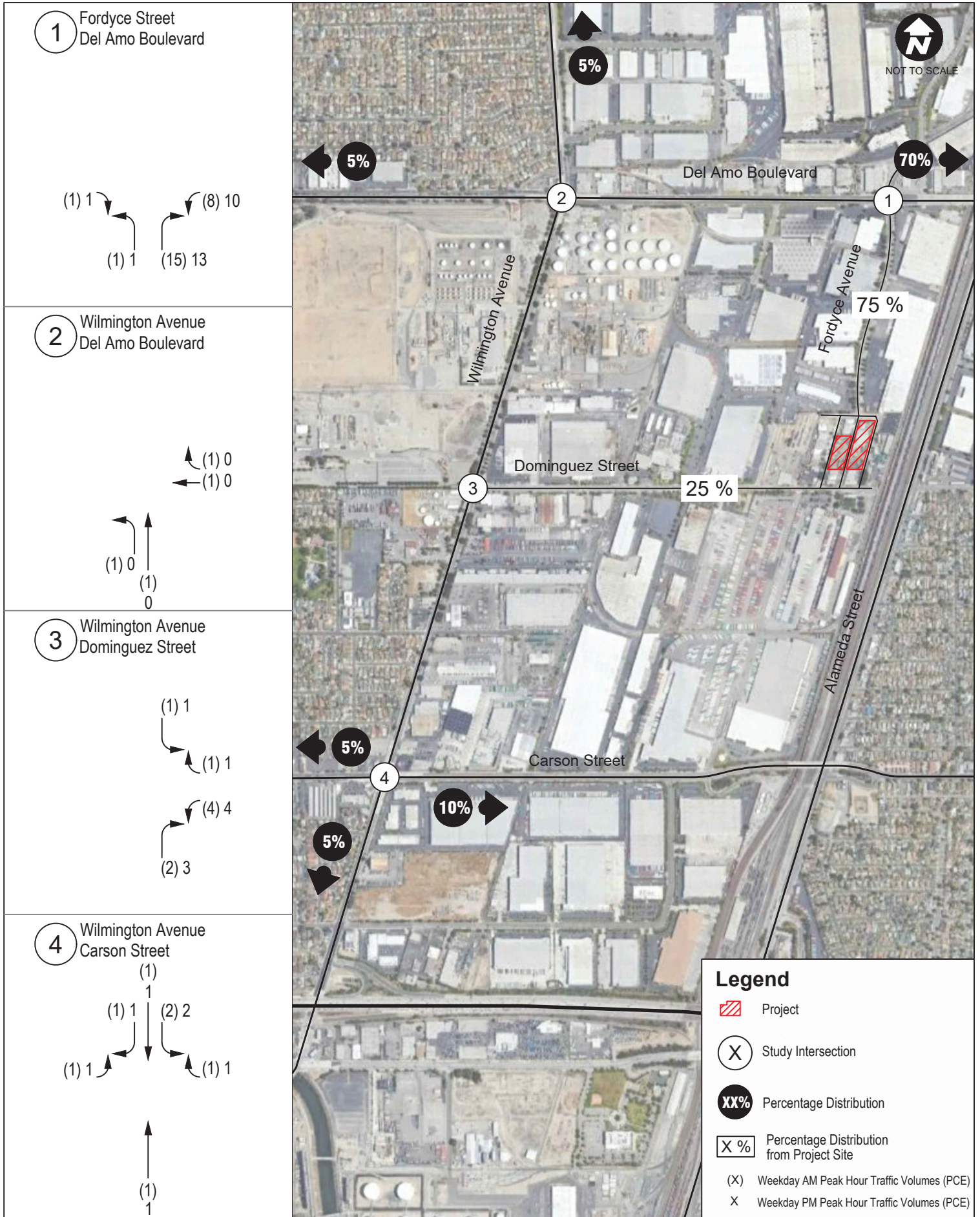
X/Y/Z Weekday PM Peak Hour Traffic Volumes  
X=Passenger Cars/Y=Medium Trucks/Z=Heavy Trucks



Aug 13, 2019 - 12:28pm - Source: Google Earth 2018, NDS 2019

Source: Google Earth 2018, NDS 2019





Source: Google Earth 2018

**FIGURE 4**  
Project Trip Distribution and Assignment (PCE Volumes)

Highline Truck Yard Project



# Attachment B

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Raw Driveway Counts

# Driveway Study

**Location:** Fordyce Ave Dwy-N/O Dominguez St

**Date:** 6/25/2019

**City:** Carson, CA

**Day:** Tuesday

Time	Vehicle Class	In	Out
7:18 AM	Cars	x	
7:44 AM	Cars		x
7:54 AM	HT		x
8:16 AM	Cars	x	
8:23 AM	Cars		x
8:49 AM	Cars		x
5:17 PM	Cars		x
5:44 PM	Cars	x	

# Driveway Study

**Location:** Fordyce Ave Dwy-S/O 209Th St

**Date:** 6/25/2019

**City:** Carson, CA

**Day:** Tuesday

Time	Vehicle Class	In	Out
7:01 AM	HT		x
7:16 AM	Car	x	
7:19 AM	HT		x
7:22 AM	Car		x
7:25 AM	HT		x
7:34 AM	HT		x
7:40 AM	Car	x	
8:00 AM	Car	x	
8:08 AM	HT		x
8:36 AM	HT	x	
8:46 AM	Car	x	
8:51 AM	HT		x
8:56 AM	HT		x
4:11 PM	Car	x	
4:16 PM	HT		x
5:05 PM	HT	x	
5:12 PM	HT	x	
5:15 PM	HT	x	
5:19 PM	MT	x	
5:23 PM	HT		x
5:38 PM	Car		x
5:49 PM	HT		x
5:54 PM	Car	x	
5:56 PM	Car		x

# Driveway Study

**Location:** Lambertson Ave Dwy- North**Date:** 6/25/2019**City:** Carson, CA**Day:** Tuesday

Time	Vehicle Class	In	Out
8:01 AM	Car	x	
8:38 AM	MT		x
8:40 AM	Car	x	
8:44 AM	MT		x
8:50 AM	MT	x	
9:05 AM	MT		x
4:33 PM	MT		x
4:42 PM	MT	x	
4:47 PM	MT		x
4:50 PM	Car	x	
4:56 PM	Car		x
5:02 PM	Car		x
5:11 PM	MT		x
5:18 PM	Car	x	
5:31 PM	MT		x
5:57 PM	Car		x

# Driveway Study

**Location:** Lambertson Ave Dwy - South

**Date:** 6/25/2019

**City:** Carson, CA

**Day:** Tuesday

Time	Vehicle Class	In	Out
8:22 AM	MT		x
8:49 AM	Car	x	
8:57 AM	MT		x
4:02 PM	MT	x	
4:04 PM	Car		x
4:24 PM	Car	x	
4:39 PM	Car		x
4:50 PM	Car		x
5:33 PM	MT		x
5:45 PM	Car		x



# Attachment C

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## Trip Generation Analysis Worksheet

**Driveway 1**

Location: Fordyce Ave Dwy-N/O Dominguez St Date: 6/25/2019  
 City: Carson, CA Day: Tuesday

Time	Vehicle Class	In	Out
7:18 AM	Cars	x	
7:44 AM	Cars		x
7:54 AM	HT		x
8:16 AM	Cars	x	
8:23 AM	Cars		x
8:49 AM	Cars		x
5:17 PM	Cars		x
5:44 PM	Cars	x	

PCE Factors	Cars	1.0
	MT	2.0
	HT	3.0

In	Out	Total			
1	-	1			
-	1	1			
-	3	3	1	4	5
1	-	1			
-	1	1			
-	1	1	1	2	3
-	1	1			
1	-	1	1	1	2

AM Peak 7 - 8 AM  
 PM Peak 5 - 6 PM

OVERALL PEAK			
	IN	OUT	TOTAL
7-8 AM	3	17	20
8-9 AM	11	21	32
4-5 PM	7	11	18
5-6 PM	14	18	32

**Driveway 2**

Location: Fordyce Ave Dwy-S/O 209Th St Date: 6/25/2019  
 City: Carson, CA Day: Tuesday

Time	Vehicle Class	In	Out
7:01 AM	HT		x
7:16 AM	Cars	x	
7:19 AM	HT		x
7:22 AM	Cars		x
7:25 AM	HT		x
7:34 AM	HT		x
7:40 AM	Cars	x	
8:00 AM	Cars	x	
8:08 AM	HT		x
8:36 AM	HT	x	
8:46 AM	Cars	x	
8:51 AM	HT		x
8:56 AM	HT		x
4:11 PM	Cars	x	
4:16 PM	HT		x
5:05 PM	HT	x	
5:12 PM	HT	x	
5:15 PM	HT	x	
5:19 PM	MT	x	
5:23 PM	HT		x
5:38 PM	Cars		x
5:49 PM	HT		x
5:54 PM	Cars	x	
5:56 PM	Cars		x

In	Out	Total			
-	3	3			
1	-	1			
-	3	3			
-	1	1			
-	3	3			
-	3	3			
1	-	1	2	13	15
1	-	1			
-	3	3			
3	-	3			
1	-	1			
-	3	3			
-	3	3	5	9	14
1	-	1			
-	3	3	1	3	4
3	-	3			
3	-	3			
3	-	3			
2	-	2			
-	3	3			
-	1	1			
-	3	3			
1	-	1			
-	1	1	12	8	20

AM Peak 7 - 8 AM  
 PM Peak 5 - 6 PM

**Driveway 3**

Location: Lambertson Ave Dwy- North Date: 6/25/2019  
 City: Carson, CA Day: Tuesday

Time	Vehicle Class	In	Out
8:01 AM	Cars	x	
8:38 AM	MT		x
8:40 AM	Cars	x	
8:44 AM	MT		x
8:50 AM	MT	x	
9:05 AM	MT		x
4:33 PM	MT		x
4:42 PM	MT	x	
4:47 PM	MT		x
4:50 PM	Cars	x	
4:56 PM	Cars		x
5:02 PM	Cars		x
5:11 PM	MT		x
5:18 PM	Cars	x	
5:31 PM	MT		x
5:57 PM	Cars		x

In	Out	Total			
1	-	1			
-	2	2			
1	-	1			
-	2	2			
2	-	2			
-	2	2	4	6	10
-	2	2			
2	-	2			
-	2	2			
1	-	1			
-	1	1	3	5	8
-	1	1			
-	2	2			
1	-	1			
-	2	2			
-	1	1	1	6	7

AM Peak 8 - 9 AM  
 PM Peak 4 - 5 PM

**Driveway 4**

Location: Lambertson Ave Dwy - South Date: 6/25/2019  
 City: Carson, CA Day: Tuesday

Time	Vehicle Class	In	Out
8:22 AM	MT		x
8:49 AM	Cars	x	
8:57 AM	MT		x
4:02 PM	MT	x	
4:04 PM	Cars		x
4:24 PM	Cars	x	
4:39 PM	Cars		x
4:50 PM	Cars		x
5:33 PM	MT		x
5:45 PM	Cars		x

In	Out	Total			
-	2	2			
1	-	1			
-	2	2	1	4	5
2	-	2			
-	1	1			
1	-	1			
-	1	1			
-	1	1	3	3	6
-	2	2			
-	1	1	0	3	3

AM Peak 8 - 9 AM  
 PM Peak 4 - 5 PM





# Attachment D

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Trip Generation Comparison

**Project Trip Generation Comparison**

Land Use	Size/Unit	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
<b>Trip Rates</b>								
Warehousing (ITE 150)	per acre	57.23	7.22	2.81	10.03	3.04	5.65	8.69
Intermodal Truck Terminal (ITE 30)	per acre	81.90	2.98	4.30	7.28	2.82	3.73	6.55
<b>Project Trip Generation</b>								
Highline Truck Yard Project (using ITE 150)	2.770 acre	159	20	8	28	8	16	24
Highline Truck Yard Project (using ITE 30)	2.770 acre	227	8	12	20	8	10	18
<b>Project Trip Generation (PCE)</b>								
Highline Truck Yard Project (using ITE 150)	2.770 acre	237	30	12	42	13	23	36
Highline Truck Yard Project (using ITE 30)	2.770 acre	427	16	23	39	15	20	35

Notes:  
PCE = Passenger Car Equivalent

<sup>1</sup> Trip rates from the Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012.

Percent In (In/Out Splits)	
AM	PM
0.72	0.35
0.41	0.43

**Adjusted Trip Rates by Vehicle Class (Warehousing - ITE 150)**

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Passenger Vehicles	39.489	4.983	1.938	6.921	2.099	3.897	5.996
2-Axle Trucks	3.892	0.491	0.191	0.682	0.207	0.384	0.591
3-Axle Trucks	3.148	0.397	0.154	0.552	0.167	0.311	0.478
4+-Axle Trucks	10.702	1.350	0.525	1.876	0.569	1.056	1.625

Warehousing (SCAQMD 2014)	
Axles	%
2 axle	6.80%
3 axle	5.50%
4 axle	18.70%
	31.00%

**Trip Generation for Highline Truck Yard Project (Warehousing - ITE 150)**

	2.770 acre	226.863	8.268	11.898	20.166	7.802	10.342	18.000
<b>Vehicle Mix<sup>1</sup></b>								
	<b>Percent<sup>1</sup></b>							
Passenger Vehicles	69.00%	109	14	5	19	6	11	17
2-Axle Trucks	6.80%	11	1	1	2	1	1	2
3-Axle Trucks	5.50%	9	1	0	2	0	1	1
4+-Axle Trucks	18.70%	30	4	1	5	2	3	5
	100%	159	20	8	28	8	16	24
<b>PCE Trip Generation<sup>2</sup></b>								
	<b>PCE Factor<sup>2</sup></b>							
Passenger Vehicles	1.0	109	14	5	19	6	11	17
2-Axle Trucks	2.0	22	3	1	4	1	2	3
3-Axle Trucks	2.0	17	2	1	3	1	2	3
4+-Axle Trucks	3.0	89	11	4	16	5	9	14
<b>Proposed Trip Generation W/PCE</b>		<b>237</b>	<b>30</b>	<b>12</b>	<b>42</b>	<b>13</b>	<b>23</b>	<b>36</b>

Notes:  
<sup>1</sup> Vehicle Mix and Percent from SCAQMD, *Warehouse Truck Trip Study Data Results and Usage*, December 2014.  
<sup>2</sup> Passenger Car Equivalent (PCE) factors are assumed to be 1.0 for passenger vehicles, 2.0 for medium trucks, and 3.0 for heavy trucks

**Adjusted Trip Rates by Vehicle Class (Intermodal Truck Terminal - ITE 30)**

	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Passenger Vehicles	37.674	1.373	1.976	3.349	1.296	1.717	3.013
2-Axle Trucks	4.996	0.182	0.262	0.444	0.172	0.228	0.400
3-Axle Trucks	11.384	0.415	0.597	1.012	0.391	0.519	0.910
4+-Axle Trucks	27.846	1.015	1.460	2.475	0.958	1.269	2.227

Intermodal Truck Terminal (Fontana Truck Trip Generation Study)	
Axles	%
2 axle	6.10%
3 axle	13.90%
4 axle	34.00%
	54.00%

**Trip Generation for Highline Truck Yard Project (Intermodal Truck Terminal - ITE 30)**

	2.770 acre	226.863	8.268	11.898	20.166	7.802	10.342	18.000
<b>Vehicle Mix<sup>1</sup></b>								
	<b>Percent<sup>1</sup></b>							
Passenger Vehicles	46.00%	104	4	5	9	4	5	9
2-Axle Trucks	6.10%	14	1	1	1	0	1	1
3-Axle Trucks	13.90%	32	1	2	3	1	1	3
4+-Axle Trucks	34.00%	77	3	4	7	3	4	6
	100%	227	8	12	20	8	10	19
<b>PCE Trip Generation<sup>2</sup></b>								
	<b>PCE Factor<sup>2</sup></b>							
Passenger Vehicles	1.0	104	4	5	9	4	5	9
2-Axle Trucks	2.0	28	1	1	3	1	1	3
3-Axle Trucks	2.0	63	2	3	6	2	3	5
4+-Axle Trucks	3.0	231	8	12	21	8	11	19
<b>Proposed Trip Generation W/PCE</b>		<b>427</b>	<b>16</b>	<b>23</b>	<b>39</b>	<b>15</b>	<b>20</b>	<b>35</b>

Notes:  
<sup>1</sup> Vehicle Mix and Percent from Fontana Truck Trip Generation Study, August 2003.  
<sup>2</sup> Passenger Car Equivalent (PCE) factors are assumed to be 1.0 for passenger vehicles, 2.0 for medium trucks, and 3.0 for heavy trucks