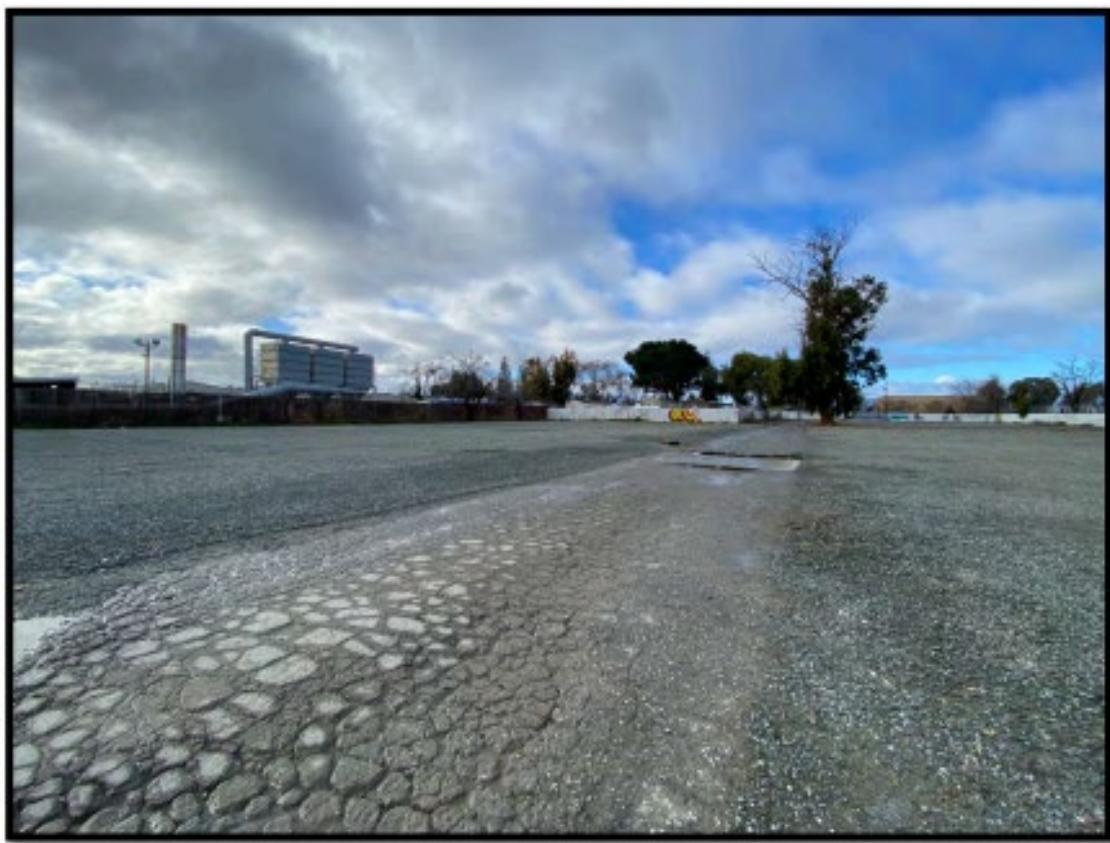


**APPENDIX A- Air Quality, GHG Analysis, and Health Risk Assessment
for the INITIAL STUDY with PROPOSED MITIGATED NEGATIVE DECLARATION
1675 MONTEREY ROAD, SAN JOSE, CALIFORNIA**

November 2021



N|V|5 |

This page is intentionally left blank

N|V|5 |

LIST OF APPENDICES

- Appendix A: Air Quality, GHG Analysis, and Health Risk Assessment
- Appendix B: Biological Resources Study and Arborist Report
- Appendix C: Noise Analysis
- Appendix D: Traffic Assessment
- Appendix E: Hazardous Materials Memorandum

LIST OF ACRONYMS

°F	degrees Fahrenheit
µg/m³	micrograms per cubic meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
AEP	Association of Environmental Professionals
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
AST	aboveground storage tank
AVL	Automatic Vehicle Location
BMP	Best Management Practice
CAAQQS	California Ambient Air Quality Standards
CaIGEM	California Geologic Energy Management Division
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERS	California Environmental Reporting System
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH₄	methane
CHRIS	California Historical Resources Information System
City	City of San Jose
CMP	Congestion Management Program
CMU	concrete masonry units
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO₂	carbon dioxide
CO₂e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DOSD	California Division of Safety of Dams

DOT	Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
ft	feet or foot
GHG	greenhouse gas
H ₂ S	hydrogen sulfide
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
hr	hour
HRA	Health Risk Assessment
Hz	Hertz
IGP	Industrial General Permit
In/sec	inches per second
IS	Initial Study
kWh	kilowatt-hours
lbs or lb	pounds
LID	Low Impact Development
LOS	Level of Service
LSTs	Localized Significance Thresholds
MEIR	Maximum Exposed Individual Resident
MEIW	Maximum Exposed Individual Worker
MIP	Monitoring Implementation Program
mmBtu	million British thermal units
MRZ	mineral resource zone
MT/yr	metric tonnes per year
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEC	No Exposure Certification
NO ₂	nitrogen dioxide
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
PM ₁₀	particulate matter with aerodynamic diameter of 10 microns or less
PM _{2.5}	particulate matter with aerodynamic diameter of 2.5 microns or less
POL	petroleum, oil, and lubricant
PPD	Precise Plan of Design
ppm	parts per million
PPV	peak particle velocity
PTC	Permit to Construct
PTO	Permit to Operate
QISP	Qualified Industrial Stormwater Practitioner
RCNM	Roadway Construction Noise Model
SJFD	San Jose Fire Department

RMS	root mean square
SFBAAB	San Francisco Bay Area Air Basin
SJMWS	San Jose Municipal Water System
SJPD	San Jose Police Department
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SIC	Standard Industrial Classification
SMARA	Surface Mining and Reclamation Act of 1975
SMARTS	Stormwater Multiple Application and Report Tracking System
SO ₂	sulfur dioxide
SOx	oxides of sulfur
SPCC	Spill Prevention, Control, and Countermeasure
SSC	species of special concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic Air Contaminants
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Load
tpd	tons per day
tpy	tons per year
UMWP	Urban Water Management Plan
US	United States
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	Water Quality Management Plan

This page is intentionally left blank

Appendix A

Air Quality, GHG Analysis, and Health Risk Assessment

N|V|5

**Air Quality Study and Health Risk Assessment
Off-Site Parking for Delivery Station in San Jose, CA**

March 18, 2021

Prepared For:

Bradley Cardon

N|V|5

3777 Long Beach Blvd, Annex Bldg
Long Beach, CA 90807

713020-2021001.29

Alta Environmental/NV5 is pleased to present the Air Quality Study and Health Risk Assessment for the off-site parking for the Delivery Station in San Jose, California. Please refer to the report for our findings and conclusions.

If you have any questions, please contact Tina Darjazanie at (310)415-4784 or by email at tina.darjazanie@nv5.com.

For and on behalf of NV5-Alta,



Tina Darjazanie

Project Manager

TABLE OF CONTENTS

1.0	Introduction.....	4
1.1	Objective of Air Quality Study and Health Risk Assessment.....	4
1.2	Facility Description and Operations	4
2.0	Emissions Calculations	6
2.1	Construction Emissions	7
2.2	Operational Emissions.....	8
2.2.1	Delivery Vans	9
2.2.2	Employee Commute.....	10
2.2.3	Criteria Pollutant Operations Summary	11
3.0	Toxic Air Contaminants.....	12
3.1	Construction Emissions	12
3.2	Operational Emissions.....	12
4.0	Greenhouse Gas Emissions.....	13
4.1	Construction Emissions	13
4.2	Operational Emissions.....	13
4.3	Overall GHG Emissions	14
5.0	Carbon Monoxide Hotspot Analysis	14
6.0	Health Risk Assessment Methodology.....	15
6.1	Emissions Calculations.....	15
6.2	Air Dispersion Modeling	15
6.2.1	General	15
6.2.2	Meteorological Data	15
6.2.3	Terrain Data	16
6.2.4	Receptors	16
6.2.5	Risk Characterization	16
7.0	Health Risk Assessment of Construction Phase.....	17
7.1	Sources	17
7.2	Emissions.....	17
7.3	Exposure Assessment.....	17
7.3.1	Exposure Pathways.....	17
7.3.2	HARP Exposure Analysis and Assumptions	18
7.4	Results	18
7.4.1	Cancer Risks	18
7.4.2	Non-Cancer Chronic Health Index.....	19
7.4.3	Non-Cancer Acute Health Index	19
8.0	Health Risk Assessment of Operational Activities	20
8.1	Sources	20
8.2	Emissions.....	20

8.3 Exposure Assessment.....	21
8.3.1 Exposure Pathways.....	21
8.3.2 HARP Exposure Analysis and Assumptions.....	21
8.4 Results	22
8.4.1 Cancer Risks	22
8.4.2 Non-Cancer Chronic Health Index.....	22
8.4.3 Non-Cancer Acute Health Index.....	22
9.0 Conclusions.....	24
10.0 References.....	25

TABLES

TABLES WITHIN TEXT

Table 2-1: CalEEMod Land Use Parameters	7
Table 2-2: Criteria Pollutant Construction Annual Emissions Summary (tpy)	7
Table 2-3: Total Daily Construction Emissions - Criteria Pollutant Summary.....	7
Table 2-4: Maximum Criteria Pollutant On-site Daily Construction Emissions.....	8
Table 2-5: Maximum Criteria Pollutant Off-site Daily Construction Emissions	8
Table 2-6: Construction Emissions – Greenhouse Gas (GHG) Summary.....	8
Table 2-7: Construction Emissions - Toxic Air Contaminant (TAC) Summary.....	8
Table 2-8: Delivery Van On-Site Maximum Daily Emissions (lb/day).....	9
Table 2-9: Delivery Van On-Site Annual Emissions (tpy).....	9
Table 2-10: Delivery Van Off-Site Maximum Daily Emissions (lb/day)	10
Table 2-11: Delivery Van Off-Site Annual Emissions (tpy)	10
Table 2-12: Employee Commute On-Site Maximum Daily Emissions (lb/day).....	10
Table 2-13: Employee Commute On-Site Annual Emissions (tpy)	11
Table 2-14: Employee Commute Off-Site Maximum Daily Emissions (lb/day)	11
Table 2-15: Employee Commute Off-Site Annual Emissions (tpy)	11
Table 2-16: Criteria Pollutant Operational Maximum Emissions Summary (lb/day).....	11
Table 2-17: Criteria Pollutant Operational Annual Emissions Summary (tpy).....	12
Table 3-1: Construction DPM Emissions	12
Table 3-2: Operational DPM Emissions.....	13
Table 4-1: GHG Emissions Summary.....	14
Table 7-1: Construction Cancer Risk Summary	18
Table 7-2: Construction Non-Cancer Chronic Health Index Summary.....	19
Table 8-1: Operation Cancer Risk Summary	22
Table 8-2: Operation Non-Cancer Chronic Health Index Summary.....	22

APPENDIX TABLES

Appendix A: CalEEMod Report and Summary Table

Appendix B: Operation Emissions Calculation Tables

Appendix C:

- Table C-1: Receptor Locations
- Table C-2: Construction Source Modeling Parameters
- Table C-3: Operations Source Modeling Parameters

FIGURES

Exhibit A: Site Location	5
Exhibit B: Site Concept Plan	6
Exhibit C: MEIR and MEIW- Construction.....	20
Exhibit D: MEIR and MEIW- Operations	23

LIST OF ACRONYMS

ADMRT	Air Dispersion Modeling and Risk Tool
CA	California
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH4	Methane
CO	Carbon Monoxide
CO2	Carbon Dioxide
CO2e	CO2 equivalent
DPM	Diesel Particulate Matter
FONT	Fontana Weather Station
GHG	Greenhouse Gases
GLC	Ground Level Concentration
HARP	Hot Spots Analysis and Reporting Program
HI	Hazard Index
hr	hour
HRA	Health Risk Assessment
lb	pound
lb/hr	pound per hour
lb/yr	pound per year
m	meters
MEIR	Maximum Exposed Individual Resident
MEIW	Maximum Exposed Individual Worker
BAAQMD	Bay Area Air Quality Management District
MT	Metric Tons
NED	National Elevation Dataset
NOX	Oxides of Nitrogen
N2O	Nitrous Oxide
OEHHA	Office of Environmental Health Hazard Assessments
PM	Particulate Matter
REL	Reference Exposure Level
ROG	Reactive Organic Gases
SOX	Oxides of Sulfur
TACs	Toxic Air Contaminants
tpy	tons per year
VMT	Vehicle miles traveled
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
WGS	World Geodetic System

1.0 INTRODUCTION

1.1 Objective of Air Quality Study and Health Risk Assessment

The purpose of this document is to evaluate local community risk and hazard impacts for the proposed off-site parking for the Delivery Station located in San Jose, California. This document provides:

- The methods and assumptions used to estimate air pollutant emissions generated from construction and operation of the proposed site,
- Details of the dispersion modeling of emissions from construction and operation to estimate pollutant concentrations at various receptor locations surrounding the facility, including residences and other sensitive locations as well as other businesses in the area,
- An assessment of the potential carcinogenic and non-carcinogenic risks to the persons in the surrounding community.

1.2 Facility Description and Operations

The site is a proposed off-site surface parking lot located at 1675 Monterey Road in San Jose, California. The proposed lot will be primarily used to store vans overnight to be loaded the following day at a nearby package sorting and loading facility. The project site is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The site is bounded by Monterey Road to the east, Pomona Avenue to the west, and other industrial facilities and commercial buildings to the north and south. See Exhibit A for the site boundary and site vicinity.

Cottage Trailer Grove, a mobile home park, is located immediately southwest of the site. The residential neighborhood north of Bellevue Avenue are the next closest sensitive receptors.

The facility is planned to occupy an existing approximately 277,000 square foot automobile parts sales lot. Access to the site will be provided via three existing driveways on Monterey Road and Pomona Avenue. Based on the Concept Plan, Exhibit B, the facility will consist of parking bay areas for the vans and personal vehicles of DSP van drivers (i.e. employee cars).

Exhibit A: Site Location

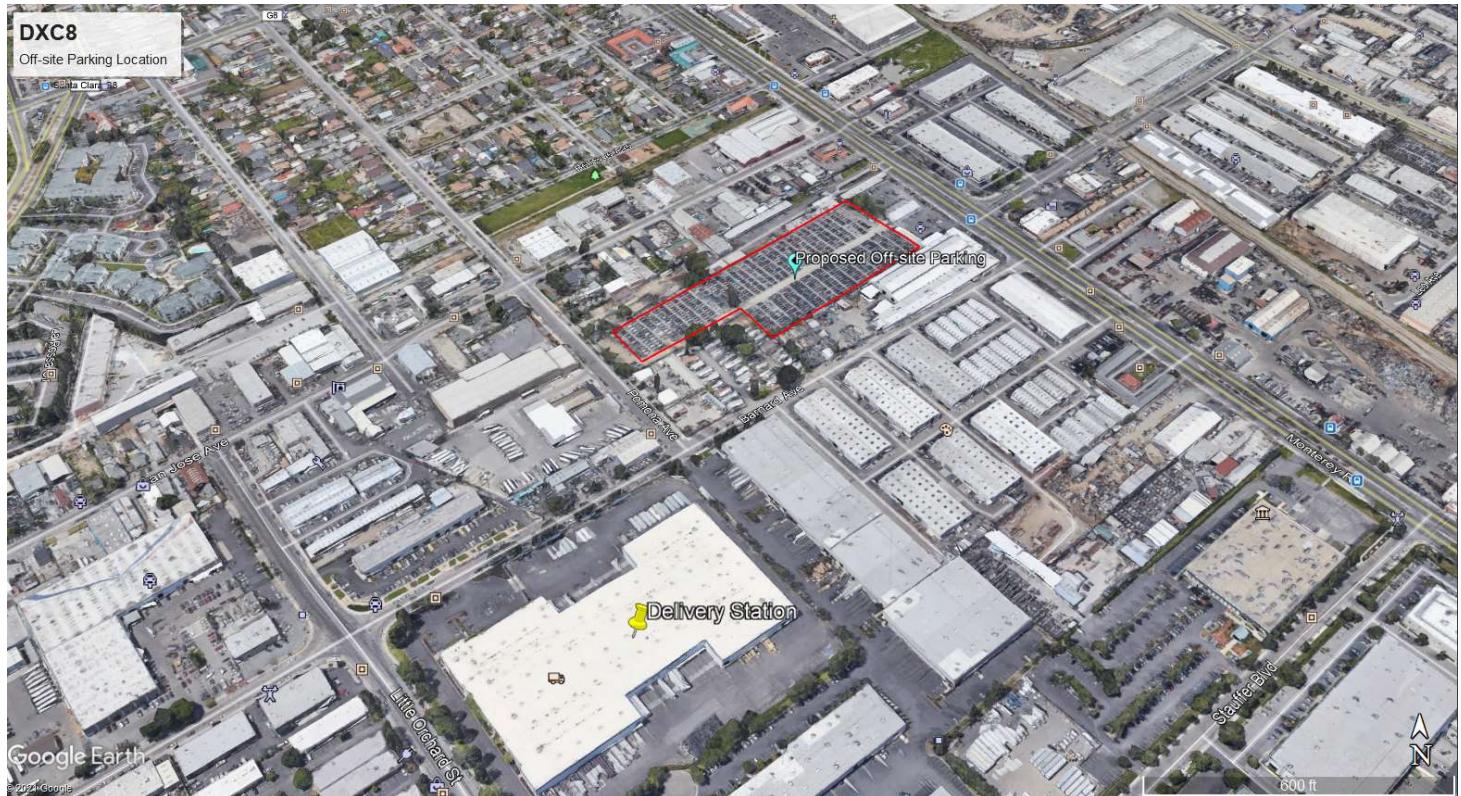
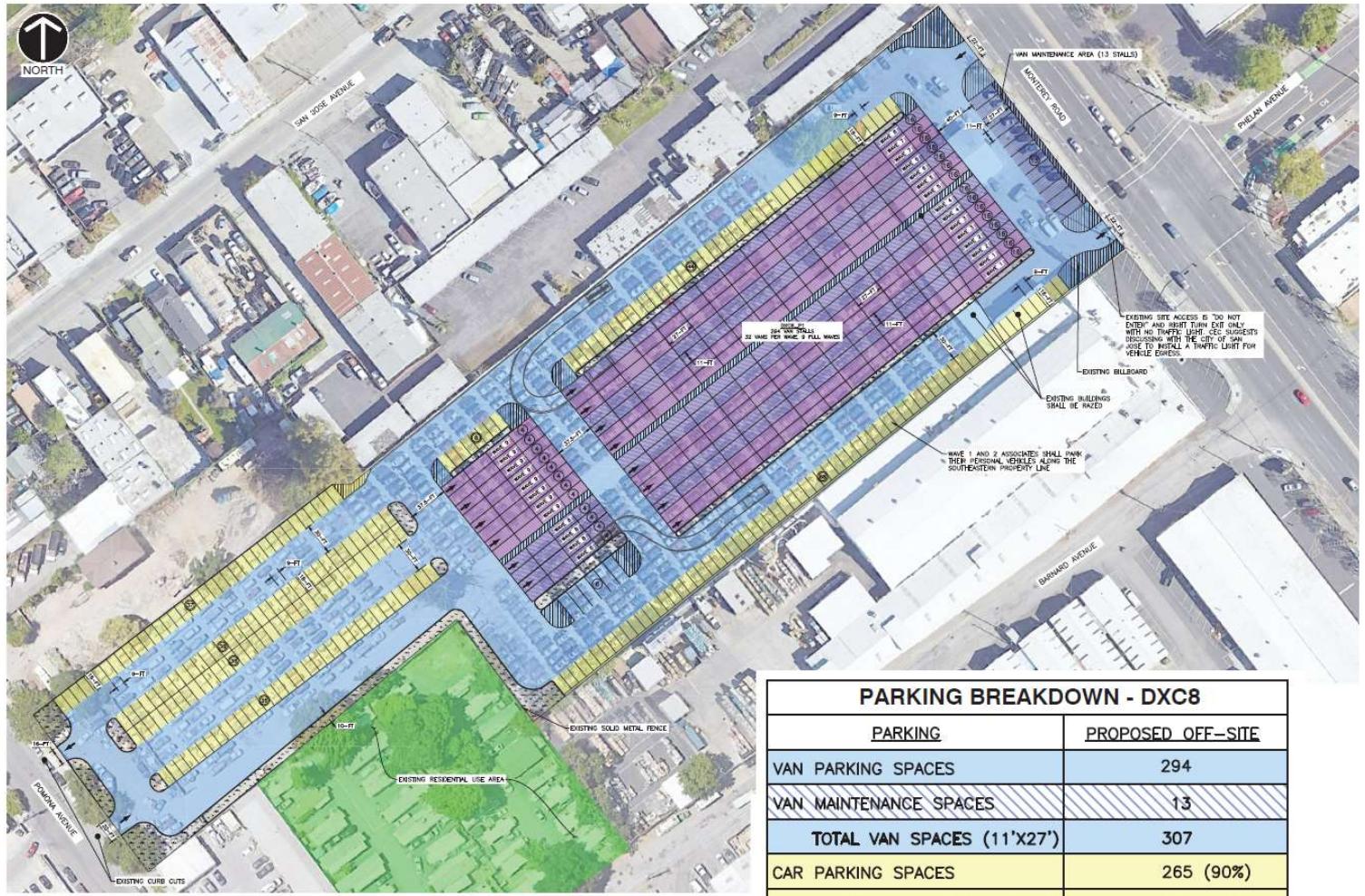


Exhibit B: Site Concept Plan



NOTES:

- PERCENTAGES LISTED ABOVE ARE THE PERCENT OF CAR SPACES TO VAN PARKING SPACES, EXCLUDING VAN MAINTENANCE SPACES.

- DELIVERY STATION HAS 32 LOADING SPOTS.

2.0 EMISSIONS CALCULATIONS

Emissions associated with construction and operation of the proposed project were estimated using emission factors and methodology from documents and emission models from various agencies including but not limited to the United States Environmental Protection Agency (USEPA), California Air Resources Board (CARB), the California Air Pollution Control Officers Association (CAPCOA), and the Bay Area Air Quality Management District (BAAQMD). The following sections describe the formulas and assumptions used to estimate emissions for each source type.

Emissions estimations include reactive organic gases (ROG), oxides of nitrogen (NOx), oxides of sulfur (SOx), carbon monoxide (CO), particulate matter with aerodynamic diameter of 10 microns or less (PM10), particulate matter with aerodynamic diameter of 2.5 microns or less (PM2.5), carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and toxic air contaminants (TACs).

2.1 CONSTRUCTION EMISSIONS

Construction of the proposed project is expected to take approximately 12 weeks to complete. Construction is expected to occur from July or August 2021 depending on when the permit is obtained. Construction tasks will include demolition, site preparation, grading, paving, and architectural coating. This project will result in the demolition of the existing 5,500 square foot building on the 6.4 acre project site.

The entire site will be graded and paved using asphalt and concrete. Approximately, 8,000 cubic yard of material is expected to be exported during grading.

Emissions generated from construction of the proposed project were estimated using the CAPCOA California Emissions Estimator Model (CalEEMod). Land use for the proposed project is assumed to be parking for delivery vans and employee vehicles. The following land use parameters were used as the basis for CalEEMod:

Table 2-1: CalEEMod Land Use Parameters

Parameter	Value
Land Use	Parking Lot, 277,000 square feet

Project specifics, such as construction schedule and equipment, were utilized as CalEEMod inputs where available. Default inputs were utilized where site-specific details are not available. CalEEMod generates emission estimates in terms of tons per year (tpy) for each phase of construction. The CalEEMod report, which contains detailed information on input data, and a summary table are provided in Appendix A. Construction emissions are summarized in the following tables. A comparison to BAAQMD significance thresholds is also included in each table where applicable.

Table 2-2: Criteria Pollutant Construction Annual Emissions Summary (tpy)

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}
Annual Emissions (tpy)	0.34	0.06	0.16	0.00	0.04	0.02

Table 2-3: Total Daily Construction Emissions - Criteria Pollutant Summary

	CO	VOC	NOX	SOX	PM10	PM2.5
Maximum Daily Emissions (lb/day)	25.38	9.72	35.05	0.13	7.25	3.98
BAAQMD Significance Thresholds (lb/day)	N/A	54	54	N/A	82	54
Exceedance?	N/A	No	No	N/A	No	No

lb/day = pounds per day

Table 2-4: Maximum Criteria Pollutant On-site Daily Construction Emissions

	CO	VOC	NOX	SOX	PM10	PM2.5
Maximum On-site Daily Emissions (lb/day)	23.28	9.65	2.02	0.04	7.10	3.94
BAAQMD Significance Thresholds (lb/day)	N/A	54	54	N/A	82	54
Exceedance?	N/A	No	No	N/A	No	No

Table 2-5: Maximum Criteria Pollutant Off-site Daily Construction Emissions

	CO	VOC	NOX	SOX	PM10	PM2.5
Maximum Off-site Daily Emissions (lb/day)	7.63	1.03	33.48	0.10	2.34	0.72
BAAQMD Significance Thresholds (lb/day)	N/A	54	54	N/A	82	54
Exceedance?	N/A	No	No	N/A	No	No

As shown in the above tables, daily emissions of Criteria Pollutants from the construction phase of the proposed project will not exceed any of the BAAQMD significance thresholds. Note: the BAAQMD does not have significance thresholds for annual emissions of Criteria Pollutants from the construction phase.

Table 2-6: Construction Emissions – Greenhouse Gas (GHG) Summary

Pollutant	Emissions (MT)
Carbon Dioxide Equivalent (CO2e)	91

MT = metric tons

1 ton = 0.9072 metric tons

Table 2-7: Construction Emissions - Toxic Air Contaminant (TAC) Summary

Pollutant	On-Site (tpy)	Off-Site (tpy)	Total (tpy)
Diesel PM (DPM)*	0.0008	0.0004	0.0012

*: All exhaust PM₁₀ assumed to be DPM

2.2 OPERATIONAL EMISSIONS

Operation of the proposed parking will generate emissions primarily from the operation of delivery vans and personnel vehicles. The vehicle emissions also include particulate emissions generated from brake and tire wear as well as fugitive emissions from road dust. Sections 2.2.1 and 2.2.2 describe the emission sources during operations and Section 2.2.3 summarizes the operational emissions of the Criteria Pollutants. TAC and GHG emissions from the operational activities are described in Sections 3.2 and 4.2, respectively.

2.2.1 Delivery Vans

The DSP van drivers park their personal vehicles in the proposed parking lot and pick up their delivery vans. The vans will then travel to the delivery station at 1710 Little Orchard Road, and queue up in the loading area. Once loaded, the vans will depart from the delivery station. Approximately 8-10 hours after dispatch, delivery routes are completed and the vans return to the parking lot. Normally, 151 van round trips will be necessary per day for deliveries.

As mentioned above, the vans will generate exhaust, brake and tire wear, and fugitive dust emissions. Emissions were calculated separately for on-site and off-site van operations.

On-Site Vans

The general methodology for calculating emissions from van movement follows the following formula:

E = EF * Activity * C, where:

E = emissions per vessel engine (tpy)

EF = emission factor (g/mile or g/vehicle)

Activity = Vehicle miles traveled (VMT) per year or vehicles per year

C = Conversion Factor (grams to tons)

Exhaust and brake and tire wear emission factors were obtained from the CARB EMFAC2017 Web Database, and fugitive dust emission factors were derived from CARB's Paved Road Dust Methodology.

Each van is assumed will travel up to 0.5 miles on-site per trip. On-site van emissions are summarized in the tables below.

Table 2-8: Delivery Van On-Site Maximum Daily Emissions (lb/day)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
Exhaust	0.70	0.03	0.06	0.00	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.02	0.01
Fugitive Dust	--	--	--	--	0.73	0.18

Table 2-9: Delivery Van On-Site Annual Emissions (tpy)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Exhaust	0.13	0.00	0.01	0.00	0.00	0.00	46.43	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.00	0.00	--	--	--
Fugitive Dust	--	--	--	--	0.13	0.03	--	--	--

Off-Site Vans

Emissions calculation methodology for off-site van operations is similar to on-site van operations. Emission factors were derived from the same sources, and calculation formulas are the same. The average van trip distance of 1.5 miles per round trip (i.e. distance from the proposed parking lot to the delivery station x2) was utilized. Off-site van emissions are summarized in the tables below.

Table 2-10: Delivery Van Off-Site Maximum Daily Emissions (lb/day)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
Exhaust	1.38	0.03	0.15	0.01	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.06	0.02
Fugitive Dust	--	--	--	--	0.27	0.07

Table 2-11: Delivery Van Off-Site Annual Emissions (tpy)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Exhaust	0.25	0.01	0.03	0.00	0.00	0.00	93.23	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.01	0.00	--	--	--
Fugitive Dust	--	--	--	--	0.05	0.01	--	--	--

2.2.2 Employee Commute

DSP van drivers (i.e. employees) commuting to the proposed project site will generate exhaust, brake and tire wear, and fugitive dust emissions. Methodology for calculating employee commute emissions is similar to the methodology employed for on-site and off-site vans. Exhaust and brake and tire wear emission factors were obtained from the CARB EMFAC2017 Web Database, and fugitive dust emission factors were derived from CARB's Paved Road Dust Methodology. During typical operation, 151 employee vehicles are expected to enter the proposed parking site daily. Each car is assumed will travel up to 0.3 miles on-site per trip. The CalEEMod default average employee trip distance of 16.6 miles per round trip was utilized. Employee commute emissions are summarized in the tables below.

On-Site Portion

Table 2-12: Employee Commute On-Site Maximum Daily Emissions (lb/day)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
Exhaust	0.28	0.01	0.02	0.00	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.01	0.00
Fugitive Dust	--	--	--	--	0.13	0.03

Table 2-13: Employee Commute On-Site Annual Emissions (tpy)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Exhaust	0.05	0.00	0.00	0.00	0.00	0.00	18.35	0.00	0.00
Brake and Tire Wear	--	--	--	--	0.00	0.00	--	--	--
Fugitive Dust	--	--	--	--	0.02	0.01	--	--	--

Off-Site Portion**Table 2-14: Employee Commute Off-Site Maximum Daily Emissions (lb/day)**

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
Exhaust	10.16	0.17	0.70	0.04	0.02	0.02
Brake and Tire Wear	--	--	--	--	0.62	0.25
Fugitive Dust	--	--	--	--	0.88	0.22

Table 2-15: Employee Commute Off-Site Annual Emissions (tpy)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Exhaust	1.85	0.03	0.13	0.01	0.00	0.00	683.35	0.01	0.01
Brake and Tire Wear	--	--	--	--	0.11	0.05	--	--	--
Fugitive Dust	--	--	--	--	0.16	0.04	--	--	--

2.2.3 Criteria Pollutant Operations Summary

Operational emissions from the proposed project in terms of pounds per day (lb/day) and tons per year (tpy) are summarized in the tables below. A comparison to BAAQMD significance thresholds is also included in each table where applicable.

Table 2-16: Criteria Pollutant Operational Maximum Emissions Summary (lb/day)

	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
Vans	2.09	0.06	0.21	0.01	1.08	0.28
Employees	10.43	0.17	0.72	0.04	0.02	0.02
Proposed Project Total	12.52	0.23	0.93	0.05	1.11	0.30
BAAQMD Threshold	N/A	54	54	N/A	82	54
Exceedance?	N/A	No	No	N/A	No	No

Table 2-17: Criteria Pollutant Operational Annual Emissions Summary (tpy)

	CO	VOC	NO_x	SO_x	PM₁₀	PM_{2.5}
Vans	0.38	0.01	0.04	0.00	0.20	0.05
Employees	1.90	0.03	0.13	0.01	0.30	0.09
Proposed Project Total	2.28	0.04	0.17	0.01	0.50	0.15
BAAQMD Threshold	N/A	10	10	N/A	15	10
Exceedance?	N/A	No	No	N/A	No	No

As shown in Tables 2-16 and 2-17, daily and annual emissions of Criteria Pollutants from the operations of the proposed project will not exceed any of the BAAQMD significance thresholds.

3.0 TOXIC AIR CONTAMINANTS

3.1 CONSTRUCTION EMISSIONS

Construction of the proposed project would temporarily increase the concentrations of Toxic Air Contaminants (TACs), primarily diesel particulate matter (DPM) from construction activity.

Table 3-1: Construction DPM Emissions

Source	DPM (tpy)	DPM (lb/yr)	DPM (lb/day)
Demolition- On-Site	0.0019	3.70	0.0625
Demolition- Off-Site	0.0003	0.56	0.0025
Site Preparation- On-Site	0.0009	1.86	0.0600
Site Preparation- Off-Site	0.0001	0.22	0.0000
Grading- On-Site	0.0015	2.90	0.0475
Grading- Off-Site	0.0041	8.20	0.1050
Paving- On-Site	0.0097	19.46	0.0380
Paving- Off-Site	0.0002	0.46	0.0000
Architectural Coating- On-Site	0.0386	77.20	0.0050
Architectural Coating- Off-Site	0.0003	0.56	0.0000
Total	0.0573	114.56	
Maximum On-Site Daily Emissions (lb/day)			0.0625
Maximum Off-Site Daily Emissions (lb/day)			0.1050

3.2 OPERATIONAL EMISSIONS

Similarly, operation of the proposed project would generate TACs, primarily DPM from diesel-fueled vehicles. All PM₁₀ generated by combustion of diesel fuel was considered DPM. Expected DPM emissions from the proposed project are summarized in the following table.

Table 3-2: Operational DPM Emissions

Source	DPM (tpy)	DPM (lb/yr)	DPM (lb/hr)
On-Site Vans	0.0003	0.66	0.0001
Off-Site Vans	0.0004	0.77	0.0001
On-Site Employee Cars	0.0000	0.00	0.0000
Off-Site Employee Cars	0.0000	0.07	0.0000
Total	0.0007	1.43	0.0002

4.0 GREENHOUSE GAS EMISSIONS

The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each Greenhouse Gas (GHG) to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons of CO₂ equivalent (MT CO₂e). CO₂e is calculated by summing the products of each pollutant multiplied by each pollutant's respective GWP. The GWPs for CO₂, CH₄, and N₂O are 1, 25, and 298, respectively (USEPA, 2018). The current version of CalEEMod uses the same GWPs and therefore these values were applied to the project.

For the purposes of determining if GHG emissions from affected projects are significant, project emissions will include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation. The BAAQMD does not have an adopted threshold of significance for construction related GHG emissions. However, since GHG emissions are cumulative and construction emissions are shortlived, the BAAQMD recommends quantifying the total GHGs for the construction activities and amortizing over the life of the project, defined as 30 years, and then adding it to the operational emissions. The total is then compared to the applicable GHG significance threshold.

4.1 CONSTRUCTION EMISSIONS

GHG emissions generated during construction activities are described Section 2.1 and the total construction CO₂e emissions as noted on Table 2-6 are 91 MT CO₂e per year. Amortized over 30 years the annual rate is approximately 3 MT CO₂e per year.

4.2 OPERATIONAL EMISSIONS

Operational activities associated with the proposed project that will result in GHG emissions include vehicle operation, on-site energy use, and facility maintenance (landscape and other maintenance operations).

The majority of the proposed project related operational GHG emissions are from the vehicles (vans and employee commuting), which are described and quantified in Section 2.2.

GHGs are emitted as a result of activities for which electricity is used as energy source. These emissions are considered direct emissions. GHGs are also emitted during the generation of electricity from off-site power plants. These emissions are considered to be indirect emissions. GHG emissions from energy consumption in this analysis were determined using CalEEMod values for the proposed parking lot.

Landscape maintenance equipment would generate GHG emissions from fuel combustion and evaporation of unburned fuel. The emissions associated with landscape maintenance equipment were calculated using the CalEEMod defaults.

4.3 OVERALL GHG EMISSIONS

Project GHG emissions in terms of CO₂e are summarized in the following table:

Table 4-1: GHG Emissions Summary

Source	CO ₂ (tpy)	CH ₄ (tpy)	N ₂ O (tpy)	CO _{2eq} (MT)
Vans	140	0	0	128
Employee Commute	702	0	0	641
Energy Consumption	31	0	0	28
Maintenance Operations	0	0	0	0
Amortized Construction Emissions				3
				Total 800
				Significance Threshold 1,100
				Exceedance? No

MT = metric tons

1 ton = 0.9072 metric tons

The BAAQMD GHG threshold emissions for land use development projects, which includes residential, commercial, industrial, and public land uses and facilities, is 1,100 metric tons per year (MT/yr) of CO₂e; or 4.6 MT CO₂e/Service Population/yr (residents + employees). This includes construction emissions amortized over 30 years and added to the annual operational GHG emissions. As shown, the proposed project would generate approximately 800 MT of CO₂e per year, which is less than the applicable threshold of 1,100 MTCO₂e per year, and therefore *less than significant*.

5.0 CARBON MONOXIDE HOTSPOT ANALYSIS

Carbon Monoxide (CO) emissions generated during construction and operational activities are described Section 2.1 and 2.2, respectively.

BAAQMD is currently designated as an attainment area for the California and National Ambient Air Quality Standards for CO; however, elevated localized concentrations of CO still warrant consideration in the environmental review process. Occurrences of localized CO concentrations, known as hotspots, are often associated with heavy traffic congestion, which most frequently occur at signalized intersections of high-volume roadways. Per Section 70200 of Title 17 of the California Code of Regulations, a project is defined as *significant* if it causes or contributes to an exceedance of the following attainment standards:

- 1-hour average: 20 ppm (state) and 35 ppm (federal); and/or
- 8-hour average: 9.0 ppm (state/federal);

If the CO concentration exceeds any of the above-mentioned standards, a “hot spot” occurs and a detailed modeling of project-specific CO “hot spots” is required.

Since the proposed parking will support the delivery station operations, the trips could be considered as trips that would otherwise exclusively go to the delivery station, and therefore the proposed parking would not increase the volume-to-capacity ratio by 2% for any intersection with an existing level of service Level of Service (LOS) D or worse. Therefore, CO hotspots are not an environmental impact of concern for the proposed project. Thus, CO impacts related to mobile-source emissions would be *less than significant*.

6.0 HEALTH RISK ASSESSMENT METHODOLOGY

6.1 EMISSIONS CALCULATIONS

Emissions associated with construction and operation of the proposed project were explained in Section 2. Construction and operations of the proposed project would generate TACs, primarily DPM from diesel-fueled vehicles. All PM10 generated by combustion of diesel fuel was considered DPM. Expected DPM emissions from construction and operations are summarized in Tables 3-1 and 3-2, respectively. Detailed emission calculation methodology and tables are provided in Appendix B.

6.2 AIR DISPERSION MODELING

6.2.1 General

Air dispersion modelling was performed to estimate ground level concentrations (GLCs) at and beyond the property boundary of the proposed project site. Modelling was performed using USEPA's AERMOD executable version 19191 via the BREEZE AERMOD software. The following options were used in running the AERMOD model:

- AERMOD was executed using the urban modeling option.
- USEPA regulatory default options were implemented.
- The UTM, World Geodetic System (WGS) 1984 projection was implemented.
- The pollutant was set to “Other”.
- Regulatory default concentration only, was used, and no depletion options were selected.

Air dispersion modeling results in terms of period average and maximum one-hour concentration were exported as plot (.plt) files, and separate plot files were created for each source.

6.2.2 Meteorological Data

AERMOD-ready meteorological data were obtained from CARB website. Data from Reid-Hillview Airport of Santa Clara County meteorological station were selected. Meteorological data from this station are available for years 2009 through 2014.

6.2.3 Terrain Data

A NED file purchased from BREEZE Modeling Software was used in the air dispersion modeling.

6.2.4 Receptors

Two sets of receptors were used in the air dispersion modelling process: boundary receptors, grid receptors. Grid receptors were set at 50-meter spacing near the facility and expanded at further distances. Receptor locations are provided in Appendix C, Table C-1.

6.2.5 Risk Characterization

Air dispersion modeling results (plot files) were imported into CARB's HARP software. HARP2 ADMRT software version 19121 was utilized to perform the dose-response assessment and calculate the potential cancer risk and non-cancer health impacts for the various receptors surrounding the facility. The dose-response assessment and risk calculations were performed in accordance with OEHHA's Risk Assessment Guidelines (OEHHA, 2015).

Cancer and non-cancer health impacts may be evaluated in HARP. Cancer risk is expressed as a theoretical probability of an individual person developing cancer as a result of exposure to carcinogenic substances. Noncancer risk is expressed with a hazard index (HI) number for pollutant-targeted organ systems: the cardiovascular system, central nervous system, immune system, kidneys, gastrointestinal tract and liver, reproductive/developmental system, respiratory system, skin, eyes, skeletal system, endocrine system, hematological system, physiological response to odors, and general toxicity (CARB, 2018). Calculations built into HARP2 ADMRT are based on the dose and risk calculation methodologies and pollutant risk factors contained within the OEHHA Risk Assessment Guidelines.

According to OEHHA, dose-response assessment describes the quantitative relationship between the amount of exposure to a substance (the dose) and the incidence or occurrence of an adverse health impact (the response). Dose-response information for noncancer health effects is used to determine Reference Exposure Levels (RELs). Dose-response information for cancer risks are based on cancer potency factors (OEHHA, 2015). Chronic RELs, 8-hour Chronic RELs, Acute RELs, and cancer potency factors for each pollutant are listed in the OEHHA Guidelines and built into HARP2. These values are periodically updated, and new versions of HARP2 incorporate the changes.

Risks are characterized using calculations and methodology contained in the OEHHA Guidelines and built into HARP2. Risk is calculated based on dose, dose-response values (RELs or cancer potency factors), and exposure duration and frequency. For this HRA, all risks were calculated using a Tier 1 approach.

Carcinogenic risks are calculated for each receptor by calculating the dose of each pollutant at that receptor then following the calculation methodology in Section 8 of the OEHHA Guidelines. Multi-pathway risks are accounted for within HARP2 and follow the methodology in the guidelines.

Chronic hazards are calculated using the period average ground level concentration of each pollutant compared to the chronic REL for each pollutant. The sum of the HIs for each pollutant is the total chronic HI for each receptor.

Acute non-cancer hazards are identical for residential and non-residential (worker) receptors. Therefore, only one set of methodology was utilized for acute non-cancer hazard index calculation. Acute hazards are calculated using the maximum 1-hour ground level concentration of each pollutant compared to the acute REL for each pollutant. The sum of the HIs for each pollutant is the total acute HI.

7.0 HEALTH RISK ASSESSMENT OF CONSTRUCTION PHASE

7.1 SOURCES

The sources of TAC emissions during construction at the proposed facility include off-road equipment used on-site during different phases of construction, as well as trucks used to transport material to and from the site.

7.2 EMISSIONS

Construction source parameters, such as name, location, release height, etc. are provided in Appendix C, Table C-2. Table 3-1 provides the annual emissions in pounds per year (lb/yr) and maximum hourly emissions in pounds per hour (lb/hr) for each operation during the construction phase.

7.3 EXPOSURE ASSESSMENT

7.3.1 Exposure Pathways

7.3.1.1 Residents

The following residential exposure pathways were included in this HRA:

- Inhalation
- Soil Ingestion
- Dermal Absorption
- Mother's Milk
- Home Grown Produce

7.3.1.2 Off-Site Workers

The following worker exposure pathways were included in this HRA:

- Inhalation
- Soil Ingestion
- Dermal Absorption

7.3.2 HARP Exposure Analysis and Assumptions

According to the OEHHA guidelines, different exposure scenarios should be used for residential and worker receptors. Exposure scenarios and assumptions for residential and worker receptors are summarized below.

7.3.2.1 Residents

Construction is expected to take approximately 2 months to complete. According to BAAQMD Guidance, projects with durations of three or fewer years should be assessed assuming an exposure duration of three years (BAAQMD, 2016). Therefore, a three-year exposure scenario is used to estimate risk from construction emissions. The following additional parameters were selected in HARP:

- Receptor Type: Individual Resident
- Intake Rate Percentile:
 - RMP using the Derived Method for Cancer
 - OEHHA Derived Method for Non-Cancer
- Exposure Frequency: 350 days per year
- Deposition Rate: 0.05 meters per second

7.3.2.2 Off-Site Workers

A three-year exposure scenario is used to estimate risk from construction emissions. The following additional parameters were selected in HARP:

- Receptor Type: Worker
- Intake Rate Percentile: OEHHA Derived Method
- Exposure Frequency: 250 days per year
- Deposition Rate: 0.05 meters per second

7.4 RESULTS

7.4.1 Cancer Risks

The following table summarizes the potential cancer risks from construction emissions for the Maximum Exposed Individual Resident (MEIR) and Maximum Exposed Individual Worker (MEIW). The locations of the MEIR and MEIW for construction phase are presented in Exhibit C.

Table 7-1: Construction Cancer Risk Summary

Receptor	UTM X (m)	UTM Y (m)	Cancer Risk
----------	-----------	-----------	-------------

MEIR	285	600020	4129830	0.24 in a million
MEIW	356	600170	4129930	0.01 in a million

7.4.2 Non-Cancer Chronic Health Index

The following table summarizes the potential non-cancer chronic HI at the MEIR and MEIW. The locations of the MEIR and MEIW for construction phase are presented in Exhibit C.

Table 7-2: Construction Non-Cancer Chronic Health Index Summary

Receptor	UTM X (m)	UTM Y (m)	Non-Cancer Chronic HI	Target Organ
MEIR	285	600020	0.00013	RESP
MEIW	356	600170	0.00029	RESP

7.4.3 Non-Cancer Acute Health Index

The only TAC emitted during construction, is Diesel exhaust PM, which does not cause acute health risk to residential or worker receptors.

Exhibit C: MEIR and MEIW- Construction



8.0 HEALTH RISK ASSESSMENT OF OPERATIONAL ACTIVITIES

8.1 SOURCES

The sources of TAC emissions during operation of the vans and from Employee Commutes. The following analysis is based on emissions from these operations.

8.2 EMISSIONS

Operational source parameters, such as name, location, release height, etc. are provided in Appendix C, Table C-3. Table 3-2 provides the annual emissions in pounds per year (lb/yr) and maximum hourly emissions in pounds per hour (lb/hr) for each source type during operations.

8.3 EXPOSURE ASSESSMENT

8.3.1 Exposure Pathways

8.3.1.1 Residents

The following residential exposure pathways were included in this HRA:

- Inhalation
- Soil Ingestion
- Dermal Absorption
- Mother's Milk
- Home Grown Produce

8.3.1.2 Off-Site Workers

The following worker exposure pathways were included in this HRA:

- Inhalation
- Soil Ingestion
- Dermal Absorption

8.3.2 HARP Exposure Analysis and Assumptions

According to the OEHHA guidelines, different exposure scenarios should be used for residential and worker receptors. Exposure scenarios and assumptions for residential and worker receptors are summarized below.

8.3.2.1 Residents

A 30-year exposure scenario is used for residential receptors to estimate cancer and chronic non-cancer risk from operation emissions. The following additional parameters were selected in HARP:

- Receptor Type: Individual Resident
- Intake Rate Percentile:
 - RMP using the Derived Method for Cancer
 - OEHHA Derived Method for Non-Cancer
- Exposure Frequency: 350 days per year
- Deposition Rate: 0.05 meters per second

8.3.2.2 Off-Site Workers

A 25-year exposure scenario starting at the age of 16 is used for off-site worker receptors to estimate cancer risk from operation emissions. The following additional parameters were selected in HARP:

- Receptor Type: Worker
- Intake Rate Percentile: OEHHA Derived Method (when applicable)
- Exposure Frequency: 250 days per year
- Deposition Rate: 0.05 meters per second

8.4 RESULTS

8.4.1 Cancer Risks

The following table summarizes the potential cancer risks from operational emissions after mitigation for the MEIR and MEIW. The locations of the MEIR and MEIW for operations are presented in Exhibit D.

Table 8-1: Operation Cancer Risk Summary

Receptor	UTM X (m)	UTM Y (m)	Cancer Risk
MEIR	285	600020	0.20 in a million
MEIW	261	599970	0.03 in a million

Diesel exhaust PM is the risk-driving pollutant.

8.4.2 Non-Cancer Chronic Health Index

The following table summarizes the potential non-cancer chronic HI at the MEIR and MEIW. The locations of the MEIR and MEIW for operations are presented in Exhibit D.

Table 8-2: Operation Non-Cancer Chronic Health Index Summary

Receptor	UTM X (m)	UTM Y (m)	Non-Cancer Chronic HI	Target Organ
MEIR	285	600020	0.0001	RESP
MEIW	261	599970	0.0001	RESP

8.4.3 Non-Cancer Acute Health Index

The only TAC emitted during operations, is Diesel exhaust PM, which does not cause acute health risk to residential or worker receptors.

Exhibit D: MEIR and MEIW- Operations



EXHIBIT D, MEIR AND MEIW - OPERATION		Prepared For: Air Quality Study and Health Risk Assessment	
Legend		1675 Monterey Road San Jose, CA 95112 713020-2021001,29	NV5 3777 Long Beach Blvd, Annex Bldg Long Beach, CA 90807 562.495.5777 ALTA ENVIRONMENTAL

9.0 CONCLUSIONS

As shown in Table 2-3, daily construction emissions would not exceed the BAAQMD significance thresholds for criteria pollutants during the two-month construction phase and therefore no mitigation measure is required. Cancer risk associated with construction activities, is expected to be below 10 in one million, and non-cancer health effects are expected to be below 1.0 for the MEIR and MEIW.

Similarly, the operational phase will not result in emission exceedance of the BAAQMD significance thresholds for criteria pollutants and therefore no mitigation is required. Cancer risks associated with emissions generated due to the operation of the proposed project are below 10 in one million and non-cancer HIs are below 1.0 for the MEIR and MEIW.

The proposed project's total emission of CO₂e will be less than the BAAQMD significance threshold and therefore will have a less than significant individual and cumulative impact for GHG emissions.

Since the proposed site will be a parking facility for the delivery vehicles for the delivery station, the trips could be considered as trips that would otherwise exclusively go to the delivery station, and therefore the impacts of the proposed parking to intersections would be less than significant. Thus, CO hotspots are not an environmental impact of concern for the proposed project.

10.0 REFERENCES

1. California Air Resources Board (CARB), June 2018. Hotspots Analysis and Reporting Program (HARP)." Available online at: <https://www.arb.ca.gov/toxics/harp/harp.htm>.
2. Office of Environmental Health Hazard Assessment (OEHHA), February 2015. "Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Risk Assessments." Available online at: <https://oehha.ca.gov/air/cnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.
3. South Coast Air Quality Management District (SCAQMD), 2021. "SCAQMD Modeling Guidance for AERMOD." Available online at: <https://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance#AERMOD>.
4. California Air Pollution Control Officers Associate (CAPCOA), November 2017. "California Emission Estimator Model (CalEEMod) Users Guide." Available online at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.
5. Bay Area Air Quality Management District (BAAQMD), May 2017. "California Environmental Quality Act (CEQA) Air Quality Guidelines". Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.
6. Bay Area Air Quality Management District (BAAQMD), December 2016. "Air Toxics New Source Review Program Health Risk Assessment Guidelines". Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en.

Appendix A
CalEEMod Report and Summary Table

San Jose Parking - Santa Clara County, Annual

San Jose Parking
Santa Clara County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	277.00	1000sqft	6.36	277,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Construction Schedule Provided by Client

Grading - Total area of the site

Demolition -

Architectural Coating - VOC levels modified to comply with BAAQMD Regulation 8 Rule 3

Construction Off-road Equipment Mitigation - Mitigation Measure: Tier 4 Final Construction Equipment

Mitigation Measure: Watering Exposed Area Twice Daily

Table Name	Column Name	Default Value	New Value

tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	100.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	8.00
tblConstructionPhase	NumDays	20.00	8.00
tblConstructionPhase	NumDays	20.00	8.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	9/30/2022	9/1/2021
tblConstructionPhase	PhaseEndDate	8/6/2021	7/21/2021
tblConstructionPhase	PhaseEndDate	9/17/2021	8/6/2021
tblConstructionPhase	PhaseEndDate	9/2/2022	8/20/2021
tblConstructionPhase	PhaseEndDate	8/20/2021	7/27/2021

tblConstructionPhase	PhaseStartDate	9/3/2022	8/21/2021
tblConstructionPhase	PhaseStartDate	8/21/2021	7/28/2021
tblConstructionPhase	PhaseStartDate	8/6/2022	8/7/2021
tblConstructionPhase	PhaseStartDate	8/7/2021	7/22/2021
tblGrading	AcresOfGrading	4.00	6.40
tblGrading	MaterialExported	0.00	8,000.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0886	0.5142	0.3098	9.0000e-004	0.0780	0.0191	0.0972	0.0370	0.0177	0.0547	0.0000	82.4556	82.4556	0.0145	0.0000	82.8173
Maximum	0.0886	0.5142	0.3098	9.0000e-004	0.0780	0.0191	0.0972	0.0370	0.0177	0.0547	0.0000	82.4556	82.4556	0.0145	0.0000	82.8173

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0576	0.1627	0.3369	9.0000e-004	0.0373	1.2100e-003	0.0385	0.0163	1.1900e-003	0.0175	0.0000	82.4555	82.4555	0.0145	0.0000	82.8172

Maximum	0.0576	0.1627	0.3369	9.0000e-004	0.0373	1.2100e-003	0.0385	0.0163	1.1900e-003	0.0175	0.0000	82.4555	82.4555	0.0145	0.0000	82.8172
---------	--------	--------	--------	-------------	--------	-------------	--------	--------	-------------	--------	--------	---------	---------	--------	--------	---------

	ROG	NOx	CO	SO2	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	34.97	68.36	-8.76	0.00	52.20	93.68	60.38	55.94	93.28	68.02	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-12-2021	9-30-2021	0.5684	0.2040
		Highest	0.5684	0.2040

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	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	28.2039	28.2039	1.2800e-003	2.6000e-004	28.3144
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0239	2.0000e-005	2.5600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	28.2088	28.2088	1.2900e-003	2.6000e-004	28.3197

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	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	28.2039	28.2039	1.2800e-003	2.6000e-004	28.3144	
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0239	2.0000e-005	2.5600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	28.2088	28.2088	1.2900e-003	2.6000e-004	28.3197	

	ROG	NOx	CO	SO2	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	7/12/2021	7/21/2021	5	8	
2	Site Preparation	Site Preparation	7/22/2021	7/27/2021	5	4	
3	Grading	Grading	7/28/2021	8/6/2021	5	8	
4	Paving	Paving	8/7/2021	8/20/2021	5	10	
5	Architectural Coating	Architectural Coating	8/21/2021	9/1/2021	5	8	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 6.4

Acres of Paving: 6.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 16,620

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

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
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	25.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	1,000.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2021

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					2.7100e-003	0.0000	2.7100e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0127	0.1258	0.0863	1.6000e-004		6.2100e-003	6.2100e-003		5.7600e-003	5.7600e-003	0.0000	13.6003	13.6003	3.8300e-003	0.0000	13.6960	
Total	0.0127	0.1258	0.0863	1.6000e-004	2.7100e-003	6.2100e-003	8.9200e-003	4.1000e-004	5.7600e-003	6.1700e-003	0.0000	13.6003	13.6003	3.8300e-003	0.0000	13.6960	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.0000e-004	3.3400e-003	7.3000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9413	0.9413	4.0000e-005	0.0000	0.9424	
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	1.8000e-004	1.3000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3939	0.3939	1.0000e-005	0.0000	0.3942	
Total	2.8000e-004	3.4700e-003	2.1000e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	1.3352	1.3352	5.0000e-005	0.0000	1.3365	

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					1.0600e-003	0.0000	1.0600e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.8500e-003	8.0100e-003	0.0931	1.6000e-004		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	13.6003	13.6003	3.8300e-003	0.0000	13.6960	
Total	1.8500e-003	8.0100e-003	0.0931	1.6000e-004	1.0600e-003	2.5000e-004	1.3100e-003	1.6000e-004	2.5000e-004	4.1000e-004	0.0000	13.6003	13.6003	3.8300e-003	0.0000	13.6960	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.0000e-004	3.3400e-003	7.3000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9413	0.9413	4.0000e-005	0.0000	0.9424	
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	1.8000e-004	1.3000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3939	0.3939	1.0000e-005	0.0000	0.3942	
Total	2.8000e-004	3.4700e-003	2.1000e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	1.3352	1.3352	5.0000e-005	0.0000	1.3365	

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

Off-Road	7.7800e-003	0.0810	0.0423	8.0000e-005		4.0900e-003	4.0900e-003		3.7600e-003	3.7600e-003	0.0000	6.6871	6.6871	2.1600e-003	0.0000	6.7412
Total	7.7800e-003	0.0810	0.0423	8.0000e-005	0.0361	4.0900e-003	0.0402	0.0199	3.7600e-003	0.0236	0.0000	6.6871	6.6871	2.1600e-003	0.0000	6.7412

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2364	0.2364	1.0000e-005	0.0000	0.2365
Total	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2364	0.2364	1.0000e-005	0.0000	0.2365

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0141	0.0000	0.0141	7.7500e-003	0.0000	7.7500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	4.0300e-003	0.0417	8.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	6.6871	6.6871	2.1600e-003	0.0000	6.7412
Total	9.3000e-004	4.0300e-003	0.0417	8.0000e-005	0.0141	1.2000e-004	0.0142	7.7500e-003	1.2000e-004	7.8700e-003	0.0000	6.6871	6.6871	2.1600e-003	0.0000	6.7412

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2364	0.2364	1.0000e-005	0.0000	0.2365
Total	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2364	0.2364	1.0000e-005	0.0000	0.2365

3.4 Grading - 2021

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					0.0279	0.0000	0.0279	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
Total	9.1600e-003	0.0990	0.0634	1.2000e-004	0.0279	4.6400e-003	0.0326	0.0137	4.2700e-003	0.0180	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057

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	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total	Hauling	Vendor	Worker	Total
Hauling	3.9200e-003	0.1337	0.0291	3.9000e-004	8.4800e-003	4.2000e-004	8.8900e-003	2.3300e-003	4.0000e-004	2.7300e-003	0.0000	37.6517	37.6517	1.7100e-003	0.0000	37.6944
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	1.8000e-004	1.3000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3939	0.3939	1.0000e-005	0.0000	0.3942
Total	4.1000e-003	0.1339	0.0305	3.9000e-004	8.9600e-003	4.2000e-004	9.3700e-003	2.4600e-003	4.0000e-004	2.8600e-003	0.0000	38.0456	38.0456	1.7200e-003	0.0000	38.0885

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Fugitive Dust					0.0109	0.0000	0.0109	5.3300e-003	0.0000	5.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.4500e-003	6.2900e-003	0.0710	1.2000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057	
Total	1.4500e-003	6.2900e-003	0.0710	1.2000e-004	0.0109	1.9000e-004	0.0111	5.3300e-003	1.9000e-004	5.5200e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057	

Mitigated Construction Off-Site

Worker	1.8000e-004	1.3000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3939	0.3939	1.0000e-005	0.0000	0.3942
Total	4.1000e-003	0.1339	0.0305	3.9000e-004	8.9600e-003	4.2000e-004	9.3700e-003	2.4600e-003	4.0000e-004	2.8600e-003	0.0000	38.0456	38.0456	1.7200e-003	0.0000	38.0885

3.5 Paving - 2021

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	6.2800e-003	0.0646	0.0733	1.1000e-004		3.3900e-003	3.3900e-003		3.1200e-003	3.1200e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927
Paving	8.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0146	0.0646	0.0733	1.1000e-004		3.3900e-003	3.3900e-003		3.1200e-003	3.1200e-003	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.6000e-004	1.7200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4924	0.4924	1.0000e-005	0.0000	0.4927
Total	2.3000e-004	1.6000e-004	1.7200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4924	0.4924	1.0000e-005	0.0000	0.4927

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	1.4000e-003	6.0800e-003	0.0865	1.1000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927
Paving	8.3300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.7300e-003	6.0800e-003	0.0865	1.1000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.0117	10.0117	3.2400e-003	0.0000	10.0927

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.3000e-004	1.6000e-004	1.7200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4924	0.4924	1.0000e-005	0.0000	0.4927	
Total	2.3000e-004	1.6000e-004	1.7200e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4924	0.4924	1.0000e-005	0.0000	0.4927	

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	tons/yr										MT/yr						
	Archit. Coating	0.0385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.8000e-004	6.1100e-003	7.2700e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0231	
Total	0.0394	6.1100e-003	7.2700e-003	1.0000e-005		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0231	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6040	0.6040	1.0000e-005	0.0000	0.6044	
Total	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6040	0.6040	1.0000e-005	0.0000	0.6044	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Archit. Coating	0.0385					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	1.2000e-004	5.2000e-004	7.3300e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0231	

Total	0.0386	5.2000e-004	7.3300e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0231
-------	--------	-------------	-------------	-------------	--	-------------	-------------	--	-------------	-------------	--------	--------	--------	-------------	--------	--------

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6040	0.6040	1.0000e-005	0.0000	0.6044	
Total	2.8000e-004	2.0000e-004	2.1000e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6040	0.6040	1.0000e-005	0.0000	0.6044	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.607897	0.037434	0.184004	0.107261	0.014919	0.004991	0.012447	0.020659	0.002115	0.001554	0.005334	0.000623	0.000761

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	28.2039	28.2039	1.2800e-003	2.6000e-004	28.3144
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	28.2039	28.2039	1.2800e-003	2.6000e-004	28.3144

NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr												MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	96950	28.2039	1.2800e-003	2.6000e-004	28.3144
Total		28.2039	1.2800e-003	2.6000e-004	28.3144

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	96950	28.2039	1.2800e-003	2.6000e-004	28.3144
Total		28.2039	1.2800e-003	2.6000e-004	28.3144

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003
Unmitigated	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-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	5.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0179					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003
Total	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003

Mitigated

Consumer Products	0.0179					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4000e-004	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003			
Total	0.0239	2.0000e-005	2.5600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.9500e-003	4.9500e-003	1.0000e-005	0.0000	5.2800e-003			

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Construction Emissions Summary - From CalEEMod Output

Onsite (tpy)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T	CO2e
Demolition	8	0.0019	0.0080	0.0931	0.0002	0.0011	0.0003	0.0013	0.0002	0.0003	0.0004	15.0972
Site Preparation	4	0.0009	0.0040	0.0417	0.0001	0.0141	0.0001	0.0142	0.0078	0.0001	0.0079	7.4309
Grading	8	0.0015	0.0063	0.0710	0.0001	0.0109	0.0002	0.0111	0.0053	0.0002	0.0055	11.5805
Paving	10	0.0097	0.0061	0.0865	0.0001	0.0000	0.0002	0.0002	0.0000	0.0002	0.0002	11.1253
Architectural Coating	8	0.0386	0.0005	0.0073	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1278

Offsite (tpy)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T	CO2e
Demolition	8	0.0003	0.0035	0.0021	0.0000	0.0007	0.0000	0.0007	0.0002	0.0000	0.0002	1.4732
Site Preparation	4	0.0001	0.0001	0.0008	0.0000	0.0003	0.0000	0.0003	0.0001	0.0000	0.0001	0.2607
Grading	8	0.0041	0.1339	0.0305	0.0004	0.0090	0.0004	0.0094	0.0025	0.0004	0.0029	41.9853
Paving	10	0.0002	0.0002	0.0017	0.0000	0.0006	0.0000	0.0006	0.0002	0.0000	0.0002	0.5431
Architectural Coating	8	0.0003	0.0002	0.0021	0.0000	0.0007	0.0000	0.0007	0.0002	0.0000	0.0002	0.6662

Total (tpy)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T	CO2e
Demolition	8	0.0021	0.0115	0.0952	0.0002	0.0018	0.0003	0.0020	0.0004	0.0003	0.0006	16.5705
Site Preparation	4	0.0010	0.0041	0.0425	0.0001	0.0144	0.0001	0.0145	0.0078	0.0001	0.0080	7.6916
Grading	8	0.0056	0.1402	0.1015	0.0005	0.0199	0.0006	0.0205	0.0078	0.0006	0.0084	53.5659
Paving	10	0.0100	0.0062	0.0882	0.0001	0.0006	0.0002	0.0008	0.0002	0.0002	0.0004	11.6684
Architectural Coating	8	0.0389	0.0007	0.0094	0.0000	0.0007	0.0000	0.0008	0.0002	0.0000	0.0002	1.7940

Overall Construction Totals (tons)	0.0576	0.1627	0.3369	0.0009	0.0373	0.0012	0.0385	0.0163	0.0012	0.0175	91.2903
------------------------------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------

Total (lb/day)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T
Demolition	8	0.53	2.87	23.80	0.04	0.44	0.07	0.50	0.09	0.07	0.15
Site Preparation	4	0.52	2.06	21.26	0.04	7.20	0.06	7.25	3.92	0.06	3.98
Grading	8	1.39	35.05	25.38	0.13	4.97	0.15	5.12	1.95	0.15	2.10
Paving	10	1.99	1.25	17.64	0.02	0.12	0.04	0.16	0.03	0.04	0.07
Architectural Coating	8	9.72	0.18	2.36	0.01	0.18	0.01	0.19	0.05	0.01	0.06
Maximum Total lb/day		9.72	35.05	25.38	0.13	7.20	0.15	7.25	3.92	0.15	3.98
BAAQMD Significance Thresholds											

Onsite (lb/day)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T
Demolition	8	0.46	2.00	23.28	0.04	0.27	0.06	0.33	0.04	0.06	0.10
Site Preparation	4	0.47	2.02	20.85	0.04	7.05	0.06	7.10	3.88	0.06	3.94
Grading	8	0.36	1.57	17.75	0.03	2.73	0.05	2.78	1.33	0.05	1.38
Paving	10	1.95	1.22	17.30	0.02	0.00	0.04	0.04	0.00	0.04	0.04
Architectural Coating	8	9.65	0.13	1.83	0.00	0.00	0.01	0.01	0.00	0.01	0.01
Maximum Onsite lb/day		9.65	2.02	23.28	0.04	7.05	0.06	7.10	3.88	0.06	3.94

Offsite (lb/day)

Phase	Working Days	ROG	NOx	CO	SOx	PM10 F	PM10 Ex	PM10 T	PM2.5 F	PM2.5 Ex	PM2.5T
Demolition	8	0.07	0.87	0.53	0.00	0.17	0.00	0.18	0.05	0.00	0.05
Site Preparation	4	0.06	0.04	0.41	0.00	0.15	0.00	0.15	0.04	0.00	0.04
Grading	8	1.03	33.48	7.63	0.10	2.24	0.11	2.34	0.62	0.10	0.72
Paving	10	0.05	0.03	0.34	0.00	0.12	0.00	0.12	0.03	0.00	0.03
Architectural Coating	8	0.07	0.05	0.53	0.00	0.18	0.00	0.18	0.05	0.00	0.05
Maximum offsite lb/day		1.03	33.48	7.63	0.10	2.24	0.11	2.34	0.62	0.10	0.72

Offsite (lb/day)

Phase	Working Days	PM10 Ex
Demolition	8	0.00
Site Preparation	4	0.00
Grading	8	0.11
Paving	10	0.00
Architectural Coating	8	0.00
Maximum Offsite lb/day		0.11

On-Site Construction Equipment Diesel Particulate Emissions

Phase				tons/yr	lbs/yr	Avg lb/day
Demolition				0.0003	0.50	0.0625
Site Preparation				0.0001	0.24	0.0600
Grading				0.0002	0.38	0.0475
Paving				0.0002	0.38	0.0380
Architectural Coating				0.0000	0.04	0.0050
Totals				0.0008	1.54	0.21

Offsite Construction Equipment Diesel Particulate Emissions

Phase				tons/yr	lbs/yr	Avg lb/day
Demolition				0.0000	0.02	0.0025
Site Preparation				0.0000	0.00	0.0000
Grading				0.0004	0.84	0.1050
Paving				0.0000	0.00	0.0000
Architectural Coating				0.0000	0.00	0.0000
Totals				0.0004	0.86	0.1075

Appendix B
Operation Emissions Calculation
Tables

Emissions Summary

Source Name	Annual Emissions (tpy)					
	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}
Employees	1.90	0.03	0.13	0.01	0.30	0.09
Vans	0.38	0.01	0.04	0.00	0.20	0.05
Electricity Usage	--	--	--	--	--	--
Total	2.28	0.04	0.17	0.01	0.50	0.15

Emissions (tpy)			Emissions (MT/yr)
CO ₂	CH ₄	N ₂ O	CO _{2eq}
701.70	0.01	0.01	640.53
139.66	0.00	0.00	127.66
31.09	0.00	0.00	28.31
872.45	0.01	0.02	796.51

- CO_{2e} (mtpy) = (CO₂ + CH₄*25 + N₂O*298) * 0.9072 (tonne/ton)

Source Name	Maximum Daily Emissions (lb/day)					
	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}
Employees	10.43	0.17	0.72	0.04	1.67	0.52
Vans	2.09	0.06	0.21	0.01	1.08	0.28
Total	12.52	0.23	0.93	0.05	2.75	0.80
BAAQMD Significance Threshold	--	54.00	54.00	--	82.00	54.00
Exceedance?	No	No	No	No	No	No

Van Emissions

	Proposed Project Emissions								
	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Max Daily (lb/day)	2.09	0.06		0.01	1.08	0.28	767.36	0.01	0.02
Max Annual (tpy)	0.38	0.01		0.04	0.00	0.20	0.05	139.66	0.00
Average Annual (tpy)	0.21	0.01		0.02	0.00	0.11	0.03	76.43	0.00

of Van Trips/day

	# of Van Trips/year
Proposed Normal Operation	151
Proposed Max Operation	381

Offsite Trip Distance	1.5 miles/roundtrip
Onsite Trip Distance	0.5 miles/roundtrip

Offsite Emissions

Exhaust Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	1.098	0.024		0.116	0.004	0.002	406.592	0.005	0.010

- EMFAC CY2021, Aggregate Speed, Aggregate MY, Vehicle Categories: MDV, Santa Clara (SF) sub-area

Proposed Projct Emissions

Max Daily (lb/day)	1.384	0.030		0.146	0.005	0.002	512.274	0.007	0.013
Max Annual (tpy)	0.252	0.006		0.027	0.001	0.000	93.234	0.001	0.002
Average Annual (tpy)	0.138	0.003		0.015	0.001	0.000	51.022	0.001	0.001

Brake and Tire Wear Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	--	--	--	--	0.045	0.018	--	--	--

- EMFAC CY2021, Aggregate Speed, Aggregate MY, Vehicle Categories: MDV, Santa Clara (SF) sub-area

Proposed Projct Emissions

Max Daily (lb/day)	--	--	--	--	0.056	0.022	--	--	--
Max Annual (tpy)	--	--	--	--	0.010	0.004	--	--	--
Average Annual (tpy)	--	--	--	--	0.006	0.002	--	--	--

Fugitive Emissions

Paved Road Emission Factor

https://ww3.arb.ca.gov/ei/arearsrc/fullpdf/full7-9_2018.pdf

$$E = [k(sL)^{0.91} \times (W)^{1.02}] \times (1 - P/4N)$$

0.00220 k PM10 (lb/VMT)

0.00054 k PM2.5 (lb/VMT)

0.032 sl

5 W (ton)

average of unloaded weight (max 8,500 lbs)

62 P # of wet days

365 N Averaging Period

		Proposed Project		
Pollutant	EF (lb/VMT)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)	Maximum Annual Emissions (tpy)
PM ₁₀	0.0005	0.271	0.049	0.027
PM _{2.5}	0.0001	0.067	0.012	0.007

Onsite Emissions

Exhaust Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	1.671	0.062		0.153	0.006	0.004	607.380	0.014	0.014

- EMFAC CY2022, Speed 5-20 mph, Aggregate MY, Vehicle Categories: MDV, [...] sub-area

Proposed Projct Emissions

Max Daily (lb/day)	0.702	0.026		0.064	0.003	0.002	255.084	0.006	0.006
Max Annual (tpy)	0.128	0.005		0.012	0.000	0.000	46.425	0.001	0.001
Average Annual (tpy)	0.070	0.003		0.006	0.000	0.000	25.406	0.001	0.001

Brake and Tire Wear Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	--	--	--	--	0.045	0.018	--	--	--

Proposed Projct Emissions

Max Daily (lb/day)	--	--	--	--	0.019	0.007	--	--	--
Max Annual (tpy)	--	--	--	--	0.003	0.001	--	--	--
Average Annual (tpy)	--	--	--	--	0.002	0.001	--	--	--

Fugitive Emissions

Paved Road Emission Factor

https://ww3.arb.ca.gov/ei/arearsrc/fullpdf/full7-9_2018.pdf

$$E = [k(sL)^{0.91} \times (W)^{1.02}] \times (1 - P/4N)$$

0.00220 k PM10 (lb/VMT)

0.00054 k PM2.5 (lb/VMT)

0.32 sl

5 W

62 P # of wet days

365 N Averaging Period

		Proposed Project		
Pollutant	EF (lb/VMT)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)	Average Annual Emissions (tpy)
PM ₁₀	0.0039	0.735	0.134	0.073
PM _{2.5}	0.0009	0.180	0.033	0.018

Employee Commute Emissions

	Proposed Project Emissions								
	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Max Daily (lb/day)	10.434	0.174	0.716	0.038	1.666	0.521	3855.509	0.043	0.077
Max Annual (tpy)	1.899	0.032	0.130	0.007	0.303	0.095	701.703	0.008	0.014
Average Annual (tpy)	1.039	0.017	0.071	0.004	0.166	0.052	384.003	0.004	0.008

Normal # of Employees/day **151**
 Maximum # of Employees/day **381**
 Average Trip Distance (offsite) **16.6 miles** (CalEEMod Default)
 Onsite Trip Distance **0.3 miles**

Max Operation Schedule **7 days/week**
52 week/year

Offsite Emissions

Exhaust Emissions

Vehicle Type	Fuel Type	VMT	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
LDA	Gasoline	2.62E+07	0.690	0.011	0.045	0.003	0.001	0.001	266.320	0.003	0.005
LDA	Diesel	2.55E+05	0.211	0.015	0.087	0.002	0.008	0.008	205.407	0.001	0.032
LDT1	Gasoline	2.41E+06	1.200	0.025	0.106	0.003	0.002	0.002	308.123	0.006	0.008
LDT1	Diesel	7.26E+02	1.237	0.218	1.268	0.004	0.176	0.168	413.997	0.010	0.065
Weighted Average EF (g/mile)			0.728	0.012	0.050	0.003	0.002	0.001	269.281	0.003	0.005
Maximum Daily Emissions (lb/day)			10.158	0.166	0.699	0.037	0.022	0.020	3754.686	0.041	0.075
Maximum Annual Emissions (tpy)			1.849	0.030	0.127	0.007	0.004	0.004	683.353	0.007	0.014
Average Annual Emissions (tpy)			1.012	0.017	0.070	0.004	0.002	0.002	373.961	0.004	0.007

- CY2021, MY and speed is aggregated, Santa Clara (SF) sub-area

% Diesel VMT **0.89%**
 Diesel PM
 lb/day **1.96E-04**
 tpy **1.95E-05**

Brake and Tire Wear Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	--	--	--	--	0.045	0.018	--	--	--
Maximum Daily Emissions (lb/day)	--	--	--	--	0.624	0.247	--	--	--
Maximum Annual Emissions (tpy)	--	--	--	--	0.114	0.045	--	--	--
Average Annual Emissions (tpy)	--	--	--	--	0.062	0.025	--	--	--

Fugitive Emissions

Paved Road Emission Factor

https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-9_2018.pdf

E = [k(sl)^{0.91} x (W)^{1.02}] x (1 - P/4N)
 0.00220 k PM10 (lb/VMT)
 0.00054 k PM2.5 (lb/VMT)
 0.032 sl
 1.5 W (ton)
 62 P # of wet days
 365 N Averaging Period

Pollutant	EF (lb/VMT)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)	Average Annual Emissions (tpy)
PM ₁₀	0.0001	0.879	0.160	0.088
PM _{2.5}	0.0000	0.216	0.039	0.021

Onsite Emissions

Exhaust Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	1.099	0.031	0.067	0.004	0.004	0.004	400.117	0.008	0.007
- EMFAC CY2021, Speed 5-20 mph, Aggregate MY, Vehicle Categories: LDA & LDT1, Santa Clara (SF) sub-area									
	Proposed Project Emissions								
Max Daily (lb/day)	0.277	0.008	0.017	0.001	0.001	0.001	100.823	0.002	0.002
Max Annual (tpy)	0.050	0.001	0.003	0.000	0.000	0.000	18.350	0.000	0.000
Average Annual (tpy)	0.028	0.001	0.002	0.000	0.000	0.000	10.042	0.000	0.000

% Diesel VMT **0.89%**
 Diesel PM
 lb/day **9.25E-06**
 tpy **9.22E-07**

Brake and Tire Wear Emissions

	CO	VOC	NOx	SOx	PM ₁₀	PM _{2.5}	CO ₂	CH ₄	N ₂ O
Weighted Average EF (g/mile)	--	--	--	--	0.045	0.018	--	--	--
Proposed Project Emissions									
Max Daily (lb/day)	--	--	--	--	0.011	0.004	--	--	--
Max Annual (tpy)	--	--	--	--	0.002	0.001	--	--	--
Average Annual (tpy)	--	--	--	--	0.001	0.000	--	--	--

Fugitive Emissions

Paved Road Emission Factor

https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-9_2018.pdf

E = [k(sl)^{0.91} x (W)^{1.02}] x (1 - P/4N)
 0.00220 k PM10 (lb/VMT)
 0.00054 k PM2.5 (lb/VMT)
 0.032 sl
 1.5 W
 62 P # of wet days
 365 N Averaging Period

Pollutant	EF (lb/VMT)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tpy)	Average Annual Emissions (tpy)
PM ₁₀	0.0011	0.129	0.023	0.013
PM _{2.5}	0.0003	0.032	0.006	0.003

Electricity Usage

	Electricity Usage		Emissions (tpy)			MT/yr
	MWH/year*		CO ₂	CH ₄	N ₂ O	
Parking Lot	96.95		31.09	0.00	0.00	28.31

* Annual Electricity Usage and Emissions calculated using CalEEMod

Natural Gas Usage

	Natural Gas Usage		Emissions (tpy)			MT/yr
	MMBTU/year*		CO ₂	CH ₄	N ₂ O	
Parking Lot	0.00		0.00	0.00E+00	0.00E+00	0.00

* Annual Usage and Emissions calculated using CalEEMod

Maintenance Operations

	Emissions (tpy)			MT/yr CO2e
	CO ₂	CH ₄	N ₂ O	
Architectural Coating	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.00	0.01
Total	0.01	0.00	0.00	0.01

* Annual Emissions calculated using CalEEMod

Water

	Emissions (tpy)			MT/yr CO2e
	Water Use	CO ₂	CH ₄	
Mgal				
Parking Lot	0.00	0.00	0.00	0.00

* Annual Usage and Emissions calculated using CalEEMod

Waste

Amount of Waste Disposed	Emissions (tpy)			MT/yr CO2e
	tons	CO ₂	CH ₄	
tons				
Parking Lot	0.00	0.00	0.00	0.00

* Annual Usage and Emissions calculated using CalEEMod

Appendix C
Modeling Parameter Tables

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
1	D1	D1	599470	4129330	39.4	39.4	1.8	1
2	D2	D2	599470	4129380	38.88	38.88	1.8	1
3	D3	D3	599470	4129430	39.38	39.38	1.8	1
4	D4	D4	599470	4129480	38.95	38.95	1.8	1
5	D5	D5	599470	4129530	38.19	38.19	1.8	1
6	D6	D6	599470	4129580	37.66	37.66	1.8	1
7	D7	D7	599470	4129630	37.48	37.48	1.8	1
8	D8	D8	599470	4129680	37.49	37.49	1.8	1
9	D9	D9	599470	4129730	36.95	36.95	1.8	1
10	D10	D10	599470	4129780	36.72	36.72	1.8	1
11	D11	D11	599470	4129830	36.78	36.78	1.8	1
12	D12	D12	599470	4129880	36.42	36.42	1.8	1
13	D13	D13	599470	4129930	35.67	35.67	1.8	1
14	D14	D14	599470	4129980	35.3	35.3	1.8	1
15	D15	D15	599470	4130030	34.76	34.76	1.8	1
16	D16	D16	599470	4130080	34.83	34.83	1.8	1
17	D17	D17	599470	4130130	33.99	33.99	1.8	1
18	D18	D18	599470	4130180	33.69	33.69	1.8	1
19	D19	D19	599470	4130230	33.59	33.59	1.8	1
20	D20	D20	599470	4130280	33.25	33.25	1.8	1
21	D21	D21	599470	4130330	33.11	33.11	1.8	1
22	D22	D22	599470	4130380	32.61	32.61	1.8	1
23	D23	D23	599470	4130430	32.18	32.18	1.8	1
24	D24	D24	599470	4130480	31.83	31.83	1.8	1
25	D25	D25	599470	4130530	31.75	31.75	1.8	1
26	D26	D26	599520	4129330	39.76	39.76	1.8	1
27	D27	D27	599520	4129380	39.25	39.25	1.8	1
28	D28	D28	599520	4129430	38.63	38.63	1.8	1
29	D29	D29	599520	4129480	38.44	38.44	1.8	1
30	D30	D30	599520	4129530	38.23	38.23	1.8	1
31	D31	D31	599520	4129580	37.99	37.99	1.8	1
32	D32	D32	599520	4129630	37.4	37.4	1.8	1
33	D33	D33	599520	4129680	37.45	37.45	1.8	1
34	D34	D34	599520	4129730	36.99	36.99	1.8	1
35	D35	D35	599520	4129780	36.7	36.7	1.8	1
36	D36	D36	599520	4129830	36.68	36.68	1.8	1
37	D37	D37	599520	4129880	35.7	35.7	1.8	1
38	D38	D38	599520	4129930	35.78	35.78	1.8	1
39	D39	D39	599520	4129980	35.24	35.24	1.8	1
40	D40	D40	599520	4130030	34.52	34.52	1.8	1
41	D41	D41	599520	4130080	34.3	34.3	1.8	1
42	D42	D42	599520	4130130	33.89	33.89	1.8	1
43	D43	D43	599520	4130180	33.66	33.66	1.8	1
44	D44	D44	599520	4130230	33.43	33.43	1.8	1
45	D45	D45	599520	4130280	33.13	33.13	1.8	1
46	D46	D46	599520	4130330	33.04	33.04	1.8	1
47	D47	D47	599520	4130380	32.62	32.62	1.8	1
48	D48	D48	599520	4130430	32.8	32.8	1.8	1
49	D49	D49	599520	4130480	31.88	31.88	1.8	1
50	D50	D50	599520	4130530	31.71	31.71	1.8	1
51	D51	D51	599570	4129330	39.01	39.01	1.8	1
52	D52	D52	599570	4129380	38.75	38.75	1.8	1
53	D53	D53	599570	4129430	38.56	38.56	1.8	1
54	D54	D54	599570	4129480	37.61	37.61	1.8	1
55	D55	D55	599570	4129530	38.22	38.22	1.8	1
56	D56	D56	599570	4129580	38.29	38.29	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
57	D57	D57	599570	4129630	37.5	37.5	1.8	1
58	D58	D58	599570	4129680	37.09	37.09	1.8	1
59	D59	D59	599570	4129730	36.87	36.87	1.8	1
60	D60	D60	599570	4129780	36.47	36.47	1.8	1
61	D61	D61	599570	4129830	36.52	36.52	1.8	1
62	D62	D62	599570	4129880	35.24	35.24	1.8	1
63	D63	D63	599570	4129930	35.17	35.17	1.8	1
64	D64	D64	599570	4129980	35.06	35.06	1.8	1
65	D65	D65	599570	4130030	34.69	34.69	1.8	1
66	D66	D66	599570	4130080	34.29	34.29	1.8	1
67	D67	D67	599570	4130130	34.21	34.21	1.8	1
68	D68	D68	599570	4130180	33.82	33.82	1.8	1
69	D69	D69	599570	4130230	33.66	33.66	1.8	1
70	D70	D70	599570	4130280	33.06	33.06	1.8	1
71	D71	D71	599570	4130330	33.2	33.2	1.8	1
72	D72	D72	599570	4130380	32.83	32.83	1.8	1
73	D73	D73	599570	4130430	32.19	32.19	1.8	1
74	D74	D74	599570	4130480	32.18	32.18	1.8	1
75	D75	D75	599570	4130530	31.88	31.88	1.8	1
76	D76	D76	599620	4129330	38.99	38.99	1.8	1
77	D77	D77	599620	4129380	38.95	39.2	1.8	1
78	D78	D78	599620	4129430	37.55	37.55	1.8	1
79	D79	D79	599620	4129480	37.16	37.16	1.8	1
80	D80	D80	599620	4129530	38.18	38.18	1.8	1
81	D81	D81	599620	4129580	37.63	37.63	1.8	1
82	D82	D82	599620	4129630	37.63	37.63	1.8	1
83	D83	D83	599620	4129680	36.96	36.96	1.8	1
84	D84	D84	599620	4129730	36.61	36.61	1.8	1
85	D85	D85	599620	4129780	36.12	36.12	1.8	1
86	D86	D86	599620	4129830	35.69	35.69	1.8	1
87	D87	D87	599620	4129880	35.12	35.12	1.8	1
88	D88	D88	599620	4129930	34.87	34.87	1.8	1
89	D89	D89	599620	4129980	34.43	34.43	1.8	1
90	D90	D90	599620	4130030	34.36	34.36	1.8	1
91	D91	D91	599620	4130080	34.27	34.27	1.8	1
92	D92	D92	599620	4130130	33.84	33.84	1.8	1
93	D93	D93	599620	4130180	33.81	33.81	1.8	1
94	D94	D94	599620	4130230	33.54	33.54	1.8	1
95	D95	D95	599620	4130280	33.49	33.49	1.8	1
96	D96	D96	599620	4130330	33.43	33.43	1.8	1
97	D97	D97	599620	4130380	33.04	33.04	1.8	1
98	D98	D98	599620	4130430	32.54	32.54	1.8	1
99	D99	D99	599620	4130480	32.06	32.06	1.8	1
100	D100	D100	599620	4130530	31.66	31.66	1.8	1
101	D101	D101	599670	4129330	38.08	40.5	1.8	1
102	D102	D102	599670	4129380	37.2	37.2	1.8	1
103	D103	D103	599670	4129430	37.45	37.45	1.8	1
104	D104	D104	599670	4129480	36.89	36.89	1.8	1
105	D105	D105	599670	4129530	37.17	37.17	1.8	1
106	D106	D106	599670	4129580	36.87	36.87	1.8	1
107	D107	D107	599670	4129630	37.34	37.34	1.8	1
108	D108	D108	599670	4129680	36.78	36.78	1.8	1
109	D109	D109	599670	4129730	36.43	36.43	1.8	1
110	D110	D110	599670	4129780	36.04	36.04	1.8	1
111	D111	D111	599670	4129830	35.71	35.71	1.8	1
112	D112	D112	599670	4129880	35.35	35.35	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
113	D113	D113	599670	4129930	34.39	34.39	1.8	1
114	D114	D114	599670	4129980	34.26	34.26	1.8	1
115	D115	D115	599670	4130030	33.9	33.9	1.8	1
116	D116	D116	599670	4130080	34.01	34.01	1.8	1
117	D117	D117	599670	4130130	33.81	33.81	1.8	1
118	D118	D118	599670	4130180	33.78	33.78	1.8	1
119	D119	D119	599670	4130230	33.48	33.48	1.8	1
120	D120	D120	599670	4130280	33.54	33.54	1.8	1
121	D121	D121	599670	4130330	33.26	33.26	1.8	1
122	D122	D122	599670	4130380	32.82	32.82	1.8	1
123	D123	D123	599670	4130430	32.74	32.74	1.8	1
124	D124	D124	599670	4130480	32.01	32.01	1.8	1
125	D125	D125	599670	4130530	31.83	31.83	1.8	1
126	D126	D126	599720	4129330	37.08	37.08	1.8	1
127	D127	D127	599720	4129380	37.05	37.05	1.8	1
128	D128	D128	599720	4129430	36.38	36.38	1.8	1
129	D129	D129	599720	4129480	35.82	35.82	1.8	1
130	D130	D130	599720	4129530	35.68	35.68	1.8	1
131	D131	D131	599720	4129580	36.82	36.82	1.8	1
132	D132	D132	599720	4129630	36.21	36.21	1.8	1
133	D133	D133	599720	4129680	36.27	36.27	1.8	1
134	D134	D134	599720	4129730	36.1	36.1	1.8	1
135	D135	D135	599720	4129780	35.69	35.69	1.8	1
136	D136	D136	599720	4129830	35.36	35.36	1.8	1
137	D137	D137	599720	4129880	35.16	35.16	1.8	1
138	D138	D138	599720	4129930	34.32	34.32	1.8	1
139	D139	D139	599720	4129980	33.74	33.74	1.8	1
140	D140	D140	599720	4130030	33.8	33.8	1.8	1
141	D141	D141	599720	4130080	33.74	33.74	1.8	1
142	D142	D142	599720	4130130	33.95	33.95	1.8	1
143	D143	D143	599720	4130180	33.79	33.79	1.8	1
144	D144	D144	599720	4130230	33.65	33.65	1.8	1
145	D145	D145	599720	4130280	33.02	33.02	1.8	1
146	D146	D146	599720	4130330	32.88	32.88	1.8	1
147	D147	D147	599720	4130380	33.01	33.01	1.8	1
148	D148	D148	599720	4130430	32.43	32.43	1.8	1
149	D149	D149	599720	4130480	31.99	31.99	1.8	1
150	D150	D150	599720	4130530	31.67	31.67	1.8	1
151	D151	D151	599770	4129330	37.13	37.13	1.8	1
152	D152	D152	599770	4129380	36.94	36.94	1.8	1
153	D153	D153	599770	4129430	35.64	35.64	1.8	1
154	D154	D154	599770	4129480	35.49	35.49	1.8	1
155	D155	D155	599770	4129530	35.56	35.56	1.8	1
156	D156	D156	599770	4129580	35.51	35.51	1.8	1
157	D157	D157	599770	4129630	35.37	35.37	1.8	1
158	D158	D158	599770	4129680	35.96	35.96	1.8	1
159	D159	D159	599770	4129730	35.45	35.45	1.8	1
160	D160	D160	599770	4129780	35.28	35.28	1.8	1
161	D161	D161	599770	4129830	34.9	34.9	1.8	1
162	D162	D162	599770	4129880	34.64	34.64	1.8	1
163	D163	D163	599770	4129930	34.22	34.22	1.8	1
164	D164	D164	599770	4129980	33.55	33.55	1.8	1
165	D165	D165	599770	4130030	33.22	33.22	1.8	1
166	D166	D166	599770	4130080	33.48	33.48	1.8	1
167	D167	D167	599770	4130130	33.39	33.39	1.8	1
168	D168	D168	599770	4130180	33.8	33.8	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
169	D169	D169	599770	4130230	33.44	33.44	1.8	1
170	D170	D170	599770	4130280	33.1	33.1	1.8	1
171	D171	D171	599770	4130330	32.79	32.79	1.8	1
172	D172	D172	599770	4130380	32.4	32.4	1.8	1
173	D173	D173	599770	4130430	32.15	32.15	1.8	1
174	D174	D174	599770	4130480	32.22	32.22	1.8	1
175	D175	D175	599770	4130530	32.12	32.12	1.8	1
176	D176	D176	599820	4129330	35.93	35.93	1.8	1
177	D177	D177	599820	4129380	35.42	35.42	1.8	1
178	D178	D178	599820	4129430	35.17	35.17	1.8	1
179	D179	D179	599820	4129480	35.18	35.18	1.8	1
180	D180	D180	599820	4129530	34.84	34.84	1.8	1
181	D181	D181	599820	4129580	35.01	35.01	1.8	1
182	D182	D182	599820	4129630	35.27	35.27	1.8	1
183	D183	D183	599820	4129680	35.52	35.52	1.8	1
184	D184	D184	599820	4129730	34.96	34.96	1.8	1
185	D185	D185	599820	4129780	34.87	34.87	1.8	1
186	D186	D186	599820	4129830	34.47	34.47	1.8	1
187	D187	D187	599820	4129880	34.12	34.12	1.8	1
188	D188	D188	599820	4129930	33.71	33.71	1.8	1
189	D189	D189	599820	4129980	33.53	33.53	1.8	1
190	D190	D190	599820	4130030	32.85	32.85	1.8	1
191	D191	D191	599820	4130080	32.9	32.9	1.8	1
192	D192	D192	599820	4130130	33.1	33.1	1.8	1
193	D193	D193	599820	4130180	33.18	33.18	1.8	1
194	D194	D194	599820	4130230	33.1	33.1	1.8	1
195	D195	D195	599820	4130280	32.71	32.71	1.8	1
196	D196	D196	599820	4130330	32.38	32.38	1.8	1
197	D197	D197	599820	4130380	32.36	32.36	1.8	1
198	D198	D198	599820	4130430	32.18	32.18	1.8	1
199	D199	D199	599820	4130480	31.68	31.68	1.8	1
200	D200	D200	599820	4130530	31.68	31.68	1.8	1
201	D201	D201	599870	4129330	35.77	35.77	1.8	1
202	D202	D202	599870	4129380	35.3	35.3	1.8	1
203	D203	D203	599870	4129430	34.85	34.85	1.8	1
204	D204	D204	599870	4129480	34.39	34.39	1.8	1
205	D205	D205	599870	4129530	34.22	34.22	1.8	1
206	D206	D206	599870	4129580	34.18	34.18	1.8	1
207	D207	D207	599870	4129630	34.85	34.85	1.8	1
208	D208	D208	599870	4129680	35.15	35.15	1.8	1
209	D209	D209	599870	4129730	35.1	35.1	1.8	1
210	D210	D210	599870	4129780	34.73	34.73	1.8	1
211	D211	D211	599870	4129830	34.56	34.56	1.8	1
212	D212	D212	599870	4129880	33.77	33.77	1.8	1
213	D213	D213	599870	4129930	33.36	33.36	1.8	1
214	D214	D214	599870	4129980	33.19	33.19	1.8	1
215	D215	D215	599870	4130030	32.65	32.65	1.8	1
216	D216	D216	599870	4130080	32.34	32.34	1.8	1
217	D217	D217	599870	4130130	32.39	32.39	1.8	1
218	D218	D218	599870	4130180	32.89	32.89	1.8	1
219	D219	D219	599870	4130230	32.63	32.63	1.8	1
220	D220	D220	599870	4130280	32.09	32.09	1.8	1
221	D221	D221	599870	4130330	32.17	32.17	1.8	1
222	D222	D222	599870	4130380	32.23	32.23	1.8	1
223	D223	D223	599870	4130430	31.81	31.81	1.8	1
224	D224	D224	599870	4130480	31.54	31.54	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
225	D225	D225	599870	4130530	31.78	31.78	1.8	1
226	D226	D226	599920	4129330	35.55	35.55	1.8	1
227	D227	D227	599920	4129380	34.99	34.99	1.8	1
228	D228	D228	599920	4129430	34.18	34.18	1.8	1
229	D229	D229	599920	4129480	33.94	33.94	1.8	1
230	D230	D230	599920	4129530	33.71	33.71	1.8	1
231	D231	D231	599920	4129580	33.38	33.38	1.8	1
232	D232	D232	599920	4129630	33.44	33.44	1.8	1
233	D233	D233	599920	4129680	34.81	34.81	1.8	1
234	D234	D234	599920	4129730	34.72	34.72	1.8	1
235	D235	D235	599920	4129780	34.51	34.51	1.8	1
236	D236	D236	599920	4129830	34.23	34.23	1.8	1
237	D237	D237	599920	4129880	34.12	34.12	1.8	1
238	D238	D238	599920	4129930	33.18	33.18	1.8	1
239	D239	D239	599920	4129980	32.67	32.67	1.8	1
240	D240	D240	599920	4130030	32.81	32.81	1.8	1
241	D241	D241	599920	4130080	32.22	32.22	1.8	1
242	D242	D242	599920	4130130	32.02	32.02	1.8	1
243	D243	D243	599920	4130180	31.97	31.97	1.8	1
244	D244	D244	599920	4130230	31.74	31.74	1.8	1
245	D245	D245	599920	4130280	31.94	31.94	1.8	1
246	D246	D246	599920	4130330	31.61	31.61	1.8	1
247	D247	D247	599920	4130380	31.93	31.93	1.8	1
248	D248	D248	599920	4130430	31.64	31.64	1.8	1
249	D249	D249	599920	4130480	31.59	31.59	1.8	1
250	D250	D250	599920	4130530	31.37	31.37	1.8	1
251	D251	D251	599970	4129330	35.47	35.47	1.8	1
252	D252	D252	599970	4129380	34.75	34.75	1.8	1
253	D253	D253	599970	4129430	34.84	34.84	1.8	1
254	D254	D254	599970	4129480	34	34	1.8	1
255	D255	D255	599970	4129530	33.4	33.4	1.8	1
256	D256	D256	599970	4129580	33.25	33.25	1.8	1
257	D257	D257	599970	4129630	33.36	33.36	1.8	1
258	D258	D258	599970	4129680	33.65	33.65	1.8	1
259	D259	D259	599970	4129730	34.39	34.39	1.8	1
260	D260	D260	599970	4129780	34.07	34.07	1.8	1
261	D261	D261	599970	4129830	33.98	33.98	1.8	1
262	D262	D262	599970	4129930	33.27	33.27	1.8	1
263	D263	D263	599970	4129980	32.64	32.64	1.8	1
264	D264	D264	599970	4130030	32.35	32.35	1.8	1
265	D265	D265	599970	4130080	32.31	32.31	1.8	1
266	D266	D266	599970	4130130	31.89	31.89	1.8	1
267	D267	D267	599970	4130180	31.58	31.58	1.8	1
268	D268	D268	599970	4130230	31.41	31.41	1.8	1
269	D269	D269	599970	4130280	31.67	31.67	1.8	1
270	D270	D270	599970	4130330	32	32	1.8	1
271	D271	D271	599970	4130380	31.73	31.73	1.8	1
272	D272	D272	599970	4130430	31.76	31.76	1.8	1
273	D273	D273	599970	4130480	31.34	31.34	1.8	1
274	D274	D274	599970	4130530	31.15	31.15	1.8	1
275	D275	D275	600020	4129330	34.59	34.59	1.8	1
276	D276	D276	600020	4129380	34.79	34.79	1.8	1
277	D277	D277	600020	4129430	34.3	34.3	1.8	1
278	D278	D278	600020	4129480	34.27	34.27	1.8	1
279	D279	D279	600020	4129530	34.07	34.07	1.8	1
280	D280	D280	600020	4129580	33.78	33.78	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
281	D281	D281	600020	4129630	34.17	34.17	1.8	1
282	D282	D282	600020	4129680	33.96	33.96	1.8	1
283	D283	D283	600020	4129730	33.26	33.26	1.8	1
284	D284	D284	600020	4129780	33.92	33.92	1.8	1
285	D285	D285	600020	4129830	33.37	33.37	1.8	1
286	D286	D286	600020	4129880	33.23	33.23	1.8	1
287	D287	D287	600020	4129980	32.48	32.48	1.8	1
288	D288	D288	600020	4130030	32.4	32.4	1.8	1
289	D289	D289	600020	4130080	32.12	32.12	1.8	1
290	D290	D290	600020	4130130	31.25	31.25	1.8	1
291	D291	D291	600020	4130180	31.56	31.56	1.8	1
292	D292	D292	600020	4130230	31.57	31.57	1.8	1
293	D293	D293	600020	4130280	31.71	31.71	1.8	1
294	D294	D294	600020	4130330	31.48	31.48	1.8	1
295	D295	D295	600020	4130380	31.48	31.48	1.8	1
296	D296	D296	600020	4130430	31.16	31.16	1.8	1
297	D297	D297	600020	4130480	31.49	38.75	1.8	1
298	D298	D298	600020	4130530	32.16	38.49	1.8	1
299	D299	D299	600070	4129330	35.13	35.13	1.8	1
300	D300	D300	600070	4129380	34.18	34.18	1.8	1
301	D301	D301	600070	4129430	34.05	34.05	1.8	1
302	D302	D302	600070	4129480	34.04	34.04	1.8	1
303	D303	D303	600070	4129530	34.28	34.28	1.8	1
304	D304	D304	600070	4129580	33.65	33.65	1.8	1
305	D305	D305	600070	4129630	33.44	33.44	1.8	1
306	D306	D306	600070	4129680	33.13	33.13	1.8	1
307	D307	D307	600070	4129730	33.2	33.2	1.8	1
308	D308	D308	600070	4129780	32.85	32.85	1.8	1
309	D309	D309	600070	4129830	32.86	32.86	1.8	1
310	D310	D310	600070	4129880	32.61	32.61	1.8	1
311	D311	D311	600070	4130030	31.92	31.92	1.8	1
312	D312	D312	600070	4130080	31.96	31.96	1.8	1
313	D313	D313	600070	4130130	31.78	31.78	1.8	1
314	D314	D314	600070	4130180	31.69	31.69	1.8	1
315	D315	D315	600070	4130230	31.58	31.58	1.8	1
316	D316	D316	600070	4130280	31.71	31.71	1.8	1
317	D317	D317	600070	4130330	31.29	31.29	1.8	1
318	D318	D318	600070	4130380	31.2	31.2	1.8	1
319	D319	D319	600070	4130430	31.3	38.75	1.8	1
320	D320	D320	600070	4130480	36.86	38.75	1.8	1
321	D321	D321	600070	4130530	33.49	38.75	1.8	1
322	D322	D322	600120	4129330	34.99	34.99	1.8	1
323	D323	D323	600120	4129380	35.12	35.12	1.8	1
324	D324	D324	600120	4129430	34.61	34.61	1.8	1
325	D325	D325	600120	4129480	33.92	33.92	1.8	1
326	D326	D326	600120	4129530	34.26	34.26	1.8	1
327	D327	D327	600120	4129580	33.04	33.04	1.8	1
328	D328	D328	600120	4129630	33.42	33.42	1.8	1
329	D329	D329	600120	4129680	33.13	33.13	1.8	1
330	D330	D330	600120	4129730	32.88	32.88	1.8	1
331	D331	D331	600120	4129780	32.89	32.89	1.8	1
332	D332	D332	600120	4129830	32.67	32.67	1.8	1
333	D333	D333	600120	4129880	32.39	32.39	1.8	1
334	D334	D334	600120	4130080	32.21	32.21	1.8	1
335	D335	D335	600120	4130130	32.04	32.04	1.8	1
336	D336	D336	600120	4130180	31.84	31.84	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
337	D337	D337	600120	4130230	31.58	31.58	1.8	1
338	D338	D338	600120	4130280	31.36	31.36	1.8	1
339	D339	D339	600120	4130330	31.56	31.56	1.8	1
340	D340	D340	600120	4130380	31.56	31.56	1.8	1
341	D341	D341	600120	4130430	31.26	38.75	1.8	1
342	D342	D342	600120	4130480	31.53	38.75	1.8	1
343	D343	D343	600120	4130530	31.72	38.75	1.8	1
344	D344	D344	600170	4129330	35.25	35.25	1.8	1
345	D345	D345	600170	4129380	35.35	35.35	1.8	1
346	D346	D346	600170	4129430	34.58	34.58	1.8	1
347	D347	D347	600170	4129480	33.81	33.81	1.8	1
348	D348	D348	600170	4129530	33.43	33.43	1.8	1
349	D349	D349	600170	4129580	33.56	33.56	1.8	1
350	D350	D350	600170	4129630	33.32	33.32	1.8	1
351	D351	D351	600170	4129680	33.1	33.1	1.8	1
352	D352	D352	600170	4129730	32.87	32.87	1.8	1
353	D353	D353	600170	4129780	32.85	32.85	1.8	1
354	D354	D354	600170	4129830	32.71	32.71	1.8	1
355	D355	D355	600170	4129880	32.31	32.31	1.8	1
356	D356	D356	600170	4129930	32.37	32.37	1.8	1
357	D357	D357	600170	4130080	32.43	32.43	1.8	1
358	D358	D358	600170	4130130	31.93	31.93	1.8	1
359	D359	D359	600170	4130180	31.9	31.9	1.8	1
360	D360	D360	600170	4130230	31.96	31.96	1.8	1
361	D361	D361	600170	4130280	31.77	31.77	1.8	1
362	D362	D362	600170	4130330	31.7	31.7	1.8	1
363	D363	D363	600170	4130380	31.49	31.49	1.8	1
364	D364	D364	600170	4130430	31.79	31.79	1.8	1
365	D365	D365	600170	4130480	31.39	31.39	1.8	1
366	D366	D366	600170	4130530	31.67	31.67	1.8	1
367	D367	D367	600220	4129330	35.73	35.73	1.8	1
368	D368	D368	600220	4129380	34.12	34.12	1.8	1
369	D369	D369	600220	4129430	34.22	34.22	1.8	1
370	D370	D370	600220	4129480	33.46	33.46	1.8	1
371	D371	D371	600220	4129530	33.38	33.38	1.8	1
372	D372	D372	600220	4129580	33.43	33.43	1.8	1
373	D373	D373	600220	4129630	33.21	33.21	1.8	1
374	D374	D374	600220	4129680	33	33	1.8	1
375	D375	D375	600220	4129730	32.95	32.95	1.8	1
376	D376	D376	600220	4129780	32.93	32.93	1.8	1
377	D377	D377	600220	4129830	32.73	32.73	1.8	1
378	D378	D378	600220	4129880	32.79	32.79	1.8	1
379	D379	D379	600220	4129930	32.56	32.56	1.8	1
380	D380	D380	600220	4129980	32.26	32.26	1.8	1
381	D381	D381	600220	4130030	32.66	32.66	1.8	1
382	D382	D382	600220	4130080	32.03	32.03	1.8	1
383	D383	D383	600220	4130130	32.25	32.25	1.8	1
384	D384	D384	600220	4130180	31.86	31.86	1.8	1
385	D385	D385	600220	4130230	32.08	32.08	1.8	1
386	D386	D386	600220	4130280	32.35	32.35	1.8	1
387	D387	D387	600220	4130330	31.66	31.66	1.8	1
388	D388	D388	600220	4130380	31.49	31.49	1.8	1
389	D389	D389	600220	4130430	31.12	31.12	1.8	1
390	D390	D390	600220	4130480	31.66	31.66	1.8	1
391	D391	D391	600220	4130530	32.52	32.52	1.8	1
392	D392	D392	600270	4129330	34.36	34.36	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
393	D393	D393	600270	4129380	34.19	34.19	1.8	1
394	D394	D394	600270	4129430	34.42	34.42	1.8	1
395	D395	D395	600270	4129480	34.06	34.06	1.8	1
396	D396	D396	600270	4129530	33.45	33.45	1.8	1
397	D397	D397	600270	4129580	33.37	33.37	1.8	1
398	D398	D398	600270	4129630	33.16	33.16	1.8	1
399	D399	D399	600270	4129680	33.08	33.08	1.8	1
400	D400	D400	600270	4129730	32.96	32.96	1.8	1
401	D401	D401	600270	4129780	32.72	32.72	1.8	1
402	D402	D402	600270	4129830	32.31	32.31	1.8	1
403	D403	D403	600270	4129880	32.69	32.69	1.8	1
404	D404	D404	600270	4129930	32.38	32.38	1.8	1
405	D405	D405	600270	4129980	32.57	32.57	1.8	1
406	D406	D406	600270	4130030	32.41	32.41	1.8	1
407	D407	D407	600270	4130080	32.08	32.08	1.8	1
408	D408	D408	600270	4130130	32.07	32.07	1.8	1
409	D409	D409	600270	4130180	32.04	32.04	1.8	1
410	D410	D410	600270	4130230	32.04	32.04	1.8	1
411	D411	D411	600270	4130280	32.04	32.04	1.8	1
412	D412	D412	600270	4130330	31.7	31.7	1.8	1
413	D413	D413	600270	4130380	31.34	31.34	1.8	1
414	D414	D414	600270	4130430	31.57	31.57	1.8	1
415	D415	D415	600270	4130480	31.98	31.98	1.8	1
416	D416	D416	600270	4130530	32.3	32.3	1.8	1
417	D417	D417	600320	4129330	34.5	34.5	1.8	1
418	D418	D418	600320	4129380	33.95	33.95	1.8	1
419	D419	D419	600320	4129430	34.24	34.24	1.8	1
420	D420	D420	600320	4129480	34.52	34.52	1.8	1
421	D421	D421	600320	4129530	33.7	33.7	1.8	1
422	D422	D422	600320	4129580	33.41	33.41	1.8	1
423	D423	D423	600320	4129630	33.3	33.3	1.8	1
424	D424	D424	600320	4129680	33.08	33.08	1.8	1
425	D425	D425	600320	4129730	32.96	32.96	1.8	1
426	D426	D426	600320	4129780	32.79	32.79	1.8	1
427	D427	D427	600320	4129830	32.64	32.64	1.8	1
428	D428	D428	600320	4129880	32.75	32.75	1.8	1
429	D429	D429	600320	4129930	32.64	32.64	1.8	1
430	D430	D430	600320	4129980	32.37	32.37	1.8	1
431	D431	D431	600320	4130030	32.58	32.58	1.8	1
432	D432	D432	600320	4130080	32.5	32.5	1.8	1
433	D433	D433	600320	4130130	32.31	32.31	1.8	1
434	D434	D434	600320	4130180	32.18	32.18	1.8	1
435	D435	D435	600320	4130230	31.56	31.56	1.8	1
436	D436	D436	600320	4130280	31.94	31.94	1.8	1
437	D437	D437	600320	4130330	31.14	31.14	1.8	1
438	D438	D438	600320	4130380	31.5	31.5	1.8	1
439	D439	D439	600320	4130430	31.56	31.56	1.8	1
440	D440	D440	600320	4130480	31.62	31.62	1.8	1
441	D441	D441	600320	4130530	32.3	32.3	1.8	1
442	D442	D442	600370	4129330	34.71	34.71	1.8	1
443	D443	D443	600370	4129380	34.39	34.39	1.8	1
444	D444	D444	600370	4129430	34.06	34.06	1.8	1
445	D445	D445	600370	4129480	34.1	34.1	1.8	1
446	D446	D446	600370	4129530	34.36	34.36	1.8	1
447	D447	D447	600370	4129580	33.48	33.48	1.8	1
448	D448	D448	600370	4129630	33.81	33.81	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
449	D449	D449	600370	4129680	33.49	33.49	1.8	1
450	D450	D450	600370	4129730	32.99	32.99	1.8	1
451	D451	D451	600370	4129780	32.95	32.95	1.8	1
452	D452	D452	600370	4129830	33.22	33.22	1.8	1
453	D453	D453	600370	4129880	32.83	32.83	1.8	1
454	D454	D454	600370	4129930	32.57	32.57	1.8	1
455	D455	D455	600370	4129980	32.4	32.4	1.8	1
456	D456	D456	600370	4130030	32.16	32.16	1.8	1
457	D457	D457	600370	4130080	32.26	32.26	1.8	1
458	D458	D458	600370	4130130	32.85	32.85	1.8	1
459	D459	D459	600370	4130180	32.27	32.27	1.8	1
460	D460	D460	600370	4130230	32.16	32.16	1.8	1
461	D461	D461	600370	4130280	31.98	31.98	1.8	1
462	D462	D462	600370	4130330	31.48	31.48	1.8	1
463	D463	D463	600370	4130380	31.25	31.25	1.8	1
464	D464	D464	600370	4130430	31.41	31.41	1.8	1
465	D465	D465	600370	4130480	31.89	31.89	1.8	1
466	D466	D466	600370	4130530	31.96	31.96	1.8	1
467	D467	D467	600420	4129330	34.9	34.9	1.8	1
468	D468	D468	600420	4129380	34.7	34.7	1.8	1
469	D469	D469	600420	4129430	34.53	34.53	1.8	1
470	D470	D470	600420	4129480	33.67	33.67	1.8	1
471	D471	D471	600420	4129530	33.97	33.97	1.8	1
472	D472	D472	600420	4129580	34.08	34.08	1.8	1
473	D473	D473	600420	4129630	33.5	33.5	1.8	1
474	D474	D474	600420	4129680	33.36	33.36	1.8	1
475	D475	D475	600420	4129730	33.14	33.14	1.8	1
476	D476	D476	600420	4129780	33.56	33.56	1.8	1
477	D477	D477	600420	4129830	32.8	32.8	1.8	1
478	D478	D478	600420	4129880	32.39	32.39	1.8	1
479	D479	D479	600420	4129930	32.4	32.4	1.8	1
480	D480	D480	600420	4129980	32.24	32.24	1.8	1
481	D481	D481	600420	4130030	32.08	32.08	1.8	1
482	D482	D482	600420	4130080	32.49	32.49	1.8	1
483	D483	D483	600420	4130130	32.29	32.29	1.8	1
484	D484	D484	600420	4130180	32.2	32.2	1.8	1
485	D485	D485	600420	4130230	32.24	32.24	1.8	1
486	D486	D486	600420	4130280	32.23	32.23	1.8	1
487	D487	D487	600420	4130330	31.54	31.54	1.8	1
488	D488	D488	600420	4130380	31.17	31.17	1.8	1
489	D489	D489	600420	4130430	31.62	31.62	1.8	1
490	D490	D490	600420	4130480	31.69	31.69	1.8	1
491	D491	D491	600420	4130530	31.92	31.92	1.8	1
492	D492	D492	600470	4129330	35.69	35.69	1.8	1
493	D493	D493	600470	4129380	34.91	34.91	1.8	1
494	D494	D494	600470	4129430	34.52	34.52	1.8	1
495	D495	D495	600470	4129480	34.03	34.03	1.8	1
496	D496	D496	600470	4129530	33.72	33.72	1.8	1
497	D497	D497	600470	4129580	33.73	33.73	1.8	1
498	D498	D498	600470	4129630	33.46	33.46	1.8	1
499	D499	D499	600470	4129680	33.44	33.44	1.8	1
500	D500	D500	600470	4129730	33.37	33.37	1.8	1
501	D501	D501	600470	4129780	32.78	32.78	1.8	1
502	D502	D502	600470	4129830	32.84	32.84	1.8	1
503	D503	D503	600470	4129880	32.59	32.59	1.8	1
504	D504	D504	600470	4129930	32.3	32.3	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
505	D505	D505	600470	4129980	32.85	32.85	1.8	1
506	D506	D506	600470	4130030	32.62	32.62	1.8	1
507	D507	D507	600470	4130080	31.92	31.92	1.8	1
508	D508	D508	600470	4130130	31.87	31.87	1.8	1
509	D509	D509	600470	4130180	31.88	31.88	1.8	1
510	D510	D510	600470	4130230	32.15	32.15	1.8	1
511	D511	D511	600470	4130280	32.24	32.24	1.8	1
512	D512	D512	600470	4130330	32.18	32.18	1.8	1
513	D513	D513	600470	4130380	31.61	31.61	1.8	1
514	D514	D514	600470	4130430	31.62	31.62	1.8	1
515	D515	D515	600470	4130480	31.8	31.8	1.8	1
516	D516	D516	600470	4130530	31.77	31.77	1.8	1
517	D517	D517	600520	4129330	35.19	35.19	1.8	1
518	D518	D518	600520	4129380	35.04	35.04	1.8	1
519	D519	D519	600520	4129430	34.89	34.89	1.8	1
520	D520	D520	600520	4129480	34.67	34.67	1.8	1
521	D521	D521	600520	4129530	33.84	33.84	1.8	1
522	D522	D522	600520	4129580	33.77	33.77	1.8	1
523	D523	D523	600520	4129630	33.67	33.67	1.8	1
524	D524	D524	600520	4129680	33.26	33.26	1.8	1
525	D525	D525	600520	4129730	32.94	32.94	1.8	1
526	D526	D526	600520	4129780	32.91	32.91	1.8	1
527	D527	D527	600520	4129830	32.85	32.85	1.8	1
528	D528	D528	600520	4129880	33	33	1.8	1
529	D529	D529	600520	4129930	33	33	1.8	1
530	D530	D530	600520	4129980	32.13	32.13	1.8	1
531	D531	D531	600520	4130030	32.27	32.27	1.8	1
532	D532	D532	600520	4130080	31.81	31.81	1.8	1
533	D533	D533	600520	4130130	32	32	1.8	1
534	D534	D534	600520	4130180	31.79	31.79	1.8	1
535	D535	D535	600520	4130230	32.52	32.52	1.8	1
536	D536	D536	600520	4130280	32.14	32.14	1.8	1
537	D537	D537	600520	4130330	31.86	31.86	1.8	1
538	D538	D538	600520	4130380	32.19	32.19	1.8	1
539	D539	D539	600520	4130430	31.85	31.85	1.8	1
540	D540	D540	600520	4130480	31.68	31.68	1.8	1
541	D541	D541	600520	4130530	31.81	31.81	1.8	1
542	D542	D542	600570	4129330	35.17	35.17	1.8	1
543	D543	D543	600570	4129380	34.71	34.71	1.8	1
544	D544	D544	600570	4129430	34.21	34.21	1.8	1
545	D545	D545	600570	4129480	34.12	34.12	1.8	1
546	D546	D546	600570	4129530	34.02	34.02	1.8	1
547	D547	D547	600570	4129580	33.76	33.76	1.8	1
548	D548	D548	600570	4129630	33.49	33.49	1.8	1
549	D549	D549	600570	4129680	33.19	33.19	1.8	1
550	D550	D550	600570	4129730	33.2	33.2	1.8	1
551	D551	D551	600570	4129780	33.2	33.2	1.8	1
552	D552	D552	600570	4129830	33.39	33.39	1.8	1
553	D553	D553	600570	4129880	32.41	32.41	1.8	1
554	D554	D554	600570	4129930	32.35	32.35	1.8	1
555	D555	D555	600570	4129980	32.59	32.59	1.8	1
556	D556	D556	600570	4130030	32.56	32.56	1.8	1
557	D557	D557	600570	4130080	32.06	32.06	1.8	1
558	D558	D558	600570	4130130	32.06	32.06	1.8	1
559	D559	D559	600570	4130180	32.48	32.48	1.8	1
560	D560	D560	600570	4130230	32	32	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
561	D561	D561	600570	4130280	31.91	31.91	1.8	1
562	D562	D562	600570	4130330	31.97	31.97	1.8	1
563	D563	D563	600570	4130380	32.22	32.22	1.8	1
564	D564	D564	600570	4130430	32.39	32.39	1.8	1
565	D565	D565	600570	4130480	31.73	31.73	1.8	1
566	D566	D566	600570	4130530	32.02	32.02	1.8	1
567	D567	D567	600620	4129330	35.22	35.22	1.8	1
568	D568	D568	600620	4129380	34.75	34.75	1.8	1
569	D569	D569	600620	4129430	34.2	34.2	1.8	1
570	D570	D570	600620	4129480	33.61	33.61	1.8	1
571	D571	D571	600620	4129530	34.16	34.16	1.8	1
572	D572	D572	600620	4129580	33.76	33.76	1.8	1
573	D573	D573	600620	4129630	33.45	33.45	1.8	1
574	D574	D574	600620	4129680	33.58	33.58	1.8	1
575	D575	D575	600620	4129730	33.13	33.13	1.8	1
576	D576	D576	600620	4129780	33.39	33.39	1.8	1
577	D577	D577	600620	4129830	32.59	32.59	1.8	1
578	D578	D578	600620	4129880	32.7	32.7	1.8	1
579	D579	D579	600620	4129930	32.51	32.51	1.8	1
580	D580	D580	600620	4129980	32.34	32.34	1.8	1
581	D581	D581	600620	4130030	31.98	31.98	1.8	1
582	D582	D582	600620	4130080	32.33	32.33	1.8	1
583	D583	D583	600620	4130130	32.37	32.37	1.8	1
584	D584	D584	600620	4130180	32.11	32.11	1.8	1
585	D585	D585	600620	4130230	32.26	32.26	1.8	1
586	D586	D586	600620	4130280	32.36	32.36	1.8	1
587	D587	D587	600620	4130330	32.03	32.03	1.8	1
588	D588	D588	600620	4130380	31.97	31.97	1.8	1
589	D589	D589	600620	4130430	31.89	31.89	1.8	1
590	D590	D590	600620	4130480	32.14	32.14	1.8	1
591	D591	D591	600620	4130530	32.43	32.43	1.8	1
592	D592	D592	600670	4129330	34.81	34.81	1.8	1
593	D593	D593	600670	4129380	34.59	34.59	1.8	1
594	D594	D594	600670	4129430	34.5	34.5	1.8	1
595	D595	D595	600670	4129480	34.51	34.51	1.8	1
596	D596	D596	600670	4129530	33.99	33.99	1.8	1
597	D597	D597	600670	4129580	33.98	33.98	1.8	1
598	D598	D598	600670	4129630	34.1	34.1	1.8	1
599	D599	D599	600670	4129680	33.89	33.89	1.8	1
600	D600	D600	600670	4129730	33.21	33.21	1.8	1
601	D601	D601	600670	4129780	33.39	33.39	1.8	1
602	D602	D602	600670	4129830	33.14	33.14	1.8	1
603	D603	D603	600670	4129880	32.66	32.66	1.8	1
604	D604	D604	600670	4129930	32.62	32.62	1.8	1
605	D605	D605	600670	4129980	32.34	32.34	1.8	1
606	D606	D606	600670	4130030	32.25	32.25	1.8	1
607	D607	D607	600670	4130080	32.42	32.42	1.8	1
608	D608	D608	600670	4130130	32.28	32.28	1.8	1
609	D609	D609	600670	4130180	32.43	32.43	1.8	1
610	D610	D610	600670	4130230	32.5	32.5	1.8	1
611	D611	D611	600670	4130280	32.35	32.35	1.8	1
612	D612	D612	600670	4130330	32.21	32.21	1.8	1
613	D613	D613	600670	4130380	32.11	32.11	1.8	1
614	D614	D614	600670	4130430	32.56	32.56	1.8	1
615	D615	D615	600670	4130480	32.16	32.16	1.8	1
616	D616	D616	600670	4130530	32.6	32.6	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
617	D617	D617	598970	4128830	39.45	39.45	1.8	1
618	D618	D618	598970	4128930	39.26	39.26	1.8	1
619	D619	D619	598970	4129030	39.19	39.19	1.8	1
620	D620	D620	598970	4129130	39.03	39.03	1.8	1
621	D621	D621	598970	4129230	38.53	38.53	1.8	1
622	D622	D622	598970	4129330	37.64	37.64	1.8	1
623	D623	D623	598970	4129430	36.36	36.36	1.8	1
624	D624	D624	598970	4129530	36.05	36.05	1.8	1
625	D625	D625	598970	4129630	34.43	45.17	1.8	1
626	D626	D626	598970	4129730	34.66	44.22	1.8	1
627	D627	D627	598970	4129830	41.14	41.14	1.8	1
628	D628	D628	598970	4129930	36.59	40.51	1.8	1
629	D629	D629	598970	4130030	35.03	35.03	1.8	1
630	D630	D630	598970	4130130	34.86	34.86	1.8	1
631	D631	D631	598970	4130230	34.47	34.47	1.8	1
632	D632	D632	598970	4130330	34.32	34.32	1.8	1
633	D633	D633	598970	4130430	34.51	34.51	1.8	1
634	D634	D634	598970	4130530	33.81	33.81	1.8	1
635	D635	D635	598970	4130630	33.11	33.11	1.8	1
636	D636	D636	598970	4130730	32.18	32.18	1.8	1
637	D637	D637	598970	4130830	32.09	32.09	1.8	1
638	D638	D638	598970	4130930	31.35	31.35	1.8	1
639	D639	D639	598970	4131030	31	31	1.8	1
640	D640	D640	599070	4128830	40.04	40.04	1.8	1
641	D641	D641	599070	4128930	39.68	39.68	1.8	1
642	D642	D642	599070	4129030	39.07	39.07	1.8	1
643	D643	D643	599070	4129130	35.27	39.67	1.8	1
644	D644	D644	599070	4129230	37.83	38.33	1.8	1
645	D645	D645	599070	4129330	36.84	36.84	1.8	1
646	D646	D646	599070	4129430	36.59	36.59	1.8	1
647	D647	D647	599070	4129530	36.28	47.14	1.8	1
648	D648	D648	599070	4129630	43.19	45.72	1.8	1
649	D649	D649	599070	4129730	41.52	43.67	1.8	1
650	D650	D650	599070	4129830	35.42	41.61	1.8	1
651	D651	D651	599070	4129930	33.45	35.36	1.8	1
652	D652	D652	599070	4130030	35.19	35.19	1.8	1
653	D653	D653	599070	4130130	35.33	35.33	1.8	1
654	D654	D654	599070	4130230	34.9	34.9	1.8	1
655	D655	D655	599070	4130330	35.11	35.11	1.8	1
656	D656	D656	599070	4130430	34.25	34.25	1.8	1
657	D657	D657	599070	4130530	33.53	33.53	1.8	1
658	D658	D658	599070	4130630	32.44	32.44	1.8	1
659	D659	D659	599070	4130730	31.96	31.96	1.8	1
660	D660	D660	599070	4130830	31.58	31.58	1.8	1
661	D661	D661	599070	4130930	31.06	31.06	1.8	1
662	D662	D662	599070	4131030	30.99	30.99	1.8	1
663	D663	D663	599170	4128830	39.74	39.74	1.8	1
664	D664	D664	599170	4128930	39.9	39.9	1.8	1
665	D665	D665	599170	4129030	39.45	39.45	1.8	1
666	D666	D666	599170	4129130	38.92	38.92	1.8	1
667	D667	D667	599170	4129230	38.67	38.67	1.8	1
668	D668	D668	599170	4129330	37.3	47.61	1.8	1
669	D669	D669	599170	4129430	37.46	47.61	1.8	1
670	D670	D670	599170	4129530	46.77	46.77	1.8	1
671	D671	D671	599170	4129630	38.02	46.84	1.8	1
672	D672	D672	599170	4129730	36.94	36.94	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
673	D673	D673	599170	4129830	36.32	36.32	1.8	1
674	D674	D674	599170	4129930	35.93	35.93	1.8	1
675	D675	D675	599170	4130030	35.6	35.6	1.8	1
676	D676	D676	599170	4130130	35.45	35.45	1.8	1
677	D677	D677	599170	4130230	34.99	34.99	1.8	1
678	D678	D678	599170	4130330	34.95	34.95	1.8	1
679	D679	D679	599170	4130430	33.81	33.81	1.8	1
680	D680	D680	599170	4130530	33.15	33.15	1.8	1
681	D681	D681	599170	4130630	32.18	32.18	1.8	1
682	D682	D682	599170	4130730	31.52	31.52	1.8	1
683	D683	D683	599170	4130830	31.27	31.27	1.8	1
684	D684	D684	599170	4130930	31.25	31.25	1.8	1
685	D685	D685	599170	4131030	31.26	31.26	1.8	1
686	D686	D686	599270	4128830	40.53	40.53	1.8	1
687	D687	D687	599270	4128930	39.32	39.32	1.8	1
688	D688	D688	599270	4129030	38.92	38.92	1.8	1
689	D689	D689	599270	4129130	38.64	38.64	1.8	1
690	D690	D690	599270	4129230	38.41	47.32	1.8	1
691	D691	D691	599270	4129330	47.06	47.06	1.8	1
692	D692	D692	599270	4129430	41.44	47.61	1.8	1
693	D693	D693	599270	4129530	39.21	46.93	1.8	1
694	D694	D694	599270	4129630	37.07	37.07	1.8	1
695	D695	D695	599270	4129730	36.95	36.95	1.8	1
696	D696	D696	599270	4129830	36.66	36.66	1.8	1
697	D697	D697	599270	4129930	36.41	36.41	1.8	1
698	D698	D698	599270	4130030	35.88	35.88	1.8	1
699	D699	D699	599270	4130130	35.44	35.44	1.8	1
700	D700	D700	599270	4130230	35.14	35.14	1.8	1
701	D701	D701	599270	4130330	34.09	34.09	1.8	1
702	D702	D702	599270	4130430	33.56	33.56	1.8	1
703	D703	D703	599270	4130530	32.79	32.79	1.8	1
704	D704	D704	599270	4130630	31.78	31.78	1.8	1
705	D705	D705	599270	4130730	31.61	31.61	1.8	1
706	D706	D706	599270	4130830	31.32	31.32	1.8	1
707	D707	D707	599270	4130930	31.47	31.47	1.8	1
708	D708	D708	599270	4131030	31.62	31.62	1.8	1
709	D709	D709	599370	4128830	40.47	40.47	1.8	1
710	D710	D710	599370	4128930	40.29	40.29	1.8	1
711	D711	D711	599370	4129030	40.13	40.13	1.8	1
712	D712	D712	599370	4129130	39.69	45.97	1.8	1
713	D713	D713	599370	4129230	39.67	47.14	1.8	1
714	D714	D714	599370	4129330	38.59	47.56	1.8	1
715	D715	D715	599370	4129430	38.84	38.84	1.8	1
716	D716	D716	599370	4129530	38.69	38.69	1.8	1
717	D717	D717	599370	4129630	38.17	38.17	1.8	1
718	D718	D718	599370	4129730	37.52	37.52	1.8	1
719	D719	D719	599370	4129830	36.9	36.9	1.8	1
720	D720	D720	599370	4129930	36.02	36.02	1.8	1
721	D721	D721	599370	4130030	35.39	35.39	1.8	1
722	D722	D722	599370	4130130	34.66	34.66	1.8	1
723	D723	D723	599370	4130230	34.21	34.21	1.8	1
724	D724	D724	599370	4130330	33.49	33.49	1.8	1
725	D725	D725	599370	4130430	32.73	32.73	1.8	1
726	D726	D726	599370	4130530	32.13	32.13	1.8	1
727	D727	D727	599370	4130630	31.89	31.89	1.8	1
728	D728	D728	599370	4130730	31.73	31.73	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
729	D729	D729	599370	4130830	31.63	31.63	1.8	1
730	D730	D730	599370	4130930	31.71	31.71	1.8	1
731	D731	D731	599370	4131030	32.09	32.09	1.8	1
732	D732	D732	599470	4128830	40.87	46.06	1.8	1
733	D733	D733	599470	4128930	40.22	47.66	1.8	1
734	D734	D734	599470	4129030	43.13	43.13	1.8	1
735	D735	D735	599470	4129130	44.02	45.24	1.8	1
736	D736	D736	599470	4129230	39.69	39.69	1.8	1
737	D737	D737	599470	4130630	31.7	31.7	1.8	1
738	D738	D738	599470	4130730	31.69	31.69	1.8	1
739	D739	D739	599470	4130830	32.38	32.38	1.8	1
740	D740	D740	599470	4130930	31.88	31.88	1.8	1
741	D741	D741	599470	4131030	32.3	32.3	1.8	1
742	D742	D742	599570	4128830	39.93	46.48	1.8	1
743	D743	D743	599570	4128930	40.72	49.16	1.8	1
744	D744	D744	599570	4129030	40.01	49.16	1.8	1
745	D745	D745	599570	4129130	39.59	39.59	1.8	1
746	D746	D746	599570	4129230	38.67	38.67	1.8	1
747	D747	D747	599570	4130630	31.5	31.5	1.8	1
748	D748	D748	599570	4130730	32.34	32.34	1.8	1
749	D749	D749	599570	4130830	32.23	32.23	1.8	1
750	D750	D750	599570	4130930	32.94	32.94	1.8	1
751	D751	D751	599570	4131030	32.45	32.45	1.8	1
752	D752	D752	599670	4128830	39.69	39.69	1.8	1
753	D753	D753	599670	4128930	39.67	39.67	1.8	1
754	D754	D754	599670	4129030	40.29	48.82	1.8	1
755	D755	D755	599670	4129130	44.75	44.75	1.8	1
756	D756	D756	599670	4129230	40.92	40.92	1.8	1
757	D757	D757	599670	4130630	31.42	31.42	1.8	1
758	D758	D758	599670	4130730	31.54	31.54	1.8	1
759	D759	D759	599670	4130830	31.94	31.94	1.8	1
760	D760	D760	599670	4130930	32.88	32.88	1.8	1
761	D761	D761	599670	4131030	33.04	33.04	1.8	1
762	D762	D762	599770	4128830	39.49	45.23	1.8	1
763	D763	D763	599770	4128930	39.84	39.84	1.8	1
764	D764	D764	599770	4129030	39.6	39.6	1.8	1
765	D765	D765	599770	4129130	39.08	39.08	1.8	1
766	D766	D766	599770	4129230	37.95	37.95	1.8	1
767	D767	D767	599770	4130630	31.53	31.53	1.8	1
768	D768	D768	599770	4130730	32.02	32.02	1.8	1
769	D769	D769	599770	4130830	32.07	32.07	1.8	1
770	D770	D770	599770	4130930	33.02	33.02	1.8	1
771	D771	D771	599770	4131030	32.86	32.86	1.8	1
772	D772	D772	599870	4128830	39.29	44.83	1.8	1
773	D773	D773	599870	4128930	39.66	39.66	1.8	1
774	D774	D774	599870	4129030	39.43	39.43	1.8	1
775	D775	D775	599870	4129130	38.42	38.42	1.8	1
776	D776	D776	599870	4129230	37.55	37.55	1.8	1
777	D777	D777	599870	4130630	31.66	31.66	1.8	1
778	D778	D778	599870	4130730	31.83	31.83	1.8	1
779	D779	D779	599870	4130830	32.31	32.31	1.8	1
780	D780	D780	599870	4130930	33.47	33.47	1.8	1
781	D781	D781	599870	4131030	32.35	32.35	1.8	1
782	D782	D782	599970	4128830	39.67	39.67	1.8	1
783	D783	D783	599970	4128930	38.95	38.95	1.8	1
784	D784	D784	599970	4129030	38.24	38.24	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
785	D785	D785	599970	4129130	37.32	37.32	1.8	1
786	D786	D786	599970	4129230	37.04	37.04	1.8	1
787	D787	D787	599970	4130630	31.42	31.42	1.8	1
788	D788	D788	599970	4130730	32.35	32.35	1.8	1
789	D789	D789	599970	4130830	32.49	32.49	1.8	1
790	D790	D790	599970	4130930	32.57	32.57	1.8	1
791	D791	D791	599970	4131030	32.04	32.04	1.8	1
792	D792	D792	600070	4128830	39.56	39.56	1.8	1
793	D793	D793	600070	4128930	38.51	38.51	1.8	1
794	D794	D794	600070	4129030	38.08	38.08	1.8	1
795	D795	D795	600070	4129130	37.4	37.4	1.8	1
796	D796	D796	600070	4129230	35.97	35.97	1.8	1
797	D797	D797	600070	4130630	31.82	31.82	1.8	1
798	D798	D798	600070	4130730	32.48	32.48	1.8	1
799	D799	D799	600070	4130830	32.42	32.42	1.8	1
800	D800	D800	600070	4130930	32.88	32.88	1.8	1
801	D801	D801	600070	4131030	31.88	31.88	1.8	1
802	D802	D802	600170	4128830	39.28	39.28	1.8	1
803	D803	D803	600170	4128930	38.44	38.44	1.8	1
804	D804	D804	600170	4129030	37.55	37.55	1.8	1
805	D805	D805	600170	4129130	37.1	37.1	1.8	1
806	D806	D806	600170	4129230	36.26	36.26	1.8	1
807	D807	D807	600170	4130630	32.59	32.59	1.8	1
808	D808	D808	600170	4130730	32.39	32.39	1.8	1
809	D809	D809	600170	4130830	32.52	32.52	1.8	1
810	D810	D810	600170	4130930	31.79	31.79	1.8	1
811	D811	D811	600170	4131030	31.58	31.58	1.8	1
812	D812	D812	600270	4128830	39.47	39.47	1.8	1
813	D813	D813	600270	4128930	38.46	38.46	1.8	1
814	D814	D814	600270	4129030	37.7	37.7	1.8	1
815	D815	D815	600270	4129130	37.72	37.72	1.8	1
816	D816	D816	600270	4129230	36.1	36.1	1.8	1
817	D817	D817	600270	4130630	32.46	32.46	1.8	1
818	D818	D818	600270	4130730	32.08	32.08	1.8	1
819	D819	D819	600270	4130830	32.14	32.14	1.8	1
820	D820	D820	600270	4130930	28.24	34.04	1.8	1
821	D821	D821	600270	4131030	31.9	31.9	1.8	1
822	D822	D822	600370	4128830	39.78	39.78	1.8	1
823	D823	D823	600370	4128930	38	38	1.8	1
824	D824	D824	600370	4129030	37.2	37.2	1.8	1
825	D825	D825	600370	4129130	37.16	37.16	1.8	1
826	D826	D826	600370	4129230	36.37	36.37	1.8	1
827	D827	D827	600370	4130630	32.95	32.95	1.8	1
828	D828	D828	600370	4130730	33.85	33.85	1.8	1
829	D829	D829	600370	4130830	33.3	33.3	1.8	1
830	D830	D830	600370	4130930	32.04	32.04	1.8	1
831	D831	D831	600370	4131030	31.33	31.33	1.8	1
832	D832	D832	600470	4128830	38.35	38.35	1.8	1
833	D833	D833	600470	4128930	37.53	37.53	1.8	1
834	D834	D834	600470	4129030	37.18	37.18	1.8	1
835	D835	D835	600470	4129130	36.38	36.38	1.8	1
836	D836	D836	600470	4129230	35.9	35.9	1.8	1
837	D837	D837	600470	4130630	32.34	32.34	1.8	1
838	D838	D838	600470	4130730	33.75	33.75	1.8	1
839	D839	D839	600470	4130830	33.27	33.27	1.8	1
840	D840	D840	600470	4130930	31.92	31.92	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
841	D841	D841	600470	4131030	31.4	31.4	1.8	1
842	D842	D842	600570	4128830	39.96	39.96	1.8	1
843	D843	D843	600570	4128930	37.49	37.49	1.8	1
844	D844	D844	600570	4129030	36.92	36.92	1.8	1
845	D845	D845	600570	4129130	35.99	35.99	1.8	1
846	D846	D846	600570	4129230	35.3	35.3	1.8	1
847	D847	D847	600570	4130630	32.68	32.68	1.8	1
848	D848	D848	600570	4130730	33.3	33.3	1.8	1
849	D849	D849	600570	4130830	33.19	33.19	1.8	1
850	D850	D850	600570	4130930	32.4	32.4	1.8	1
851	D851	D851	600570	4131030	31.56	31.56	1.8	1
852	D852	D852	600670	4128830	39.26	39.26	1.8	1
853	D853	D853	600670	4128930	38.58	38.58	1.8	1
854	D854	D854	600670	4129030	37.15	37.15	1.8	1
855	D855	D855	600670	4129130	36.02	36.02	1.8	1
856	D856	D856	600670	4129230	35.42	35.42	1.8	1
857	D857	D857	600670	4130630	32.99	32.99	1.8	1
858	D858	D858	600670	4130730	33.31	33.31	1.8	1
859	D859	D859	600670	4130830	33.11	33.11	1.8	1
860	D860	D860	600670	4130930	32.96	32.96	1.8	1
861	D861	D861	600670	4131030	31.84	31.84	1.8	1
862	D862	D862	600770	4128830	39.19	39.19	1.8	1
863	D863	D863	600770	4128930	38.17	38.17	1.8	1
864	D864	D864	600770	4129030	37.59	37.59	1.8	1
865	D865	D865	600770	4129130	36.45	36.45	1.8	1
866	D866	D866	600770	4129230	35.69	35.69	1.8	1
867	D867	D867	600770	4129330	35.15	35.15	1.8	1
868	D868	D868	600770	4129430	34.51	34.51	1.8	1
869	D869	D869	600770	4129530	34.19	34.19	1.8	1
870	D870	D870	600770	4129630	33.87	33.87	1.8	1
871	D871	D871	600770	4129730	33.3	33.3	1.8	1
872	D872	D872	600770	4129830	32.48	32.48	1.8	1
873	D873	D873	600770	4129930	32.33	32.33	1.8	1
874	D874	D874	600770	4130030	32.62	32.62	1.8	1
875	D875	D875	600770	4130130	32.65	32.65	1.8	1
876	D876	D876	600770	4130230	32.63	32.63	1.8	1
877	D877	D877	600770	4130330	32.32	32.32	1.8	1
878	D878	D878	600770	4130430	32.48	32.48	1.8	1
879	D879	D879	600770	4130530	32.6	32.6	1.8	1
880	D880	D880	600770	4130630	33.38	33.38	1.8	1
881	D881	D881	600770	4130730	34.24	34.24	1.8	1
882	D882	D882	600770	4130830	33.42	33.42	1.8	1
883	D883	D883	600770	4130930	32.86	32.86	1.8	1
884	D884	D884	600770	4131030	32.28	32.28	1.8	1
885	D885	D885	600870	4128830	39.21	39.21	1.8	1
886	D886	D886	600870	4128930	38.23	38.23	1.8	1
887	D887	D887	600870	4129030	37.35	37.35	1.8	1
888	D888	D888	600870	4129130	36.61	36.61	1.8	1
889	D889	D889	600870	4129230	36.25	36.25	1.8	1
890	D890	D890	600870	4129330	35.27	35.27	1.8	1
891	D891	D891	600870	4129430	34.69	34.69	1.8	1
892	D892	D892	600870	4129530	33.54	33.54	1.8	1
893	D893	D893	600870	4129630	33.57	33.57	1.8	1
894	D894	D894	600870	4129730	33.21	33.21	1.8	1
895	D895	D895	600870	4129830	33.16	33.16	1.8	1
896	D896	D896	600870	4129930	32.88	32.88	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
897	D897	D897	600870	4130030	33.02	33.02	1.8	1
898	D898	D898	600870	4130130	32.59	32.59	1.8	1
899	D899	D899	600870	4130230	32.45	32.45	1.8	1
900	D900	D900	600870	4130330	32.29	32.29	1.8	1
901	D901	D901	600870	4130430	32.37	32.37	1.8	1
902	D902	D902	600870	4130530	32.96	32.96	1.8	1
903	D903	D903	600870	4130630	33.67	33.67	1.8	1
904	D904	D904	600870	4130730	34.25	34.25	1.8	1
905	D905	D905	600870	4130830	34.16	34.16	1.8	1
906	D906	D906	600870	4130930	33.24	33.24	1.8	1
907	D907	D907	600870	4131030	33.16	33.16	1.8	1
908	D908	D908	600970	4128830	39.07	39.07	1.8	1
909	D909	D909	600970	4128930	37.89	37.89	1.8	1
910	D910	D910	600970	4129030	37.12	37.12	1.8	1
911	D911	D911	600970	4129130	36.95	36.95	1.8	1
912	D912	D912	600970	4129230	36.86	36.86	1.8	1
913	D913	D913	600970	4129330	35.15	35.15	1.8	1
914	D914	D914	600970	4129430	34.78	34.78	1.8	1
915	D915	D915	600970	4129530	34.37	34.37	1.8	1
916	D916	D916	600970	4129630	34.11	34.11	1.8	1
917	D917	D917	600970	4129730	33.62	33.62	1.8	1
918	D918	D918	600970	4129830	33.15	33.15	1.8	1
919	D919	D919	600970	4129930	33.05	33.05	1.8	1
920	D920	D920	600970	4130030	33.05	33.05	1.8	1
921	D921	D921	600970	4130130	32.66	32.66	1.8	1
922	D922	D922	600970	4130230	32.6	32.6	1.8	1
923	D923	D923	600970	4130330	32.44	32.44	1.8	1
924	D924	D924	600970	4130430	32.71	32.71	1.8	1
925	D925	D925	600970	4130530	32.75	32.75	1.8	1
926	D926	D926	600970	4130630	33.07	33.07	1.8	1
927	D927	D927	600970	4130730	34.09	34.09	1.8	1
928	D928	D928	600970	4130830	34.22	34.22	1.8	1
929	D929	D929	600970	4130930	34.1	34.1	1.8	1
930	D930	D930	600970	4131030	33.98	33.98	1.8	1
931	D931	D931	601070	4128830	39.34	39.34	1.8	1
932	D932	D932	601070	4128930	37.97	37.97	1.8	1
933	D933	D933	601070	4129030	37.66	37.66	1.8	1
934	D934	D934	601070	4129130	37.32	37.32	1.8	1
935	D935	D935	601070	4129230	36.47	36.47	1.8	1
936	D936	D936	601070	4129330	35.35	35.35	1.8	1
937	D937	D937	601070	4129430	34.94	34.94	1.8	1
938	D938	D938	601070	4129530	34.46	34.46	1.8	1
939	D939	D939	601070	4129630	34.01	34.01	1.8	1
940	D940	D940	601070	4129730	33.67	33.67	1.8	1
941	D941	D941	601070	4129830	33.17	33.17	1.8	1
942	D942	D942	601070	4129930	32.83	32.83	1.8	1
943	D943	D943	601070	4130030	32.77	32.77	1.8	1
944	D944	D944	601070	4130130	32.71	32.71	1.8	1
945	D945	D945	601070	4130230	32.6	32.6	1.8	1
946	D946	D946	601070	4130330	32.47	32.47	1.8	1
947	D947	D947	601070	4130430	32.9	32.9	1.8	1
948	D948	D948	601070	4130530	33.17	33.17	1.8	1
949	D949	D949	601070	4130630	33.31	33.31	1.8	1
950	D950	D950	601070	4130730	33.74	33.74	1.8	1
951	D951	D951	601070	4130830	34.27	34.27	1.8	1
952	D952	D952	601070	4130930	34.47	34.47	1.8	1

Table C-1- Receptor Locations

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Hill Height Scale (m)	Flagpole Height (m)	Sensitive
953	D953	D953	601070	4131030	34.93	34.93	1.8	1
954	D954	D954	601170	4128830	39.31	39.31	1.8	1
955	D955	D955	601170	4128930	38.94	38.94	1.8	1
956	D956	D956	601170	4129030	37.39	37.39	1.8	1
957	D957	D957	601170	4129130	37.23	37.23	1.8	1
958	D958	D958	601170	4129230	35.91	35.91	1.8	1
959	D959	D959	601170	4129330	35.44	35.44	1.8	1
960	D960	D960	601170	4129430	35.07	35.07	1.8	1
961	D961	D961	601170	4129530	34.53	34.53	1.8	1
962	D962	D962	601170	4129630	34.02	34.02	1.8	1
963	D963	D963	601170	4129730	34.21	34.21	1.8	1
964	D964	D964	601170	4129830	33.58	33.58	1.8	1
965	D965	D965	601170	4129930	34.02	34.02	1.8	1
966	D966	D966	601170	4130030	32.74	32.74	1.8	1
967	D967	D967	601170	4130130	32.84	32.84	1.8	1
968	D968	D968	601170	4130230	33.2	33.2	1.8	1
969	D969	D969	601170	4130330	32.97	32.97	1.8	1
970	D970	D970	601170	4130430	33.23	33.23	1.8	1
971	D971	D971	601170	4130530	33.49	33.49	1.8	1
972	D972	D972	601170	4130630	33.47	33.47	1.8	1
973	D973	D973	601170	4130730	33.45	33.45	1.8	1
974	D974	D974	601170	4130830	34.68	34.68	1.8	1
975	D975	D975	601170	4130930	35.18	35.18	1.8	1
976	D976	D976	601170	4131030	35.34	35.34	1.8	1

Table C-2: Construction Source Modeling Parameters

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Emission Rate (g/s)	Release Height (m)	Init. Lat. Dim (m)	Init. Ver. Dim (m/s)
1	ORE1	Offroad Equipment	599939.1	4129850.8	34.07	1	5	9.3	1.4
2	ORE2	Offroad Equipment	599964.1	4129850.8	33.84	1	5	9.3	1.4
3	ORE3	Offroad Equipment	599939.1	4129875.8	33.95	1	5	9.3	1.4
4	ORE4	Offroad Equipment	599964.1	4129875.8	33.72	1	5	9.3	1.4
5	ORE5	Offroad Equipment	599989.1	4129875.8	33.51	1	5	9.3	1.4
6	ORE6	Offroad Equipment	599989.1	4129900.8	33.36	1	5	9.3	1.4
7	ORE7	Offroad Equipment	600014.1	4129900.8	33.14	1	5	9.3	1.4
8	ORE8	Offroad Equipment	600014.1	4129925.8	32.97	1	5	9.3	1.4
9	ORE9	Offroad Equipment	600039.1	4129925.8	32.73	1	5	9.3	1.4
10	ORE10	Offroad Equipment	600064.1	4129925.8	32.62	1	5	9.3	1.4
11	ORE11	Offroad Equipment	600089.1	4129925.8	32.45	1	5	9.3	1.4
12	ORE12	Offroad Equipment	600114.1	4129925.8	32.29	1	5	9.3	1.4
13	ORE13	Offroad Equipment	600039.1	4129950.8	32.63	1	5	9.3	1.4
14	ORE14	Offroad Equipment	600064.1	4129950.8	32.42	1	5	9.3	1.4
15	ORE15	Offroad Equipment	600089.1	4129950.8	32.45	1	5	9.3	1.4
16	ORE16	Offroad Equipment	600114.1	4129950.8	32.34	1	5	9.3	1.4
17	ORE17	Offroad Equipment	600139.1	4129950.8	32.34	1	5	9.3	1.4
18	ORE18	Offroad Equipment	600064.1	4129975.8	32.47	1	5	9.3	1.4
19	ORE19	Offroad Equipment	600089.1	4129975.8	32.25	1	5	9.3	1.4
20	ORE20	Offroad Equipment	600114.1	4129975.8	32.21	1	5	9.3	1.4
21	ORE21	Offroad Equipment	600139.1	4129975.8	32.16	1	5	9.3	1.4
22	ORE22	Offroad Equipment	600164.1	4129975.8	32.25	1	5	9.3	1.4
23	ORE23	Offroad Equipment	600114.1	4130000.8	32.09	1	5	9.3	1.4
24	ORE24	Offroad Equipment	600139.1	4130000.8	31.96	1	5	9.3	1.4
25	ORE25	Offroad Equipment	600164.1	4130000.8	32.02	1	5	9.3	1.4
26	ORE26	Offroad Equipment	600189.1	4130000.8	32.29	1	5	9.3	1.4
27	ORE27	Offroad Equipment	600139.1	4130025.8	31.99	1	5	9.3	1.4
28	ORE28	Offroad Equipment	600164.1	4130025.8	32.12	1	5	9.3	1.4
29	ORE29	Offroad Equipment	600189.1	4130025.8	32.12	1	5	9.3	1.4
30	ORE30	Offroad Equipment	600164.1	4130050.8	32.14	1	5	9.3	1.4
31	OFTRK1	Offsite Trucks	600212.6	4130038.2	32.62	1	2	1.4	1.86
32	OFTRK2	Offsite Trucks	600197	4130057.7	32.52	1	2	1.4	1.86
33	OFTRK3	Offsite Trucks	600181.4	4130077.2	32.47	1	2	1.4	1.86
34	OFTRK4	Offsite Trucks	600165.7	4130096.8	32.32	1	2	1.4	1.86
35	OFTRK5	Offsite Trucks	600150.1	4130116.3	32.23	1	2	1.4	1.86
36	OFTRK6	Offsite Trucks	600134.5	4130135.8	32.18	1	2	1.4	1.86
37	OFTRK7	Offsite Trucks	600118.9	4130155.3	32.1	1	2	1.4	1.86
38	OFTRK8	Offsite Trucks	600103.3	4130174.8	32.19	1	2	1.4	1.86
39	OFTRK9	Offsite Trucks	600087.7	4130194.4	32.08	1	2	1.4	1.86
40	OFTRK10	Offsite Trucks	600072	4130213.9	31.93	1	2	1.4	1.86
41	OFTRK11	Offsite Trucks	600056.4	4130233.4	31.86	1	2	1.4	1.86
42	OFTRK12	Offsite Trucks	600040.8	4130252.9	31.66	1	2	1.4	1.86
43	OFTRK13	Offsite Trucks	600025.2	4130272.5	31.72	1	2	1.4	1.86
44	OFTRK14	Offsite Trucks	600009.6	4130292	31.73	1	2	1.4	1.86
45	OFTRK15	Offsite Trucks	599993.9	4130311.5	31.87	1	2	1.4	1.86
46	OFTRK16	Offsite Trucks	599978.3	4130331	31.83	1	2	1.4	1.86
47	OFTRK17	Offsite Trucks	599962.7	4130350.5	31.92	1	2	1.4	1.86
48	OFTRK18	Offsite Trucks	599947.1	4130370.1	31.96	1	2	1.4	1.86
49	OFTRK19	Offsite Trucks	599931.5	4130389.6	31.99	1	2	1.4	1.86
50	OFTRK20	Offsite Trucks	599915.9	4130409.1	32	1	2	1.4	1.86
51	OFTRK21	Offsite Trucks	599900.2	4130428.6	31.95	1	2	1.4	1.86
52	OFTRK22	Offsite Trucks	599884.6	4130448.1	31.89	1	2	1.4	1.86
53	OFTRK23	Offsite Trucks	599869	4130467.7	31.76	1	2	1.4	1.86
54	OFTRK24	Offsite Trucks	599853.4	4130487.2	31.74	1	2	1.4	1.86
55	OFTRK25	Offsite Trucks	599837.8	4130506.7	31.72	1	2	1.4	1.86
56	OFTRK26	Offsite Trucks	599822.1	4130526.2	31.69	1	2	1.4	1.86
57	OFTRK27	Offsite Trucks	599806.5	4130545.7	31.65	1	2	1.4	1.86
58	OFTRK28	Offsite Trucks	599790.9	4130565.3	31.63	1	2	1.4	1.86
59	OFTRK29	Offsite Trucks	599773.6	4130565.7	31.67	1	2	1.4	1.86
60	OFTRK30	Offsite Trucks	599754.7	4130549.3	31.71	1	2	1.4	1.86
61	OFTRK31	Offsite Trucks	599735.8	4130532.8	31.75	1	2	1.4	1.86
62	OFTRK32	Offsite Trucks	599717	4130516.4	31.84	1	2	1.4	1.86
63	OFTRK33	Offsite Trucks	599698.1	4130500	31.99	1	2	1.4	1.86
64	OFTRK34	Offsite Trucks	599679.3	4130483.6	32.05	1	2	1.4	1.86
65	OFTRK35	Offsite Trucks	599660.4	4130467.2	32.23	1	2	1.4	1.86
66	OFTRK36	Offsite Trucks	599641.6	4130450.8	32.34	1	2	1.4	1.86
67	OFTRK37	Offsite Trucks	599622.7	4130434.4	32.54	1	2	1.4	1.86
68	OFTRK38	Offsite Trucks	599603.8	4130418	32.65	1	2	1.4	1.86
69	OFTRK39	Offsite Trucks	599585	4130401.5	32.74	1	2	1.4	1.86
70	OFTRK40	Offsite Trucks	599566.1	4130385.1	32.86	1	2	1.4	1.86
71	OFTRK41	Offsite Trucks	599547.3	4130368.7	32.9	1	2	1.4	1.86
72	OFTRK42	Offsite Trucks	599528.4	4130352.3	32.94	1	2	1.4	1.86
73	OFTRK43	Offsite Trucks	599509.5	4130335.9	33.06	1	2	1.4	1.86

Table C-2: Construction Source Modeling Parameters

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Emission Rate (g/s)	Release Height (m)	Init. Lat. Dim (m)	Init. Ver. Dim (m/s)
74	OFTRK44	Offsite Trucks	599490.7	4130319.5	33.09	1	2	1.4	1.86
75	OFTRK45	Offsite Trucks	599471.8	4130303.1	33.25	1	2	1.4	1.86
76	OFTRK46	Offsite Trucks	599453	4130286.7	33.49	1	2	1.4	1.86
77	OFTRK47	Offsite Trucks	599434.1	4130270.3	33.61	1	2	1.4	1.86
78	OFTRK48	Offsite Trucks	599415.2	4130253.8	33.82	1	2	1.4	1.86
79	OFTRK49	Offsite Trucks	599396.4	4130237.4	33.93	1	2	1.4	1.86
80	OFTRK50	Offsite Trucks	599377.5	4130221	34.29	1	2	1.4	1.86
81	OFTRK51	Offsite Trucks	599363.2	4130202.7	34.39	1	2	1.4	1.86
82	OFTRK52	Offsite Trucks	599365	4130177.8	34.48	1	2	1.4	1.86
83	OFTRK53	Offsite Trucks	599366.8	4130152.9	34.61	1	2	1.4	1.86
84	OFTRK54	Offsite Trucks	599368.7	4130127.9	34.7	1	2	1.4	1.86
85	OFTRK55	Offsite Trucks	599370.5	4130103	34.77	1	2	1.4	1.86
86	OFTRK56	Offsite Trucks	599372.3	4130078.1	34.95	1	2	1.4	1.86
87	OFTRK57	Offsite Trucks	599374.1	4130053.1	34.93	1	2	1.4	1.86
88	OFTRK58	Offsite Trucks	599376	4130028.2	35.27	1	2	1.4	1.86
89	OFTRK59	Offsite Trucks	599377.8	4130003.3	35.5	1	2	1.4	1.86
90	OFTRK60	Offsite Trucks	599379.6	4129978.3	35.76	1	2	1.4	1.86
91	OFTRK61	Offsite Trucks	599380.6	4129953.4	35.96	1	2	1.4	1.86
92	OFTRK62	Offsite Trucks	599378.9	4129928.5	36.16	1	2	1.4	1.86
93	OFTRK63	Offsite Trucks	599377.2	4129903.5	36.33	1	2	1.4	1.86
94	OFTRK64	Offsite Trucks	599375.5	4129878.6	36.55	1	2	1.4	1.86
95	OFTRK65	Offsite Trucks	599373.7	4129853.6	36.75	1	2	1.4	1.86
96	OFTRK66	Offsite Trucks	599372	4129828.7	36.96	1	2	1.4	1.86
97	OFTRK67	Offsite Trucks	599370.3	4129803.8	37.16	1	2	1.4	1.86
98	OFTRK68	Offsite Trucks	599369.2	4129778.8	37.33	1	2	1.4	1.86
99	OFTRK69	Offsite Trucks	599370.6	4129753.9	37.45	1	2	1.4	1.86
100	OFTRK70	Offsite Trucks	599372.1	4129728.9	37.57	1	2	1.4	1.86
101	OFTRK71	Offsite Trucks	599376.6	4129704.6	37.88	1	2	1.4	1.86
102	OFTRK72	Offsite Trucks	599385.4	4129681.2	37.99	1	2	1.4	1.86
103	OFTRK73	Offsite Trucks	599395.9	4129658.6	38.08	1	2	1.4	1.86
104	OFTRK74	Offsite Trucks	599409.5	4129637.6	37.99	1	2	1.4	1.86
105	OFTRK75	Offsite Trucks	599423	4129616.7	38.02	1	2	1.4	1.86
106	OFTRK76	Offsite Trucks	599436.6	4129595.7	37.98	1	2	1.4	1.86
107	OFTRK77	Offsite Trucks	599450.2	4129574.7	37.9	1	2	1.4	1.86
108	OFTRK78	Offsite Trucks	599463.8	4129537.3	37.93	1	2	1.4	1.86
109	OFTRK79	Offsite Trucks	599477.4	4129532.7	38.12	1	2	1.4	1.86
110	OFTRK80	Offsite Trucks	599491	4129511.7	38.24	1	2	1.4	1.86
111	OFTRK81	Offsite Trucks	599504.6	4129490.8	38.44	1	2	1.4	1.86
112	OFTRK82	Offsite Trucks	599518.2	4129469.8	38.6	1	2	1.4	1.86
113	OFTRK83	Offsite Trucks	599531.9	4129448.9	38.72	1	2	1.4	1.86
114	OFTRK84	Offsite Trucks	599546.2	4129428.4	38.8	1	2	1.4	1.86
115	OFTRK85	Offsite Trucks	599560.5	4129407.9	38.92	1	2	1.4	1.86
116	OFTRK86	Offsite Trucks	599574.8	4129387.4	38.94	1	2	1.4	1.86
117	OFTRK87	Offsite Trucks	599589.1	4129366.9	38.88	1	2	1.4	1.86
118	OFTRK88	Offsite Trucks	599603.4	4129346.4	38.73	1	2	1.4	1.86
119	OFTRK89	Offsite Trucks	599617.7	4129325.9	38.8	1	2	1.4	1.86
120	OFTRK90	Offsite Trucks	599632	4129305.4	39.27	1	2	1.4	1.86
121	OFTRK91	Offsite Trucks	599646.4	4129284.9	39.72	1	2	1.4	1.86
122	OFTRK92	Offsite Trucks	599652.5	4129261.2	39.82	1	2	1.4	1.86
123	OFTRK93	Offsite Trucks	599655.8	4129236.4	39.51	1	2	1.4	1.86
124	OFTRK94	Offsite Trucks	599659	4129211.6	40.13	1	2	1.4	1.86
125	OFTRK95	Offsite Trucks	599660.2	4129186.7	40.87	1	2	1.4	1.86
126	OFTRK96	Offsite Trucks	599660.2	4129161.7	41.74	1	2	1.4	1.86
127	OFTRK97	Offsite Trucks	599660.2	4129136.7	44.02	1	2	1.4	1.86
128	OFTRK98	Offsite Trucks	599648	4129115	44.14	1	2	1.4	1.86
129	OFTRK99	Offsite Trucks	599635.4	4129093.4	43.72	1	2	1.4	1.86
130	OFTRK100	Offsite Trucks	599622.8	4129071.8	44.54	1	2	1.4	1.86
131	OFTRK101	Offsite Trucks	599610.2	4129050.3	45.87	1	2	1.4	1.86
132	OFTRK102	Offsite Trucks	599597.5	4129028.7	45.68	1	2	1.4	1.86
133	OFTRK103	Offsite Trucks	599584.9	4129007.1	40.26	1	2	1.4	1.86

Table C-3: Operations Source Modeling Parameters

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Emission Rate (g/s)	Release Height (m)	Init. Lat. Dim (m)	Init. Ver. Dim (m/s)
1	ONVAN1	Onsite Vans	600193.4	4130036.5	32.45	1	1.6	1.2	1.5
2	ONVAN2	Onsite Vans	600174.8	4130019.8	32.18	1	1.6	1.2	1.5
3	ONVAN3	Onsite Vans	600157.3	4130027.4	32.05	1	1.6	1.2	1.5
4	ONVAN4	Onsite Vans	600140.1	4130042.7	32.14	1	1.6	1.2	1.5
5	ONVAN5	Onsite Vans	600120.9	4130026.7	32.22	1	1.6	1.2	1.5
6	ONVAN6	Onsite Vans	600101.7	4130010.6	32.23	1	1.6	1.2	1.5
7	ONVAN7	Onsite Vans	600082.5	4129994.6	32.35	1	1.6	1.2	1.5
8	ONVAN8	Onsite Vans	600063.3	4129978.6	32.46	1	1.6	1.2	1.5
9	ONVAN9	Onsite Vans	600044.1	4129962.6	32.5	1	1.6	1.2	1.5
10	ONVAN10	Onsite Vans	600043.3	4129944.8	32.58	1	1.6	1.2	1.5
11	ONVAN11	Onsite Vans	600025.5	4129937.6	32.8	1	1.6	1.2	1.5
12	ONVAN12	Onsite Vans	600006.5	4129930.1	32.92	1	1.6	1.2	1.5
13	ONVAN13	Onsite Vans	599986.6	4129915	33.35	1	1.6	1.2	1.5
14	ONVAN14	Onsite Vans	599966.8	4129899.8	33.7	1	1.6	1.2	1.5
15	ONVAN15	Onsite Vans	599946.9	4129884.6	33.85	1	1.6	1.2	1.5
16	ONVAN16	Onsite Vans	599927	4129869.4	34.04	1	1.6	1.2	1.5
17	ONVAN17	Onsite Vans	599938.9	4129849	34.09	1	1.6	1.2	1.5
18	ONVAN18	Onsite Vans	599954.8	4129842.3	33.98	1	1.6	1.2	1.5
19	ONVAN19	Onsite Vans	599974.1	4129858.2	33.75	1	1.6	1.2	1.5
20	ONVAN20	Onsite Vans	599993.3	4129874.2	33.5	1	1.6	1.2	1.5
21	ONVAN21	Onsite Vans	600012.6	4129890.1	33.25	1	1.6	1.2	1.5
22	ONVAN22	Onsite Vans	600031.8	4129906.1	32.94	1	1.6	1.2	1.5
23	ONVAN23	Onsite Vans	600051.1	4129922.1	32.7	1	1.6	1.2	1.5
24	ONVAN24	Onsite Vans	600067.6	4129913.7	32.59	1	1.6	1.2	1.5
25	ONVAN25	Onsite Vans	600083	4129895.5	32.39	1	1.6	1.2	1.5
26	ONVAN26	Onsite Vans	600102.2	4129911.5	32.29	1	1.6	1.2	1.5
27	ONVAN27	Onsite Vans	600121.5	4129927.4	32.3	1	1.6	1.2	1.5
28	ONVAN28	Onsite Vans	600140.7	4129943.4	32.3	1	1.6	1.2	1.5
29	ONVAN29	Onsite Vans	600160	4129959.3	32.25	1	1.6	1.2	1.5
30	ONVAN30	Onsite Vans	600179.2	4129975.3	32.4	1	1.6	1.2	1.5
31	ONVAN31	Onsite Vans	600190.8	4129991.8	32.39	1	1.6	1.2	1.5
32	ONVAN32	Onsite Vans	600173.8	4130010.1	32.14	1	1.6	1.2	1.5
33	OFST1	Offsite Vans and Passenger Cars	600207.7	4130050.6	32.49	1	1.6	1.2	1.5
34	OFST2	Offsite Vans and Passenger Cars	600192.2	4130070.2	32.43	1	1.6	1.2	1.5
35	OFST3	Offsite Vans and Passenger Cars	600176.7	4130089.9	32.37	1	1.6	1.2	1.5
36	OFST4	Offsite Vans and Passenger Cars	600161.3	4130109.5	32.2	1	1.6	1.2	1.5
37	OFST5	Offsite Vans and Passenger Cars	600145.8	4130129.1	32.13	1	1.6	1.2	1.5
38	OFST6	Offsite Vans and Passenger Cars	600130.3	4130148.8	32.05	1	1.6	1.2	1.5
39	OFST7	Offsite Vans and Passenger Cars	600114.8	4130168.4	32.01	1	1.6	1.2	1.5
40	OFST8	Offsite Vans and Passenger Cars	600099.3	4130188	31.95	1	1.6	1.2	1.5
41	OFST9	Offsite Vans and Passenger Cars	600083.9	4130207.6	31.89	1	1.6	1.2	1.5
42	OFST10	Offsite Vans and Passenger Cars	600068.4	4130227.3	31.67	1	1.6	1.2	1.5
43	OFST11	Offsite Vans and Passenger Cars	600051.5	4130234	31.99	1	1.6	1.2	1.5
44	OFST12	Offsite Vans and Passenger Cars	600032.3	4130218.1	31.41	1	1.6	1.2	1.5
45	OFST13	Offsite Vans and Passenger Cars	600013	4130202.2	31.39	1	1.6	1.2	1.5
46	OFST14	Offsite Vans and Passenger Cars	599993.7	4130186.2	31.51	1	1.6	1.2	1.5
47	OFST15	Offsite Vans and Passenger Cars	599974.5	4130170.3	31.53	1	1.6	1.2	1.5
48	OFST16	Offsite Vans and Passenger Cars	599955.2	4130154.4	31.69	1	1.6	1.2	1.5
49	OFST17	Offsite Vans and Passenger Cars	599935.9	4130138.4	31.9	1	1.6	1.2	1.5
50	OFST18	Offsite Vans and Passenger Cars	599916.7	4130122.5	32.13	1	1.6	1.2	1.5
51	OFST19	Offsite Vans and Passenger Cars	599897.4	4130106.6	32.09	1	1.6	1.2	1.5
52	OFST20	Offsite Vans and Passenger Cars	599878.1	4130090.6	32.3	1	1.6	1.2	1.5
53	OFST21	Offsite Vans and Passenger Cars	599858.9	4130074.7	32.44	1	1.6	1.2	1.5
54	OFST22	Offsite Vans and Passenger Cars	599839.6	4130058.8	32.57	1	1.6	1.2	1.5
55	OFST23	Offsite Vans and Passenger Cars	599820.3	4130042.8	32.77	1	1.6	1.2	1.5
56	OFST24	Offsite Vans and Passenger Cars	599801.1	4130026.9	32.94	1	1.6	1.2	1.5
57	OFST25	Offsite Vans and Passenger Cars	599781.8	4130011	33.1	1	1.6	1.2	1.5
58	OFST26	Offsite Vans and Passenger Cars	599786.2	4129992.3	33.27	1	1.6	1.2	1.5
59	OFST27	Offsite Vans and Passenger Cars	599801.4	412972.5	33.8	1	1.6	1.2	1.5
60	OFST28	Offsite Vans and Passenger Cars	599816.6	4129952.6	33.82	1	1.6	1.2	1.5
61	OFST29	Offsite Vans and Passenger Cars	599831.8	4129932.8	33.62	1	1.6	1.2	1.5
62	OFST30	Offsite Vans and Passenger Cars	599847	4129912.9	33.42	1	1.6	1.2	1.5
63	OFST31	Offsite Vans and Passenger Cars	599862.2	4129893	33.65	1	1.6	1.2	1.5
64	OFST32	Offsite Vans and Passenger Cars	599877.4	4129873.2	33.82	1	1.6	1.2	1.5
65	OFST33	Offsite Vans and Passenger Cars	599892.5	4129853.3	34.03	1	1.6	1.2	1.5
66	OFST34	Offsite Vans and Passenger Cars	599907.7	4129833.5	34.19	1	1.6	1.2	1.5
67	OFST35	Offsite Vans and Passenger Cars	599922.9	4129813.6	34.27	1	1.6	1.2	1.5
68	OFST36	Offsite Vans and Passenger Cars	599938.1	4129793.7	34.26	1	1.6	1.2	1.5
69	OFST37	Offsite Vans and Passenger Cars	599953.3	4129773.9	34.12	1	1.6	1.2	1.5
70	OFST38	Offsite Vans and Passenger Cars	599968.5	4129754	34.03	1	1.6	1.2	1.5
71	OFST39	Offsite Vans and Passenger Cars	599979.1	4129734.8	34.17	1	1.6	1.2	1.5
72	OFST40	Offsite Vans and Passenger Cars	599958.7	4129720.3	34.56	1	1.6	1.2	1.5
73	OFST41	Offsite Vans and Passenger Cars	599938.4	4129705.8	34.69	1	1.6	1.2	1.5
74	OFST42	Offsite Vans and Passenger Cars	599918.1	4129691.3	34.85	1	1.6	1.2	1.5
75	OFST43	Offsite Vans and Passenger Cars	599987.7	4129676.7	34.85	1	1.6	1.2	1.5
76	OFST44	Offsite Vans and Passenger Cars	599987.4	4129662.2	35.03	1	1.6	1.2	1.5
77	OFST45	Offsite Vans and Passenger Cars	599857	4129647.7	35.02	1	1.6	1.2	1.5
78	OFST46	Offsite Vans and Passenger Cars	599836.7	4129633.2	35.19	1	1.6	1.2	1.5
79	OFST47	Offsite Vans and Passenger Cars	599816.3	4129618.6	35.18	1	1.6	1.2	1.5
80	OFST48	Offsite Vans and Passenger Cars	599796	4129604.1	35.34	1	1.6	1.2	1.5
81	OFST49	Offsite Vans and Passenger Cars	600056.3	4130244.2	31.55	1	1.6	1.2	1.5

Table C-3: Operations Source Modeling Parameters

Index	ID	Description	UTM X (m)	UTM Y (m)	Elevation (m)	Emission Rate (g/s)	Release Height (m)	Init. Lat. Dim (m)	Init. Ver. Dim (m/s)
82	OFST50	Offsite Vans and Passenger Cars	600040.5	4130263.6	31.47	1	1.6	1.2	1.5
83	OFST51	Offsite Vans and Passenger Cars	600024.7	4130283	31.51	1	1.6	1.2	1.5
84	OFST52	Offsite Vans and Passenger Cars	600008.9	4130302.4	31.54	1	1.6	1.2	1.5
85	OFST53	Offsite Vans and Passenger Cars	599993.2	4130321.7	31.64	1	1.6	1.2	1.5
86	OFST54	Offsite Vans and Passenger Cars	599977.4	4130341.1	31.64	1	1.6	1.2	1.5
87	OFST55	Offsite Vans and Passenger Cars	599961.6	4130360.5	31.8	1	1.6	1.2	1.5
88	OFST56	Offsite Vans and Passenger Cars	599945.8	4130379.9	31.83	1	1.6	1.2	1.5
89	OFST57	Offsite Vans and Passenger Cars	599930	4130399.3	31.9	1	1.6	1.2	1.5
90	OFST58	Offsite Vans and Passenger Cars	599914.2	4130418.7	31.83	1	1.6	1.2	1.5
91	OFST59	Offsite Vans and Passenger Cars	599898.4	4130438	31.77	1	1.6	1.2	1.5
92	OFST60	Offsite Vans and Passenger Cars	599882.6	4130457.4	31.72	1	1.6	1.2	1.5
93	OFST61	Offsite Vans and Passenger Cars	599866.9	4130476.8	31.65	1	1.6	1.2	1.5
94	OFST62	Offsite Vans and Passenger Cars	599851.1	4130496.2	31.65	1	1.6	1.2	1.5
95	OFST63	Offsite Vans and Passenger Cars	599835.3	4130515.6	31.57	1	1.6	1.2	1.5
96	OFST64	Offsite Vans and Passenger Cars	599819.5	4130535	31.59	1	1.6	1.2	1.5
97	OFST65	Offsite Vans and Passenger Cars	599803.7	4130554.4	31.6	1	1.6	1.2	1.5
98	OFST66	Offsite Vans and Passenger Cars	599787.9	4130573.7	31.58	1	1.6	1.2	1.5
99	OFST67	Offsite Vans and Passenger Cars	599770	4130569.7	31.65	1	1.6	1.2	1.5
100	OFST68	Offsite Vans and Passenger Cars	599751	4130553.5	31.62	1	1.6	1.2	1.5
101	OFST69	Offsite Vans and Passenger Cars	599732	4130537.3	31.7	1	1.6	1.2	1.5
102	OFST70	Offsite Vans and Passenger Cars	599712.9	4130521.1	31.83	1	1.6	1.2	1.5
103	OFST71	Offsite Vans and Passenger Cars	599693.9	4130504.9	31.88	1	1.6	1.2	1.5
104	OFST72	Offsite Vans and Passenger Cars	599674.9	4130488.6	31.9	1	1.6	1.2	1.5
105	OFST73	Offsite Vans and Passenger Cars	599655.9	4130472.4	32.13	1	1.6	1.2	1.5
106	OFST74	Offsite Vans and Passenger Cars	599636.9	4130456.2	32.17	1	1.6	1.2	1.5
107	OFST75	Offsite Vans and Passenger Cars	599617.8	4130440	32.39	1	1.6	1.2	1.5
108	OFST76	Offsite Vans and Passenger Cars	599598.8	4130423.7	32.54	1	1.6	1.2	1.5
109	OFST77	Offsite Vans and Passenger Cars	599579.8	4130407.5	32.65	1	1.6	1.2	1.5
110	OFST78	Offsite Vans and Passenger Cars	599560.8	4130391.3	32.73	1	1.6	1.2	1.5
111	OFST79	Offsite Vans and Passenger Cars	599541.8	4130375.1	32.86	1	1.6	1.2	1.5
112	OFST80	Offsite Vans and Passenger Cars	599522.7	4130358.8	32.9	1	1.6	1.2	1.5
113	OFST81	Offsite Vans and Passenger Cars	599514.7	4130341.5	32.98	1	1.6	1.2	1.5
114	OFST82	Offsite Vans and Passenger Cars	599530.1	4130321.8	32.98	1	1.6	1.2	1.5
115	OFST83	Offsite Vans and Passenger Cars	599545.6	4130302.1	33.14	1	1.6	1.2	1.5
116	OFST84	Offsite Vans and Passenger Cars	599561	4130282.5	33.21	1	1.6	1.2	1.5
117	OFST85	Offsite Vans and Passenger Cars	599576.4	4130262.8	33.31	1	1.6	1.2	1.5
118	OFST86	Offsite Vans and Passenger Cars	599591.8	4130243.1	33.38	1	1.6	1.2	1.5
119	OFST87	Offsite Vans and Passenger Cars	599607.2	4130223.4	33.46	1	1.6	1.2	1.5
120	OFST88	Offsite Vans and Passenger Cars	599622.6	4130203.7	33.57	1	1.6	1.2	1.5
121	OFST89	Offsite Vans and Passenger Cars	599638	4130184.1	33.59	1	1.6	1.2	1.5
122	OFST90	Offsite Vans and Passenger Cars	599653.5	4130164.4	33.63	1	1.6	1.2	1.5
123	OFST91	Offsite Vans and Passenger Cars	599668.9	4130144.7	33.74	1	1.6	1.2	1.5
124	OFST92	Offsite Vans and Passenger Cars	599684.3	4130125	33.85	1	1.6	1.2	1.5
125	OFST93	Offsite Vans and Passenger Cars	599699.7	4130105.3	33.8	1	1.6	1.2	1.5
126	OFST94	Offsite Vans and Passenger Cars	599715.1	4130085.6	33.74	1	1.6	1.2	1.5
127	OFST95	Offsite Vans and Passenger Cars	599730.5	4130066	33.64	1	1.6	1.2	1.5
128	OFST96	Offsite Vans and Passenger Cars	599746	4130046.3	33.44	1	1.6	1.2	1.5
129	OFST97	Offsite Vans and Passenger Cars	599761.4	4130026.6	33.32	1	1.6	1.2	1.5
130	ONPSN1	Onsite Passenger Cars	600174.6	4130060.7	32.39	1	1	0.93	0.93
131	ONPSN2	Onsite Passenger Cars	600155.3	4130044.9	32.1	1	1	0.93	0.93
132	ONPSN3	Onsite Passenger Cars	600135.9	4130029	32.06	1	1	0.93	0.93
133	ONPSN4	Onsite Passenger Cars	600116.6	4130013.2	32.18	1	1	0.93	0.93
134	ONPSN5	Onsite Passenger Cars	600097.2	4129997.3	32.3	1	1	0.93	0.93
135	ONPSN6	Onsite Passenger Cars	600077.9	4129981.5	32.39	1	1	0.93	0.93
136	ONPSN7	Onsite Passenger Cars	600058.6	4129965.7	32.47	1	1	0.93	0.93
137	ONPSN8	Onsite Passenger Cars	600039.2	4129949.8	32.64	1	1	0.93	0.93
138	ONPSN9	Onsite Passenger Cars	600019.9	4129934	32.86	1	1	0.93	0.93
139	ONPSN10	Onsite Passenger Cars	600000.5	4129918.1	33.18	1	1	0.93	0.93
140	ONPSN11	Onsite Passenger Cars	599981.2	4129902.3	33.44	1	1	0.93	0.93
141	ONPSN12	Onsite Passenger Cars	599961.9	4129886.4	33.73	1	1	0.93	0.93
142	ONPSN13	Onsite Passenger Cars	599942.5	4129870.6	33.96	1	1	0.93	0.93
143	ONPSN14	Onsite Passenger Cars	599947.7	4129851.9	33.95	1	1	0.93	0.93
144	ONPSN15	Onsite Passenger Cars	599966	4129858.5	33.83	1	1	0.93	0.93
145	ONPSN16	Onsite Passenger Cars	599985.4	4129874.3	33.54	1	1	0.93	0.93
146	ONPSN17	Onsite Passenger Cars	600004.8	4129890	33.31	1	1	0.93	0.93
147	ONPSN18	Onsite Passenger Cars	600024.2	4129905.8	33.08	1	1	0.93	0.93
148	ONPSN19	Onsite Passenger Cars	600043.6	4129921.5	32.75	1	1	0.93	0.93
149	ONPSN20	Onsite Passenger Cars	600063.1	4129937.3	32.53	1	1	0.93	0.93
150	ONPSN21	Onsite Passenger Cars	600079	4129924.4	32.49	1	1	0.93	0.93
151	ONPSN22	Onsite Passenger Cars	600095.3	4129916.4	32.31	1	1	0.93	0.93
152	ONPSN23	Onsite Passenger Cars	600114.1	4129932.9	32.32	1	1	0.93	0.93
153	ONPSN24	Onsite Passenger Cars	600132.9	4129949.4	32.39	1	1	0.93	0.93
154	ONPSN25	Onsite Passenger Cars	600151.6	4129965.9	32.14	1	1	0.93	0.93
155	ONPSN26	Onsite Passenger Cars	600170.4	4129982.4	32.36	1	1	0.93	0.93
156	ONPSN27	Onsite Passenger Cars	600189.2	4129998.9	32.32	1	1	0.93	0.93

N|V|5 Delivering Solutions
Improving Lives