July 22, 2019

Balancing the Natural and Built Environment

Deb Farrar Director of Community Services City of Colton Community Services Department 650 North La Cadena Drive Colton, California 92324 VIA EMAIL DFarrar@coltonca.gov

Subject: Air Quality and Greenhouse Gas Emissions Analysis for the Proposed Colton Community Soccer Park Project in the City of Colton, California

Dear Ms. Farrar:

This Letter Report presents the results of the air quality and greenhouse gas emissions analysis for the proposed Colton Community Soccer Park Project located south of East Congress Street, east of the Union Pacific Railroad line, and west of the Santa Ana River in the City of Colton, California (hereinafter referred to as the "Project"). This analysis addresses the potential air quality and greenhouse gas emission impacts associated with the Project in accordance with the California Environmental Quality Act (CEQA) (*California Public Resources Code* §21000 et seq.) and the State CEQA Guidelines (*California Code of Regulations*, Title 14, §15000 et seq.).

PROJECT SETTING AND DESCRIPTION

The Project proponent, the City of Colton Community Services Department, proposes to construct and operate a community soccer park facility on a vacant parcel of land of 58 total acres. The Project site is currently vacant and undeveloped. The Project includes development of up to 8 lighted regulation-size soccer fields on approximately 21 acres to accommodate soccer leagues and tournaments on approximately 55 acres of the site, with 3 acres of the site allocated to preserving native habitat. Based on the topography of the site and adjacent lands, the conceptual park design includes three tiers to facilitate the proposed soccer fields. The Park Master Plan currently calls for six of the fields to have synthetic turf and two of the fields (in the northeast and southwest corners) to have natural turf, but the City may decide to install all synthetic turf fields at some later time. The proposed park would be supported by approximately 300 parking stalls including handicapped stalls, 2 restroom facilities, 2 concession buildings, breezeways with seating, several child play areas, multipurpose trails of decomposed granite, field and parking lot lighting, security fencing, retaining walls, and shaded spectator seating. The northern concession building is also planned to have a small police sub-station.

The Project site is predominantly surrounded by residential and industrial uses to the north and west. Please refer to Exhibit 1, Project Area.

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AIR QUALITY ANALYSIS

Relevant elements of the proposed Project related to the analysis of potential air quality impacts include (1) site preparation activities; (2) on-site grading activities, which are expected to import 58,500 cubic yards (cy) of soil; (3) the use of construction equipment during construction of 8 soccer fields, surface parking, 2 restrooms, and 2 concession buildings; and (4) the vehicle trips generated by the proposed Project.

The Project site is in the San Bernardino County portion of the South Coast Air Basin (SoCAB) and is under the jurisdiction of the South Coast Air Quality Management District (South Coast AQMD) for air quality regulation and permitting. The SoCAB is a 6,600-square-mile area bound by the Pacific Ocean to the west, the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego County line to the south. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. The SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation that is limited to a few storms during the winter (November through April).

Existing Air Quality Conditions

Air quality data for the Project site is represented by the Fontana-Arrow Highway Monitoring Station located at 14360 Arrow Boulevard, Fontana. The monitoring station is located approximately 10 miles southeast of the Project site. Pollutants measured at the Fontana-Arrow Highway Monitoring Station include O₃, PM10, PM2.5, and NO₂. The monitoring data presented in Table 1, Air Quality Levels Measured at the Fontana-Arrow Highway Monitoring Station, were obtained from CARB (CARB 2019). Federal and State air quality standards are presented with the number of times those standards were exceeded.

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TABLE 1AIR QUALITY LEVELS MEASURED AT THE FONTANA-ARROW HIGHWAY
MONITORING STATION

Pollutant	California Standard	National Standard	Year	Max. Level ^a	Days State Standard Exceeded	Days National Standard Exceeded
•			2015	0.133	36	3
O₃ (1 hour)	0.09 ppm	None	2016	0.139	34	3
(Thour)			2017	0.137	33	2
			2015	0.111	59	57
O₃ (8 hour)	0.070 ppm	0.070 ppm	2016	0.105	52	49
(o nour)			2017	0.119	51	49
			2015	92.0	13	0
PM10 (24 hour)	50 µg/m³	150 µg/m³	2016	94.8	14	0
(24 110ul)			2017	5 92.0 13 6 94.8 14 7 75.3 8	0	
-			2015	-	_	-
PM10 (AAM)	20 µg/m³	None	2016	_	_	_
			2017	-	_	-
			2015	0.089	0	0
NO ₂	0.18 ppm	0.100 ppm	2016	0.071	0	0
(1 Hour)			2017	0.069	0	0
			2015	50.5	N/A	3
PM2.5 (24 Hour)	None	35 µg/m³	2016	58.8	N/A	1
			2017	39.2	N/A	1

-: Data Not Reported or insufficient data available to determine the value; O₃: ozone; ppm: parts per million; PM10: respirable particulate matter with a diameter of 10 microns or less; µg/m³: micrograms per cubic meter; AAM: Annual Arithmetic Mean; NO₂: nitrogen dioxide; CO: carbon monoxide; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SO₂: sulfur dioxide. N/A indicates that there is no applicable standard.

^a California maximum levels were used.

Source: CARB 2019.

Regulatory Background

Pollutants and Standards

The U.S. Environmental Protection Agency (USEPA) defines seven "criteria" air pollutants: O₃, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter with a diameter of 10 microns or less (PM10), fine particulate matter with a diameter of 2.5 microns or less (PM2.5), and lead. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants. The California Air Resources Board (CARB) has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as "nonattainment" and the regional air quality agency must develop plans to attain the standards.

Source: South Coast AQMD 2018.

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Based on monitored air pollutant concentrations, the USEPA and the CARB designate an area's status in attaining the NAAQS and the CAAQS, respectively, for selected criteria pollutants. These attainment designations are shown in Table 2.

TABLE 2ATTAINMENT STATUS OF CRITERIA POLLUTANTSIN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal			
O₃ (1 hour)	Nonattainment	No standards			
O₃ (8 hour)	Nonattainment	Nonattainment			
PM10	Nonattainment	Attainment/Maintenance			
PM2.5	Nonattainment	Nonattainment			
CO	Attainment	Attainment/Maintenance			
NO ₂	Attainment	Attainment/Maintenance			
SO ₂	Attainment	Attainment			
Lead	Attainment	Attainment/Nonattainment*			
All others	Attainment/Unclassified	No standards			
O ₃ : ozone; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO ₂ : nitrogen dioxide; SO ₂ : sulfur dioxide; SoCAB: South Coast Air Basin.					
* Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards.					

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the State SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

O₃ is a secondary pollutant and is created when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight. The predominant source of air emissions generated by Project development would be from vehicle emissions. Motor vehicles primarily emit CO, NOx, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O₃, CO, NO₂, SO₂, PM10, PM2.5, and lead are shown in Table 3.

The South Coast AQMD was established in 1977 by merging the individual air pollution control districts of the four counties within the SoCAB: Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The South Coast AQMD and the Southern California Association of Governments (SCAG), in coordination with local governments and the private sector, develop the Air Quality Management Plan (AQMP) for the SoCAB to satisfy these requirements. The AQMP is the most important air management document for the SoCAB because it provides the blueprint for meeting State and federal ambient air quality standards.

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On November 28, 2007, CARB submitted a State Implementation Plan (SIP) revision to the USEPA for O₃, PM2.5, CO, and NO₂ in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal PM2.5 standard in the SoCAB by 2014 and attainment of the federal 8-hour O₃ standard by 2023. This SIP also includes a request to reclassify the O₃ attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the 8-hour O₃ standard in the SoCAB by June 2024. CARB approved PM2.5 SIP revisions in April 2011 and the O₃ SIP revisions in July 2011. The USEPA approved the PM2.5 SIP on September 25, 2013 and has approved 47 of the 62 1997 8-hour O₃ SIP requirements. On November 30, 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 PM2.5 standards (USEPA 2014). The comment period closed on January 22, 2015; no subsequent action has been taken.

On September 30, 2015, the USEPA proposed to approve elements of the South Coast 2012 PM2.5 Plan and 2015 Supplement, which addresses Clean Air Act requirements for the 2006 PM2.5 NAAQS and proposed to reclassify the area as a 'serious' nonattainment area for the 2006 PM2.5 standard. The reclassification is based on the determination that the area cannot practicably attain the 2006 PM2.5 NAAQS by the moderate area attainment date (December 31, 2015). On December 22, 2015, the EPA reclassified the South Coast area as a "Serious" nonattainment area for the 2006 PM2.5 standard. The final reclassification requires the State to submit a "serious area" plan that provides for attainment of the 2006 PM2.5 NAAQS as expeditiously as practicable as and no later than December 31, 2019 (USEPA 2016).

On March 3, 2017, the South Coast AQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (South Coast AQMD, CARB, SCAG, and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory methodologies for various source categories; and SCAG's latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the Project should not (1) exceed the South Coast AQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

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Dellestent	A	California	Federal	Standards
Pollutant	Averaging Time	Standards	Primary ^a	Secondary ^b
	1 Hour	0.09 ppm (180 µg/m ³)	-	-
O ₃	8 Hour	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)	Same as Primary
PM10	24 Hour	50 μg/m³	150 µg/m³	Same as Primary
TINITO	AAM	20 µg/m³	-	Same as Primary
PM2.5	24 Hour	-	35 µg/m³	Same as Primary
FIVIZ.J	AAM	12 µg/m³	12.0 µg/m³	15.0 μg/m ³
	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	-
со	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	-
00	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)	_	_
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
NO ₂	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	_
	24 Hour	0.04 ppm (105 µg/m ³)	-	-
SO ₂	3 Hour	_	_	0.5 ppm (1,300 μg/m³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	-
	30-day Avg.	1.5 µg/m³	-	-
Lead	Calendar Quarter	-	1.5 µg/m³	Sama as Drimany
	Rolling 3-month Avg.	-	0.15 µg/m³	Same as Primary
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)		No
Sulfates	24 Hour	25 µg/m³		ederal ndards
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m ³)	Sta	nualus
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)		

TABLE 3 CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

 O_3 : ozone; ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter; PM10: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; –: No Standard; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m³: milligrams per cubic meter; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer.

^a *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

^b National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov). Source: CARB 2016.

Sensitive Air Quality Receptors

Sensitive receptors include, but are not limited to, children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. The nearest sensitive land use includes residences adjacent to the Project's northern and northwestern boundaries.

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Air Quality Impact Analysis

Thresholds of Significance

The South Coast AQMD's *Air Quality Analysis Handbook* provides significance thresholds for both construction and operation of projects within the South Coast AQMD's jurisdictional boundaries (South Coast AQMD 2017a). The South Coast AQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The City of Colton uses the current South Coast AQMD thresholds to determine whether a proposed project would have a significant impact. These South Coast AQMD thresholds are identified in Table 4.

TABLE 4 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)						
Pollutant	Construction	Operation				
VOC	75	55				
NOx	100	55				
СО	550	550				
PM10	150	150				
PM2.5	55	55				
SOx	150	150				
Lead	3	3				
Ibs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SOx: sulfur oxides.						
Source: South Coast AQM	D 2019					

The following questions correspond to the questions in the Air Quality section of the Initial Study Checklist in Appendix G of the State CEQA Guidelines, as updated on December 28, 2018.

Question AQ-1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. The South Coast AQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources and has prepared an AQMP that establishes a program of rules and regulations directed at attaining the NAAQS and CAAQS.

As stated above, the South Coast AQMD adopted the 2016 AQMP on March 3, 2017 (South Coast AQMD 2017b). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts.

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The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the South Coast AQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

In order to be consistent with the AQMP, the following analysis compares the Project's construction and operational emissions with the South Coast AQMD CEQA air quality significance thresholds. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The South Coast AQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards.

A project with daily emission rates below the South Coast AOMD's established air quality significance thresholds (shown in Table 4) would have a less than significant effect on regional air quality. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 computer program (CAPCOA 2017). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and county-specific information. For air quality modeling purposes, construction of the Project was based on the Project's construction assumptions and default assumptions derived from CalEEMod. Construction of the proposed park would require 102,300 cy of earthwork including 21,900 cy of cut and 80,400 cy of fill of which 58,500 cy would be imported from offsite. The City would attempt to balance earthwork on the site to the greatest extent practical to minimize the offsite importation of soil. However, the current estimate of 58,500 cy of imported soil would require 3,656 truck-loads to the site from offsite locations assuming 16 cy of soil capacity per truck. These truck trips distributed over a period of three months (Monday through Saturday or 78 days), equals 47 truck-loads per day or 5 trucks per hour assuming 9 hours per work day (7 AM to 4 PM). The input for operational emissions was based on the vehicle trip generation rates provided in the Traffic Impact Study and the proposed building areas and soccer fields (Psomas 2019). Additional input details are included in Attachment A.

Construction Emissions

Air pollutant emissions would occur from construction equipment exhaust, fugitive dust from site grading; exhaust and particulate emissions from trucks hauling soil and building materials to and from the Project site; from automobiles and light-duty trucks driven to and from the Project site by construction workers; and VOCs from painting and asphalt paving operations. The proposed Project would comply with applicable South Coast AQMD rules and regulations, including Rule 403 for fugitive dust control and Rule 1113 for architectural coatings. Rule 403 measures include regular watering of active grading areas and unpaved roads, limiting vehicle speeds on unpaved surfaces, stabilizing stockpiled earth, and curtailing grading operations during high wind conditions (South Coast AQMD 1976). Watering of active grading areas is included in the CalEEMod emissions analysis and results in reduced PM10 and PM2.5 emissions. It should be noted that some project requirements and features (such as watering grading areas), although required project elements, are shown in the CalEEMod format as mitigation measures. South Coast AQMD 2016b). The emission reductions associated with compliance with this rule have been included in the emissions calculations.

Regional Emissions Thresholds - Maximum Daily Regional Emissions

Table 5, Estimated Maximum Daily Regional Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with

the South Coast AQMD's daily regional emission thresholds. As shown in Table 5, Project construction mass daily emissions would be less than the South Coast AQMD's thresholds for all criteria air pollutants.

	Emissions (lbs/day)					
Year	voc	NO _x	со	SOx	PM10	PM2.5
2019	4	46	23	<1	7	5
2020	8	73	37	<1	6	3
Maximum	8	73	37	<1	7	5
South Coast AQMD Thresholds (Table 4)	75	100	550	150	150	55
Exceeds South Coast AQMD No No No No No No No						No
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; South Coast AQMD: South Coast Air Quality Management District.						

 TABLE 5

 ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Source: South Coast AQMD 2019 (thresholds); see Attachment A for CalEEMod model outputs.

Construction-Phase Localized Significance Thresholds

In addition to the mass daily emissions thresholds established by the South Coast AQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NO₂, CO, PM10, and PM2.5 are examined based on South Coast AQMD's localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the South Coast AQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts.

The LST method is recommended to be limited to projects that are five acres or less. For the purposes of an LST analysis, the South Coast AQMD considers receptors where it is possible that an individual could remain for 1 hour for NO_2 and CO exposure and 24 hours for PM10 and PM2.5 exposure. The emissions limits in the lookup tables are based on the South Coast AQMD's Ambient Air Quality Standards (South Coast AQMD 2016a). The closest receptors to the Project site are residential uses adjacent to the Project's northern and northwestern boundaries. The emissions thresholds are for receptors within 25 meters (82 feet)¹ of the Project site; the thresholds for receptors farther away would be higher, and the Project emissions would be a smaller fraction of the thresholds.

Table 6, Construction-Phase Localized Significance Threshold Emissions shows the maximum daily onsite emissions for construction activities compared with the South Coast AQMD LSTs with receptors within 25 meters. The Project site is approximately 58 acres in area. The thresholds shown are from the lookup tables for a site that is 3 acres, which is based upon the most intensive phase of construction that involves soil disturbance. The Project's maximum daily on-site emissions would occur during the grading phase (for NOx and CO) and during the site preparation phase (PM10, and PM2.5). As shown in Table 6, localized emissions for all criteria pollutants would be less than their respective thresholds. Therefore,

¹ The South Coast AQMD recommends that, when sensitive receptors are located nearer than 25 meters (82 feet) from the Project site, the minimum 25 meter/82 foot distance threshold should be used.

localized air quality impacts at receptors proximate to construction activities would be exposed to less than significant air quality impacts.

TABLE 6CONSTRUCTION-PHASELOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS

	Emissions (Ibs/day)				
Emissions and Thresholds	NOx	со	PM10	PM2.5	
Project maximum daily on-site emissions	50	32	6	4	
Localized Significance Threshold	203	1,230	9	5	
Exceed threshold?	No No No No				
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.					
Note: Data is for South Coast AQMD Source Receptor Area 34, Central San Bernardino Valley.					
Source: South Coast AQMD 2009 (thresholds); see Att	achment A for C	alEEMod model	outputs.		

Operational Emissions

The ongoing operation of the Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from Project-generated vehicle trips and through operational emissions from the ongoing use of the Project. The Project site is currently vacant; there are no operational emissions associated with the existing Project site. The following section provides an analysis of potential long-term air quality impacts to regional and local air quality with the long-term operation of the proposed Project. The potential operations-related air emissions have been analyzed below for the regional and local criteria pollutant emissions and cumulative impacts.

Operations-Related Criteria Pollutant Analysis

Operational emissions are comprised of area, energy, and mobile source emissions. The principal source of VOC emissions associated with the Project would result from the use of consumer products; the primary source of CO emissions would be landscaping equipment. Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and sizes. Mobile source emissions are based on estimated Project-related trip generation forecasts, as provided in the Traffic Impact Study (TIS) prepared for the Project. The Project would generate 571 daily weekday trips; 3,239 Saturday trips; and 2,302 Sunday trips (Psomas 2019). Estimated peak daily operational emissions are shown in Table 7.

Note:

consistent with the first criterion.

	Emissions (lbs/day)					
Source	VOC	NOx	СО	SOx	PM10	PM2.5
Area sources	<1	<1	<1	<1	<1	<1
Energy sources	<1	<1	<1	<1	<1	<1
Mobile sources	7	11	78	<1	20	5
Total Operational Emissions [*]	7	11	78	<1	20	5
South Coast AQMD Significance Thresholds (Table 4)	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Ibs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; South Coast AQMD: South Coast Air Quality Management District.						
* Some totals do not add due to rounding.						

TABLE 7 PEAK DAILY OPERATIONAL EMISSIONS

As shown in Table 7, the Project's operational emissions would be less than the South Coast AQMD CEQA significance thresholds for all criteria pollutants. Therefore, the Project's operational impact on

regional emissions would be less than significant, and no mitigation is required. The Project would be

CalEEMod model data sheets are included in Attachment A.

For the second criterion, a project is consistent with the AQMP if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. The most recent AQMP adopted by South Coast AQMD (2016) incorporates SCAG's 2016–2040 Regional Transportation Plan (RTP) socioeconomic forecast projections of regional population and employment growth. The 2016–2040 RTP projects that population in the region will grow with the addition of approximately 1.5 million new households by 2035. As the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, SCAG addresses regional issues related to transportation, the economy, community development, and the environment. With regard to air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide (RCPG), which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP. These documents are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. Both the RCPG and AQMP are based, in part, on projections originating with county and city general plans.

The proposed Project is consistent with the City's General Plan and zoning designations (Open Space Resources) and is therefore consistent with existing land use designations and transportation assumptions in the City's General Plan. The Project would also not result in population growth. Employment associated with maintenance of the athletic fields and concession stand would not be substantial to the extent that it would meaningfully affect the employment projections in the RTP. As such, all potential Project-related emissions would be accounted for in the AQMP, which is crafted to bring the Basin into attainment for all criteria pollutants. Additionally, all construction activities would be in compliance with AQMP regulatory measures, including South Coast AQMD rules pertaining to fugitive dust (Rule 403), visibility of emissions (Rule 401), nuisance activities (Rule 402), and the limiting of VOC content in both asphalt and architectural coatings (Rules 1108 and 1113).

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For the reasons outlined above, Project impacts relative to the AQMP are less than significant and no mitigation is required.

Question AQ-2 Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The South Coast AQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards. A project with daily emission rates below the South Coast AQMD's established air quality significance thresholds (shown in Table 4, previously) would have a less than significant effect on regional air quality. The South Coast AQMD uses the same significance thresholds for project-specific and cumulative impacts: "Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant" (South Coast AQMD 2003).

Construction Activities

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts, as quantified previously in Tables 5 and 6, respectively. South Coast AQMD's policy with respect to cumulative impacts associated with the above referenced pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant, as stated above (South Coast AQMD 2003). As discussed under Question AQ-2, short-term construction emissions would be less than the South Coast AQMD's significance thresholds. Therefore, consistent with South Coast AQMD policy, the cumulative construction impact of criteria pollutants would also be less than significant.

Operational Activities

As shown in Table 7, operational emissions for all analyzed pollutants would be below the South Coast AQMD CEQA significance thresholds. Therefore, the Project would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable and would be less than significant; no mitigation would be required.

Question AQ-3 Would the Project result expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for the following situations: CO hotspots; criteria pollutants and toxic air contaminants (TACs, specifically diesel particulate matter [DPM]) from on-site construction; exposure to off-site TAC emissions; and asbestos and lead-based paint during demolition. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways.

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Carbon Monoxide Hotspot

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations typically are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. An initial screening procedure is provided in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) to determine whether a project poses the potential to generate a CO hotspot (UCD ITS 1997). The key criterion is whether the Project would worsen traffic congestion at signalized intersections operating at level of service (LOS) E or F. If a project poses a potential for a CO hotspot, a quantitative screening is required.

The TIS prepared for this Project indicates that none of the study intersections would operate at LOS E or F with implementation of the proposed Project (Psomas 2019). The signalized intersections included as part of the TIS for the Project would operate at LOS A or B with implementation of the Project. The impact would be less than significant.

Criteria Pollutants from On-Site Construction

Exposure of persons to NOx, CO, PM10, and PM2.5 emissions is discussed in response to Question AQ-1 above. There would be no significant impacts, and no additional mitigation is required.

Toxic Air Contaminant Emissions from On-Site Construction

Construction activities would result in short-term, Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the total construction period would be relatively short when compared to a 40-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant and no mitigation is required.

Exposure to Off-Site Toxic Air Contaminant Emissions

The CARB *Air Quality and Land Use Handbook: A Community Health Perspective* provides guidance concerning land use compatibility with TAC sources (CARB 2005). While not a law or adopted policy, the handbook offers advisory recommendations for siting sensitive receptors near uses associated with TACs (such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports,

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refineries, dry cleaners, gasoline stations, and industrial facilities) to help keep children and other sensitive populations out of harm's way.

Projects of concern for mobile sources of TACs are typically those located within 500 feet of the following types of facilities that emit significant quantities of DPM: urban roads with more than 100,000 vehicles per day; freeways or roads with a high heavy truck concentration; and/or near rail yards, ports, and/or distribution centers. The City of Colton classifies three existing roadways near the Project site as major arterials, which include La Cadena Drive, M Street, and Mt. Vernon Avenue (City of Colton 2012). The Project site is more than 500 feet from any freeway or major urban road, and from the City-designated major arterials.

With respect to proximity to emissions from railroad sources, CARB recommends avoiding siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard (CARB 2005); the Project site is not located within 1,000 feet of this type of facility. However, the site is proximate to an existing rail terminus to the west of the Project site. Health risk associated with diesel exhaust from locomotives is generally is assessed for long-term exposure, at land-uses that have prolonged exposure to receptors, including residences, schools, and places of employment. The recreational users at the Project site are not expected to have the same exposure duration as these users. CARB recommends not placing sensitive receptors within the same building as a dry cleaner and avoiding siting residences within 300 feet of a large gas station or within 500 feet of dry-cleaning operations with 2 machines using perchloroethylene. There are no gas stations within 300 feet or dry-cleaning operations within 500 feet of the Project site. The Project also does not involve emission sources with the potential for substantial levels of emissions of TACs. As such, no off-site sensitive uses would be exposed to significant levels TACs. Impacts would be less than significant, and no mitigation is required.

Question AQ-4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact. According to the South Coast AQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not include any the above identified uses, and therefore would not produce objectionable odors over the long-term (i.e., during operation of the park).

There may be potential odor emitters during park construction activities include asphalt paving and the use of "architectural" coatings (e.g., lane paint) and solvents. South Coast AQMD Rules 1108 and 1113 limit the amounts of VOCs from cutback asphalt and architectural coatings and solvents, respectively. Given mandatory compliance with South Coast AQMD rules, no construction activities or materials are proposed that would create a significant level of objectionable odors. As such, potential impacts during short-term construction would be less than significant assuming compliance with established regulations from the South Coast AQMD. No mitigation measures are required. The proposed Project would not construct or operate any uses that would result in significant odors or other air pollutant emissions due the nature of the Project (i.e., soccer fields). Food preparation activities at the concession buildings may result in the smell of cooking food (e.g., hamburgers, hot dogs), but these smells are not considered to be nuisance odors or other objectionable emissions that are regulated by the South Coast AQMD's Rule 402 because they are do not constitute a public nuisance. Rule 402 prohibits any the discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. As such, the Project would have no significant impact regarding other emissions and no mitigation is required.

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GREENHOUSE GAS EMISSIONS ANALYSIS

Regulatory Background

Significant changes in global climate patterns have been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of Greenhouse Gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere which, in turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 recognizes that California is the source of substantial amounts of GHG emissions. The statute states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes the goal of reducing GHG emissions to 1990 levels by the year 2020, codifying the Executive Order S-3-05 goal.

CARB approved a *Climate Change Scoping Plan* as required by AB 32 in 2008; this plan is required to be updated every five years. The *Climate Change Scoping Plan* proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The *Climate Change Scoping Plan* has a range of GHG-reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation regulation to fund the program. On February 10, 2014, CARB released the Draft Proposed First Update to the *Climate Change Scoping Plan* (CARB 2014). The board approved the final *First Update to the Climate Change Scoping Plan* on May 22, 2014. The first update describes California's progress towards AB 32 goals, stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). The latest update occurred in January 2017 and incorporates the 40 percent reduction to 1990 emissions levels by 2030.

California Executive Order B-30-15 (April 29, 2015) set an "interim" Statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030, and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels.

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On September 8, 2016, Governor Edmund G, "Jerry" Brown signed Senate Bill 32 (SB 32) to codify the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030 (Health and Safety Code Section 38566). This goal is expected to keep the State on track to meeting the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050 (California Legislative Information 2017a). SB 32's findings state that CARB will "achieve the state's more stringent greenhouse gas emission reductions in a manner that benefits the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature."

AB 197 was signed at the same time and will make sure that the SB 32 goals are met by requiring CARB to provide annual reports of GHGs, criteria pollutants, and TACs by facility, City and subcounty level, and sector for stationary sources and at the County level for mobile sources. It also requires the CARB to prioritize specified emission reduction rules and regulations and to identify specified information for emission reduction measures (e.g., alternative compliance mechanism, market-based compliance mechanism, and potential monetary and nonmonetary incentive) when updating the Scoping Plan (California Legislative Information 2017b).

On April 29, 2015, Governor Brown signed Executive Order (EO) B-30-15, which orders "A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050" (COOG 2015). Five key goals for reducing GHG emissions through 2030 include (1) increasing renewable electricity to 50 percent; (2) doubling the energy efficiency savings achieved in existing buildings and making heating fuels cleaner; (3) reducing petroleum use in cars and trucks by up to 50 percent; (4) reducing emissions of short-lived climate pollutants; and (5) managing farms, rangelands, forests and wetlands to increasingly store carbon. EO B-30-15 also directs CARB to update the *Climate Change Scoping Plan* to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Senate Bill (SB) 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are as follows (California Legislative Information 2015):

- 1. To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.
- 2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources.

The Sustainable Communities and Climate Protection Act of 2008, Senate Bill (SB) 375, established a process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 required SCAG to incorporate a "sustainable communities strategy" (SCS) into its regional transportation plans (RTPs) that will achieve GHG emission reduction targets though several measures, including land use decisions. SCAG's SCS is included in the SCAG 2016–2040 RTP/SCS (SCAG 2016). The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects; locating residents closer to where they work and play; and designing communities so there is access to high quality transit service.

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The City of Colton has prepared and adopted a Climate Action Plan (CAP) on November 3, 2015 (City of Colton 2015a). The City's CAP includes the following components: a summary of existing federal, State, and local initiatives addressing climate change; background on Colton's climate-change efforts; GHG reduction profiles; GHG reduction measures; and implementation of the CAP and regional coordination. It is accepted as very unlikely that any individual development project such as the size and character of the proposed Project would have GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis. CEQA Guidelines Section 15183.5 allows lead agencies to analyze the impacts associated with GHG emissions at a programmatic level in plan-level documents such as a CAP, so that project-level environmental documents may tier from the programmatic review. As part of the City's CAP, the City also published a draft guidance document titled "Greenhouse Gas Emissions Screening Tables" (City of Colton 2015b). As discussed within this guidance document, the Development Review Process (DRP) procedures for evaluating GHG impacts and determining significance for CEQA purposes are streamlined by (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing Screening Tables to mitigate project GHG emissions that exceed the threshold level. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A threshold level of 3,000 MTCO₂e per year is to be used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. Projects that emit less than 3,000 MTCO₂e per year would not be required to use the Screening Tables within the guidance document (City of Colton 2015b).

Greenhouse Gas Emissions Impact Analysis

The following questions correspond to the questions in the Greenhouse Gas Emissions section of the Initial Study Checklist in Appendix G of the State CEQA Guidelines.

Question GHG-1 Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. In developing methods for GHG impact analysis, there have been suggestions of quantitative thresholds, often referred to as screening levels, which define an emissions level below which it may be presumed that climate change impacts would be less than significant.

Based on the proposed construction activities, the principal source of construction GHG emissions would be internal combustion engines of construction equipment, on-road construction vehicles, and workers' commuting vehicles. GHG emissions from construction activities were obtained from the CalEEMod model, described above. The estimated construction GHG emissions for the Project would be 721 MTCO₂e, as shown in Table 8.

TABLE 8ESTIMATED GREENHOUSE GASEMISSIONS FROM CONSTRUCTION

Source	Emissions (MTCO2e)
2019	94
2020	626
Total	721
MTCO ₂ e: metric tons of carbon dioxide equivalent	
Notes:	
• Totals may not add due to rounding variances.	
Detailed calculations in Attachment A.	

Operational GHG emissions would come primarily from vehicle trips; other sources include electricity and water consumption; natural gas for space and water heating; and gasoline-powered landscaping and maintenance equipment. Estimated Project operational GHG emissions are shown in Table 9.

TABLE 9ESTIMATED ANNUAL GREENHOUSE GASEMISSIONS FROM PROJECT OPERATION

Source	Emissions (MTCO2e/yr.)
Area	<1
Energy	61
Mobile	1,177
Waste	2
Water	111
Total	1,350
MTCO ₂ e/yr.: metric tons of carbon dioxide equivalent Notes:	per year
Totals may not add due to rounding variances.Detailed calculations in Attachment A.	

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. The South Coast AQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies. Therefore, construction and operational emissions are combined by amortizing the construction emissions to the annual operational emissions. The total GHG emissions attributable to the Project is shown in Table10.

TABLE 10 ESTIMATED TOTAL PROJECT ANNUAL GREENHOUSE GAS EMISSIONS

Source	Emissions (MTCO₂e/yr.ª)
Construction Amortized	24 ^a
Operations (Table 9)	1,350
Total Annual GHG emissions ^b	1,374
Project Threshold	3,000
Exceed Threshold?	No
MTCO ₂ e/yr.: metric tons of carbon dioxide equivalent person	per year; SP: service
 Total derived by dividing construction emissions (s Total annual emissions is the sum of amortized co and operational emissions. 	, ,

As shown in Table 10, the Project's total annual GHG emissions is 1,374 MTCO₂e/year, which is less than the 3,000 MTCO₂e/year threshold. As per the guidance document, the City determined that if a project emitted fewer annual emissions than the 3,000 MTCO₂e/year, it was deemed as a "small project" and is considered less than significant and does not need to use the Screening Tables or alternative calculations. Therefore, the Project is less than significant and does not need to use the Screening Tables or alternative calculations (City of Colton 2015b). The impact would be less than significant, and no mitigation is required.

Question GHG-2 Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. As discussed previously, the State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the proposed Project are Executive Order S-3-05, AB 32, the California Global Warming Solutions Act of 2006, and SB 32. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020 to 80 percent below 1990 levels by 2050, and for SB 32, to 40% below 1990 levels by 2030. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is not addressed.

The City has two adopted plans regarding GHG emissions (i.e., carbon footprint). These include the General Plan and the Climate Action Plan (CAP). The General Plan and CAP goals and policies relative to potential GHG emissions of the Project are outlined below:

General Plan – Land Use Element

Goal LU-5: Reduce use of energy resources citywide, with a key goal of reducing the City's carbon footprint.

- **Policy LU-5.1:** Require the incorporation of energy conservation features into the design of all new construction and site development, as required by State law and local regulations.
- **Policy LU-4.2:** Facilitate the use of green building standards and Leadership in Energy and Environmental Design (LEED) or similar programs in both private and public projects.
- **Policy LU-4.3:** Promote sustainable building practices that go beyond the requirement of Title 24 of the California Administrative Code, and encourage energy-efficient design

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elements.

• **Policy LU-4.4:** Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment.

CLIMATE ACTION PLAN

The City's CAP presents applicable GHG emission inventories, identifies the effectiveness of various California initiatives to reduce GHG emissions, and identifies local measures selected by the City to reduce GHG emissions to achieve the City's identified GHG reduction target. The City participated in the San Bernardino County Regional Greenhouse Gas Reduction Plan (Plan) which presents the collective results of all local efforts to reduce GHG emissions consistent with statewide GHG targets expressed in AB 32, the "Global Warming Solutions Act of 2006" and Senate Bill (SB) 375. The City used the technical information within the Plan in the development of its CAP. The CAP builds on the regional work and refines it to provide City-specific information and to develop the local implementation plan for City-selected GHG reduction measures. This CAP identifies how the GHG reduction measures will be implemented and monitored by the City going forward to ensure that progress is being made toward the GHG reduction target.

Although the CAP is primarily organized around residential and commercial land use policies, it requires the City to utilize the most appropriate energy conservation improvements and programs as an overall effort to reduce GHG emissions within the City. While the CAP does not have specific measures for new construction of public facilities, many of the goals and policies of the CAP require or encourage the conservation and wise use of energy resources, water, and the minimization of solid waste. The Project would conserve water consumption and minimize solid waste generation by installing synthetic turf fields and drought tolerant landscaping, so the use of irrigation water and the generation and regular disposal of grass clippings would be eliminated or greatly reduced.

The proposed field and security lighting systems, as well as planned buildings and supporting improvements, are intended to minimize and control Project-related electrical energy use. All improvements would also be consistent with the State Building Code and Title 24 of that code relative to energy conservation. The development of these athletic fields uses would serve the recreational needs of local communities in the surrounding region.

CONCLUSION

The Project was analyzed for potential air quality and GHG emissions from both the construction and operational phases. Regarding air quality emissions, the Project would not conflict with or obstruct implementation of the South Coast AQMD 2016 Air Quality Management Plan. As previously shown in Tables 5 through 7, air quality impacts from construction and operation of the Project would be under South Coast AQMD air quality thresholds. Project-related construction emissions would not be cumulatively considerable, and the impact would be less than significant. Sensitive receptors near the Project site would not be exposed to substantial pollutant concentrations and the impact would be less than significant. The Project would not produce other emissions, such as objectionable odors, which would adversely affect a substantial number of people.

For greenhouse gas emissions, the Project's GHG emissions would be below the 3,000 MTCO₂e/year significance threshold that was identified in the City's Climate Action Plan. The Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the

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environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The impact would be less than significant and no mitigation is required. In conclusion, the Project would have no impacts or less than significant impacts for all Project-related air quality and greenhouse gas emissions.

Thank you for the opportunity to assist on this Project. If you have any questions or comments, please contact me at (626) 351-2000.

Sincerely, **P S O M A S**

Tin Cheung

Director of Air Quality, Climate Change, and Noise Services

Enclosures: Exhibit 1 – Project Area Attachment A – CalEEMod Data

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ATTACHMENT A

CALEEMOD DATA

Attached is the output data from the CalEEMod criteria air pollutant and greenhouse gas emissions (GHG) model.

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Colton Community Soccer Park - San Bernardino-South Coast County, Winter

Colton Community Soccer Park San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	300.00	Space	2.70	120,000.00	0
City Park	16.75	Acre	16.75	729,630.00	0
Golf Course	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Statewide Average				
CO2 Intensity (Ib/MWhr)	1001.57	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Statewide Average used because City of Colton is its own utility provide, and the CO2 IF is not available for the city.

Land Use - City Park- Synthetic Turf and rest of Park (children's play areas) Concession stand/police substation, restrooms included in City park Building Area SF Golf Course- Natural Turf

Construction Phase - ..

Trips and VMT - .

Grading - per South Coast AQMD large operation requirements

Vehicle Trips - All trip numbers incorporated into City Park

Energy Use - All electrical consumption for Project included in Parking Lot kWh. total is provided by City and lighting contractor (Musco)/

Water And Wastewater - Defaults

Solid Waste - .

Construction Off-road Equipment Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	52.00
tblConstructionPhase	NumDays	35.00	78.00
tblConstructionPhase	NumDays	370.00	78.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.35	1.11
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02

tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	МН	1.0100e-003	1.0960e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblGrading	MaterialImported	0.00	58,500.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblTripsAndVMT	VendorTripNumber	151.00	5.00
tblTripsAndVMT	WorkerTripNumber	388.00	20.00

tblTripsAndVMT	WorkerTripNumber	78.00	15.00
tblVehicleTrips	ST_TR	22.75	193.37
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	SU_TR	16.74	137.51
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	WD_TR	1.89	34.09
tblVehicleTrips	WD_TR	5.04	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	ay							lb/c	lay		
2019	4.4416	45.6475	22.8018	0.0399	10.2634	2.3917	12.6551	5.8205	2.2004	8.0209	0.0000	3,954.801 4	3,954.8014	1.1979	0.0000	3,984.747 5
2020	7.8147	73.4897	36.5968	0.1357	7.9545	2.2451	10.1996	2.7306	2.0681	4.7987	0.0000	13,812.22 01	13,812.220 1	2.4057	0.0000	13,872.36 20
Maximum	7.8147	73.4897	36.5968	0.1357	10.2634	2.3917	12.6551	5.8205	2.2004	8.0209	0.0000	13,812.22 01	13,812.220 1	2.4057	0.0000	13,872.36 20

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	lay							lb/c	lay		
2019	4.4416	45.6475	22.8018	0.0399	4.1255	2.3917	6.5172	2.3025	2.2004	4.5029	0.0000	3,954.801 4	3,954.8014	1.1979	0.0000	3,984.747 5

2020	7.8147	73.4897	36.5968	0.1357	4.2395	2.2451	6.4846	1.3755	2.0681	3.4436	0.0000	13,812.22 01	13,812.220 1	2.4057	0.0000	13,872.36 20
Maximum	7.8147	73.4897	36.5968	0.1357	4.2395	2.3917	6.5172	2.3025	2.2004	4.5029	0.0000	13,812.22 01	13,812.220 1	2.4057	0.0000	13,872.36 20
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ау		
Area	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	5.6230	11.1108	66.9097	0.1882	19.6106	0.1482	19.7588	5.2236	0.1377	5.3613		18,863.87 68	18,863.876 8	0.8229		18,884.44 85
Total	5.9420	11.1111	66.9424	0.1882	19.6106	0.1483	19.7589	5.2236	0.1378	5.3614		18,863.94 65	18,863.946 5	0.8231	0.0000	18,884.52 28

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Area	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mobile	5.6230	11.1108	66.9097	0.1882	19.6106	0.1482	19.7588	5.2236	0.137	7 5.3	613	18	8,863.87 68	18,863.876 8	0.8229		18,884.44 85
Total	5.9420	11.1111	66.9424	0.1882	19.6106	0.1483	19.7589	5.2236	0.137	78 5.3	614	18	8,863.94 65	18,863.946 5	0.8231	0.0000	18,884.52 28
	ROG	N	Ox C	o s					gitive M2.5	Exhaust PM2.5	PM2.5 Total		2 NBio-	CO2 Total	CO2 CF	14 N2	20 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	0.0	0.0	0 0.0	00 0.0	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2019	12/31/2019	6	52	
2	Grading	Grading	1/1/2020	3/31/2020	6	78	
3	Building Construction	Building Construction	4/1/2020	6/30/2020	6	78	
4	Paving	Paving	7/1/2020	7/25/2020	6	22	
5	Architectural Coating	Architectural Coating	7/25/2020	8/19/2020	6	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 195

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 15,000; Non-Residential Outdoor: 5,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	7,313.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		

Fugitive Dust					10.0622	0.0000	10.0622	5.7671	0.0000	5.7671		0.0000		0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	3,766.452 9	3,766.4529	1.1917	3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	10.0622	2.3904	12.4526	5.7671	2.1991	7.9663	3,766.452 9	3,766.4529	1.1917	3,796.244 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.7388	1.8900e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		188.3485	188.3485	6.1800e- 003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		188.3485	188.3485	6.1800e- 003		188.5030

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Fugitive Dust					3.9243	0.0000	3.9243	2.2492	0.0000	2.2492			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.452 9	3,766.4529	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	3.9243	2.3904	6.3146	2.2492	2.1991	4.4483	0.0000	3,766.452 9	3,766.4529	1.1917		3,796.244 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.7388	1.8900e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		188.3485	188.3485	6.1800e- 003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		188.3485	188.3485	6.1800e- 003		188.5030

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Fugitive Dust					6.0901	0.0000	6.0901	2.2215	0.0000	2.2215			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.8653	1.9424		6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	6.0901	2.1739	8.2640	2.2215	2.0000	4.2215		6,005.865 3	6,005.8653	1.9424		6,054.425 7

Unmitigated Construction Off-Site

Category					lb/d	lay						lb/c	lay	
Hauling	0.6088	23.2184	3.8993	0.0716	1.6408	0.0698	1.7106	0.4499	0.0667	0.5166	7,603.604 9	7,603.6049	0.4572	7,615.035 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1092	0.0737	0.7393	2.0400e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606	202.7500	202.7500	6.0500e- 003	202.9013
Total	0.7180	23.2922	4.6385	0.0737	1.8644	0.0712	1.9356	0.5092	0.0681	0.5772	7,806.354 9	7,806.3549	0.4633	7,817.936 2

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					2.3752	0.0000	2.3752	0.8664	0.0000	0.8664			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.8653	1.9424		6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	2.3752	2.1739	4.5491	0.8664	2.0000	2.8664	0.0000	6,005.865 3	6,005.8653	1.9424		6,054.425 7

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.6088	23.2184	3.8993	0.0716	1.6408	0.0698	1.7106	0.4499	0.0667	0.5166		7,603.604 9	7,603.6049	0.4572		7,615.035 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0737	0.7393	2.0400e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		202.7500	202.7500	6.0500e- 003		202.9013

Total	0.7180	23.2922	4.6385	0.0737	1.8644	0.0712	1.9356	0.5092	0.0681	0.5772	7,806.354	7,806.3549	0.4633	7,817.936
											9			2

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category		lb/day									lb/day						
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.0631	0.6229		2,568.634 5	
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.0631	0.6229		2,568.634 5	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0160	0.5234	0.1192	1.3000e- 003	0.0320	2.4600e- 003	0.0345	9.2200e- 003	2.3500e- 003	0.0116		137.5001	137.5001	0.0103		137.7569
Worker	0.1092	0.0737	0.7393	2.0400e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		202.7500	202.7500	6.0500e- 003		202.9013
Total	0.1252	0.5971	0.8584	3.3400e- 003	0.2556	3.9200e- 003	0.2595	0.0685	3.7000e- 003	0.0722		340.2500	340.2500	0.0163		340.6582

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.0631	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.0631	0.6229		2,568.634 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0160	0.5234	0.1192	1.3000e- 003	0.0320	2.4600e- 003	0.0345	9.2200e- 003	2.3500e- 003	0.0116		137.5001	137.5001	0.0103		137.7569
Worker	0.1092	0.0737	0.7393	2.0400e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		202.7500	202.7500	6.0500e- 003		202.9013
Total	0.1252	0.5971	0.8584	3.3400e- 003	0.2556	3.9200e- 003	0.2595	0.0685	3.7000e- 003	0.0722		340.2500	340.2500	0.0163		340.6582

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		

Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.7528	0.6926	0.6926	2,207.733	2,207.7334	0.7140	2,225.584
									4			1
Paving	0.3216				0.0000	0.0000	0.0000	0.0000		0.0000		0.0000
Total	1.6781	14.0656	14.6521	0.0228	0.7528	0.7528	0.6926	0.6926	2,207.733	2,207.7334	0.7140	2,225.584
									4			1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		152.0625	152.0625	4.5400e- 003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		152.0625	152.0625	4.5400e- 003		152.1760

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.7334	0.7140		2,225.584 1
Paving	0.3216	0	Dununununununununununununununununununun			0.0000	0.0000		0.0000	0.0000		δ	0.0000			0.0000
Total	1.6781	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.7334	0.7140		2,225.584 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		152.0625	152.0625	4.5400e- 003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		152.0625	152.0625	4.5400e- 003		152.1760

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Archit. Coating	5.7306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	5.9727	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Unmitigated Construction Off-Site

Category					lb/c	lay						lb/	day	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	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	0.000	0.0000	0.0000	0.0000
Worker	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455	152.06	152.0625	4.5400e- 003	152.1760
Total	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455	152.06	152.0625	4.5400e- 003	152.1760

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Archit. Coating	5.7306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	5.9727	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0553	0.5544	1.5300e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		152.0625	152.0625	4.5400e- 003		152.1760

Total	0.0819	0.0553	0.5544	1.5300e-	0.1677	1.1000e-	0.1688	0.0445	1.0100e-	0.0455	152.0625	152.0625	4.5400e-	152.1760
				003		003			003				003	i I
														l l

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Mitigated	5.6230	11.1108	66.9097	0.1882	19.6106	0.1482	19.7588	5.2236	0.1377	5.3613		18,863.87 68	18,863.876 8	0.8229		18,884.44 85
Unmitigated	5.6230	11.1108	66.9097	0.1882	19.6106	0.1482	19.7588	5.2236	0.1377	5.3613		18,863.87 68	18,863.876 8	0.8229		18,884.44 85

4.2 Trip Summary Information

	Avera	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	571.01	3,238.95	2303.29	3,451,929	3,451,929
Golf Course	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	571.01	3,238.95	2,303.29	3,451,929	3,451,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	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
City Park	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Golf Course	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Parking Lot	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	ay		

City Park	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
Golf Course	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	lay							lb/c	lay		
City Park	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
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	ay		

Mitigated	0.3190	3.0000e-	0.0326	0.0000	1.2000e-	1.2000e-	1.2000e-	1.2000e-	0.0697	0.0697	1.9000e-	0.0743
		004			004	004	004	004			004	
Unmitigated	0.3190	3.0000e-	0.0326	0.0000	1.2000e-	1.2000e-	1.2000e-	1.2000e-	0.0697	0.0697	1.9000e-	0.0743
		004			004	004	004	004			004	

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/d	lay		
Architectural Coating	0.0345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2814					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e- 003	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Total	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/d	ay		
Architectural Coating	0.0345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2814					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e- 003	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Total	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
Number					
	Number	Number Heat Input/Day	Number Heat Input/Day Heat Input/Year	Number Heat Input/Day Heat Input/Year Boiler Rating	Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type

Page 1 of 1

Colton Community Soccer Park - San Bernardino-South Coast County, Summer

Colton Community Soccer Park San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	300.00	Space	2.70	120,000.00	0
City Park	16.75	Acre	16.75	729,630.00	0
Golf Course	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Statewide Average				
CO2 Intensity (Ib/MWhr)	1001.57	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Statewide Average used because City of Colton is its own utility provide, and the CO2 IF is not available for the city.

Land Use - City Park- Synthetic Turf and rest of Park (children's play areas) Concession stand/police substation, restrooms included in City park Building Area SF Golf Course- Natural Turf

Construction Phase - ..

Trips and VMT - .

Grading - per South Coast AQMD large operation requirements

Vehicle Trips - All trip numbers incorporated into City Park

Energy Use - All electrical consumption for Project included in Parking Lot kWh. total is provided by City and lighting contractor (Musco)/

Water And Wastewater - Defaults

Solid Waste - .

Construction Off-road Equipment Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	52.00
tblConstructionPhase	NumDays	35.00	78.00
tblConstructionPhase	NumDays	370.00	78.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.35	1.11
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02

tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	МН	1.0100e-003	1.0960e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblGrading	MaterialImported	0.00	58,500.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblTripsAndVMT	VendorTripNumber	151.00	5.00
tblTripsAndVMT	WorkerTripNumber	388.00	20.00

tblTripsAndVMT	WorkerTripNumber	78.00	15.00
tblVehicleTrips	ST_TR	22.75	193.37
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	SU_TR	16.74	137.51
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	WD_TR	1.89	34.09
tblVehicleTrips	WD_TR	5.04	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	lay							lb/d	ay		
2019	4.4417	45.6437	22.9603	0.0401	10.2634	2.3917	12.6551	5.8205	2.2004	8.0209	0.0000	3,976.407 8	3,976.4078	1.1987	0.0000	4,006.375 4
2020	7.8146	73.3634	36.2659	0.1378	7.9545	2.2442	10.1987	2.7306	2.0672	4.7978	0.0000	14,039.05 42	14,039.054 2	2.3707	0.0000	14,098.32 03
Maximum	7.8146	73.3634	36.2659	0.1378	10.2634	2.3917	12.6551	5.8205	2.2004	8.0209	0.0000	14,039.05 42	14,039.054 2	2.3707	0.0000	14,098.32 03

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	lay							lb/c	lay		
2019	4.4417	45.6437	22.9603	0.0401	4.1255	2.3917	6.5172	2.3025	2.2004	4.5029	0.0000	3,976.407 8	3,976.4078	1.1987	0.0000	4,006.375 4

2020	7.8146	73.3634	36.2659	0.1378	4.2395	2.2442	6.4837	1.3755	2.0672	3.4427	0.0000	14,039.05 42	14,039.054 2	2.3707	0.0000	14,098.32 03
Maximum	7.8146	73.3634	36.2659	0.1378	4.2395	2.3917	6.5172	2.3025	2.2004	4.5029	0.0000	14,039.05 42	14,039.054 2	2.3707	0.0000	14,098.32 03
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		
Area	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	6.6567	10.6179	77.5688	0.2081	19.6106	0.1481	19.7588	5.2236	0.1376	5.3612		20,835.16 10	20,835.161 0	0.8708		20,856.93 13
Total	6.9757	10.6182	77.6015	0.2081	19.6106	0.1483	19.7589	5.2236	0.1377	5.3613		20,835.23 07	20,835.230 7	0.8710	0.0000	20,857.00 56

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/d	lay		
Area	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mobile	6.6567	10.6179	77.5688	0.2081	19.6106	0.1481	19.7588	5.2236	0.137	76 5.3	612		835.16 10	20,835.161 0	0.8708		20,856.93 13
Total	6.9757	10.6182	77.6015	0.2081	19.6106	0.1483	19.7589	5.2236	0.137	77 5.3	613	20,	835.23 07	20,835.230 7	0.8710	0.0000	20,857.00 56
	ROG	N	Ox C	o s					gitive M2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-C	CO2 Total	CO2 CH	14 N2	20 CO2e
Percent Reduction	0.00	0.	.00 0	.00 0	.00 0.	00 0	.00 0.	00 0	0.00	0.00	0.00	0.00	0.00	0.0	0 0.0	0 0.0	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2019	12/31/2019	6	52	
2	Grading	Grading	1/1/2020	3/31/2020	6	78	
3	Building Construction	Building Construction	4/1/2020	6/30/2020	6	78	
4	Paving	Paving	7/1/2020	7/25/2020	6	22	
5	Architectural Coating	Architectural Coating	7/25/2020	8/19/2020	6	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 195

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 15,000; Non-Residential Outdoor: 5,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	7,313.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		

Fugitive Dust					10.0622	0.0000	10.0622	5.7671	0.0000	5.7671		0.0000		0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	3,766.452 9	3,766.4529	1.1917	3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	10.0622	2.3904	12.4526	5.7671	2.1991	7.9663	3,766.452 9	3,766.4529	1.1917	3,796.244 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0710	0.8973	2.1100e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		209.9549	209.9549	7.0400e- 003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		209.9549	209.9549	7.0400e- 003		210.1309

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					3.9243	0.0000	3.9243	2.2492	0.0000	2.2492			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.452 9	3,766.4529	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	3.9243	2.3904	6.3146	2.2492	2.1991	4.4483	0.0000	3,766.452 9	3,766.4529	1.1917		3,796.244 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1067	0.0710	0.8973	2.1100e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		209.9549	209.9549	7.0400e- 003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e- 003	0.2012	1.3500e- 003	0.2026	0.0534	1.2500e- 003	0.0546		209.9549	209.9549	7.0400e- 003		210.1309

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		
Fugitive Dust					6.0901	0.0000	6.0901	2.2215	0.0000	2.2215			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.8653	1.9424		6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	6.0901	2.1739	8.2640	2.2215	2.0000	4.2215		6,005.865 3	6,005.8653	1.9424		6,054.425 7

Unmitigated Construction Off-Site

Category					lb/d	lay							lb/c	lay	
Hauling	0.5824	23.0958	3.4081	0.0736	1.6408	0.0688	1.7096	0.4499	0.0658	0.5157	7	7,807.172 1	7,807.1721	0.4213	7,817.705
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	 0.0000
Worker	0.1092	0.0701	0.8995	2.2700e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606	2	226.0168	226.0168	6.9000e- 003	 226.1893
Total	0.6916	23.1659	4.3076	0.0758	1.8644	0.0703	1.9346	0.5092	0.0672	0.5763	8	3,033.188 9	8,033.1889	0.4282	8,043.894 6

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Fugitive Dust					2.3752	0.0000	2.3752	0.8664	0.0000	0.8664			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.8653	1.9424		6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	2.3752	2.1739	4.5491	0.8664	2.0000	2.8664	0.0000	6,005.865 3	6,005.8653	1.9424		6,054.425 7

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.5824	23.0958	3.4081	0.0736	1.6408	0.0688	1.7096	0.4499	0.0658	0.5157		7,807.172 1	7,807.1721	0.4213		7,817.705 3
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0701	0.8995	2.2700e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		226.0168	226.0168	6.9000e- 003		226.1893

Total	0.6916	23.1659	4.3076	0.0758	1.8644	0.0703	1.9346	0.5092	0.0672	0.5763	8,033.188	8,033.1889	0.4282	8,043.894
											9			6

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	ay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.0631	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.0631	0.6229		2,568.634 5

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0152	0.5276	0.1028	1.3600e- 003	0.0320	2.4300e- 003	0.0345	9.2200e- 003	2.3200e- 003	0.0115		143.0507	143.0507	9.2900e- 003		143.2830
Worker	0.1092	0.0701	0.8995	2.2700e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		226.0168	226.0168	6.9000e- 003		226.1893
Total	0.1243	0.5977	1.0023	3.6300e- 003	0.2556	3.8900e- 003	0.2595	0.0685	3.6700e- 003	0.0722		369.0675	369.0675	0.0162		369.4723

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	ay							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.0631	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.0631	0.6229		2,568.634 5

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/o	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0152	0.5276	0.1028	1.3600e- 003	0.0320	2.4300e- 003	0.0345	9.2200e- 003	2.3200e- 003	0.0115		143.0507	143.0507	9.2900e- 003		143.2830
Worker	0.1092	0.0701	0.8995	2.2700e- 003	0.2236	1.4600e- 003	0.2250	0.0593	1.3500e- 003	0.0606		226.0168	226.0168	6.9000e- 003		226.1893
Total	0.1243	0.5977	1.0023	3.6300e- 003	0.2556	3.8900e- 003	0.2595	0.0685	3.6700e- 003	0.0722		369.0675	369.0675	0.0162		369.4723

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		

Off-Road	1.3566	14.0656	14.6521	0.0228	0.7528	0.7528	0.6926	0.6926	2,207.733	2,207.7334	0.7140	2,225.584
									4			1
Paving	0.3216				0.0000	0.0000	0.0000	0.0000		0.0000		0.0000
Total	1.6781	14.0656	14.6521	0.0228	0.7528	0.7528	0.6926	0.6926	2,207.733	2,207.7334	0.7140	2,225.584
									4			1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		169.5126	169.5126	5.1700e- 003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		169.5126	169.5126	5.1700e- 003		169.6420

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	lay		
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.7334	0.7140		2,225.584 1
Paving	0.3216	0	0		0	0.0000	0.0000		0.0000	0.0000		δ	0.0000			0.0000
Total	1.6781	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.733 4	2,207.7334	0.7140		2,225.584 1

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		169.5126	169.5126	5.1700e- 003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		169.5126	169.5126	5.1700e- 003		169.6420

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Archit. Coating	5.7306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	5.9727	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Unmitigated Construction Off-Site

Category					lb/d	lay						lb/e	day	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455	169.5126	169.5126	5.1700e- 003	169.6420
Total	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455	169.5126	169.5126	5.1700e- 003	169.6420

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay				lb/c	lay					
Archit. Coating	5.7306					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	5.9727	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0819	0.0525	0.6746	1.7000e- 003	0.1677	1.1000e- 003	0.1688	0.0445	1.0100e- 003	0.0455		169.5126	169.5126	5.1700e- 003		169.6420

ľ	Total	0.0819	0.0525	0.6746	1.7000e-	0.1677	1.1000e-	0.1688	0.0445	1.0100e-	0.0455	169.5126	169.5126	5.1700e-	169.6420
I					003		003			003				003	
L															

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
Mitigated	6.6567	10.6179	77.5688	0.2081	19.6106	0.1481	19.7588	5.2236	0.1376	5.3612		20,835.16 10	20,835.161 0	0.8708		20,856.93 13
Unmitigated	6.6567	10.6179	77.5688	0.2081	19.6106	0.1481	19.7588	5.2236	0.1376	5.3612		20,835.16 10	20,835.161 0	0.8708		20,856.93 13

4.2 Trip Summary Information

	Avera	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	571.01	3,238.95	2303.29	3,451,929	3,451,929
Golf Course	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	571.01	3,238.95	2,303.29	3,451,929	3,451,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	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
City Park	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Golf Course	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Parking Lot	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	ay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	ay		

City Park	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
Golf Course	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	lay							lb/d	lay		
City Park	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
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	ay		

Mitigated	0.3	3190	3.0000e-	0.0326	0.0000	1.2000e-	1.2000e-	1.2000e-	1.2000e-	0.0697	0.0697	1.9000e-	0.0743
			004			004	004	004	004			004	
Unmitigated	0.3	3190	3.0000e-	0.0326	0.0000	1.2000e-	1.2000e-	1.2000e-	1.2000e-	0.0697	0.0697	1.9000e-	 0.0743
			004			004	004	004	004			004	

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	ay							lb/c	lay		
Architectural Coating	0.0345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2814					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e- 003	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Total	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/c	lay							lb/d	ay		
Architectural Coating	0.0345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2814					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0500e- 003	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743
Total	0.3190	3.0000e- 004	0.0326	0.0000		1.2000e- 004	1.2000e- 004		1.2000e- 004	1.2000e- 004		0.0697	0.0697	1.9000e- 004		0.0743

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
Number					
		Number Heat Input/Day	Number Heat Input/Day Heat Input/Year	Number Heat Input/Day Heat Input/Year Boiler Rating	Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type

Page 1 of 1

Colton Community Soccer Park - San Bernardino-South Coast County, Annual

Colton Community Soccer Park San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	300.00	Space	2.70	120,000.00	0
City Park	16.75	Acre	16.75	729,630.00	0
Golf Course	1.70	Acre	1.70	74,052.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Statewide Average				
CO2 Intensity (Ib/MWhr)	1001.57	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Statewide Average used because City of Colton is its own utility provide, and the CO2 IF is not available for the city.

Land Use - City Park- Synthetic Turf and rest of Park (children's play areas) Concession stand/police substation, restrooms included in City park Building Area SF Golf Course- Natural Turf

Construction Phase - ..

Trips and VMT - .

Grading - per South Coast AQMD large operation requirements

Vehicle Trips - All trip numbers incorporated into City Park

Energy Use - All electrical consumption for Project included in Parking Lot kWh. total is provided by City and lighting contractor (Musco)/

Water And Wastewater - Defaults

Solid Waste - .

Construction Off-road Equipment Mitigation - .

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	52.00
tblConstructionPhase	NumDays	35.00	78.00
tblConstructionPhase	NumDays	370.00	78.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblEnergyUse	LightingElect	0.35	1.11
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	HHD	0.06	1.0850e-003
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDA	0.55	0.60
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02

tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	LHD2	5.2670e-003	5.7160e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MCY	6.0000e-003	6.5110e-003
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	MH	1.0100e-003	1.0960e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	MHD	0.02	1.0850e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	OBUS	1.3480e-003	1.4630e-003
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	SBUS	8.1200e-004	8.8100e-004
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblFleetMix	UBUS	1.6070e-003	1.7440e-003
tblGrading	MaterialImported	0.00	58,500.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblGrading	MaterialMoistureContentBulldozing	7.90	12.00
tblTripsAndVMT	VendorTripNumber	151.00	5.00
tblTripsAndVMT	WorkerTripNumber	388.00	20.00

tblTripsAndVMT	WorkerTripNumber	78.00	15.00
tblVehicleTrips	ST_TR	22.75	193.37
tblVehicleTrips	ST_TR	5.82	0.00
tblVehicleTrips	SU_TR	16.74	137.51
tblVehicleTrips	SU_TR	5.88	0.00
tblVehicleTrips	WD_TR	1.89	34.09
tblVehicleTrips	WD_TR	5.04	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tons	s/yr							MT	/yr		
2019	0.1152	1.1869	0.5938	1.0400e- 003	0.2668	0.0622	0.3289	0.1513	0.0572	0.2085	0.0000	93.3785	93.3785	0.0283	0.0000	94.0849
2020	0.3735	3.8310	2.3038	6.8400e- 003	0.3224	0.1408	0.4632	0.1098	0.1306	0.2404	0.0000	623.5920	623.5920	0.1145	0.0000	626.4532
Maximum	0.3735	3.8310	2.3038	6.8400e- 003	0.3224	0.1408	0.4632	0.1513	0.1306	0.2404	0.0000	623.5920	623.5920	0.1145	0.0000	626.4532

Mitigated Construction

	ROG	NOx	СО	SO2	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	s/yr							MT	/yr		
2019	0.1152	1.1869	0.5938	1.0400e- 003	0.1072	0.0622	0.1694	0.0598	0.0572	0.1171	0.0000	93.3784	93.3784	0.0283	0.0000	94.0848

2020	0.3735	3.8310	2.3038	6.8400e- 003	0.1775	0.1408	0.3183	0.0569	0.1306	0.1875	0.0000	623.5916	623.5916	0.1145	0.0000	626.4528
Maximum	0.3735	3.8310	2.3038	6.8400e- 003	0.1775	0.1408	0.3183	0.0598	0.1306	0.1875	0.0000	623.5916	623.5916	0.1145	0.0000	626.4528
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.68	0.00	38.44	55.28	0.00	32.15	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	St	art Date	End	d Date	Maximu	ım Unmitiga	ated ROG +	NOX (tons	/quarter)	Maxir	num Mitiga	ted ROG + I	NOX (tons/q	uarter)		
1	11	-1-2019	1-3	1-2020			2.3545					2.3545				
2	2.	1-2020	4-3	0-2020			2.3058					2.3058				
3	5-	1-2020	7-3	1-2020			0.7694					0.7694				
4	8-	1-2020	9-3	0-2020			0.0634					0.0634				
				ghest			2.3545					2.3545				

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003				
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	60.5134	60.5134	1.7500e- 003	3.6000e- 004	60.6652				
Mobile	0.3704	0.7737	4.7059	0.0129	1.2969	9.9700e- 003	1.3069	0.3460	9.2700e- 003	0.3552	0.0000	1,175.336 5	1,175.3365	0.0510	0.0000	1,176.612 4				
Waste						0.0000	0.0000		0.0000	0.0000	0.6130	0.0000	0.6130	0.0362	0.0000	1.5188				
Water						0.0000	0.0000		0.0000	0.0000	0.0000	110.9545	110.9545	3.2100e- 003	6.6000e- 004	111.2328				
Total	0.4284	0.7738	4.7099	0.0129	1.2969	9.9800e- 003	1.3069	0.3460	9.2800e- 003	0.3553	0.6130	1,346.812 3	1,347.4253	0.0922	1.0200e- 003	1,350.037 6				

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category					ton	s/yr	·				MT/yr							
Area	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003		
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	60.5134	60.5134	1.7500e- 003	3.6000e- 004	60.6652		
Mobile	0.3704	0.7737	4.7059	0.0129	1.2969	9.9700e- 003	1.3069	0.3460	9.2700e- 003	0.3552	0.0000	1,175.336 5	1,175.3365	0.0510	0.0000	1,176.612 4		
Waste						0.0000	0.0000	0	0.0000	0.0000	0.6130	0.0000	0.6130	0.0362	0.0000	1.5188		
Water						0.0000	0.0000		0.0000	0.0000	0.0000	110.9545	110.9545	3.2100e- 003	6.6000e- 004	111.2328		
Total	0.4284	0.7738	4.7099	0.0129	1.2969	9.9800e- 003	1.3069	0.3460	9.2800e- 003	0.3553	0.6130	1,346.812 3	1,347.4253	0.0922	1.0200e- 003	1,350.037 6		
	ROG	N	Ox C	o s							2.5 Bio- tal	CO2 NBio	-CO2 Total	CO2 CI	14 N2	20 CO		
Percent Reduction	0.00	0	.00 0.	.00 0	0.00 0	.00 0	.00 0	.00 0	.00 0	.00 0.	00 0.	00 0.	0.0	0 0.0	0.0	00 0.		

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2019	12/31/2019	6	52	
2	Grading	Grading	1/1/2020	3/31/2020	6	78	
3	Building Construction	Building Construction	4/1/2020	6/30/2020	6	78	
4	Paving	Paving	7/1/2020	7/25/2020	6	22	
5	Architectural Coating	Architectural Coating	7/25/2020	8/19/2020	6	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 195

Acres of Paving: 2.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 15,000; Non-Residential Outdoor: 5,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	7,313.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	20.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.2616	0.0000	0.2616	0.1500	0.0000	0.1500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1127	1.1849	0.5736	9.9000e- 004		0.0622	0.0622		0.0572	0.0572	0.0000	88.8386	88.8386	0.0281	0.0000	89.5413
Total	0.1127	1.1849	0.5736	9.9000e- 004	0.2616	0.0622	0.3238	0.1500	0.0572	0.2071	0.0000	88.8386	88.8386	0.0281	0.0000	89.5413

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	s/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	2.5100e- 003	2.0500e- 003	0.0202	5.0000e- 005	5.1300e- 003	4.0000e- 005	5.1700e- 003	1.3600e- 003	3.0000e- 005	1.4000e- 003	0.0000	4.5399	4.5399	1.5000e- 004	0.0000	4.5437
Total	2.5100e- 003	2.0500e- 003	0.0202	5.0000e- 005	5.1300e- 003	4.0000e- 005	5.1700e- 003	1.3600e- 003	3.0000e- 005	1.4000e- 003	0.0000	4.5399	4.5399	1.5000e- 004	0.0000	4.5437

	ROG	NOx	CO	SO2	Fugitive 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	s/yr							MT	/yr		
Fugitive Dust					0.1020	0.0000	0.1020	0.0585	0.0000	0.0585	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1127	1.1849	0.5736	9.9000e- 004		0.0622	0.0622		0.0572	0.0572	0.0000	88.8385	88.8385	0.0281	0.0000	89.5412
Total	0.1127	1.1849	0.5736	9.9000e- 004	0.1020	0.0622	0.1642	0.0585	0.0572	0.1157	0.0000	88.8385	88.8385	0.0281	0.0000	89.5412

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/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	2.5100e- 003	2.0500e- 003	0.0202	5.0000e- 005	5.1300e- 003	4.0000e- 005	5.1700e- 003	1.3600e- 003	3.0000e- 005	1.4000e- 003	0.0000	4.5399	4.5399	1.5000e- 004	0.0000	4.5437
Total	2.5100e- 003	2.0500e- 003	0.0202	5.0000e- 005	5.1300e- 003	4.0000e- 005	5.1700e- 003	1.3600e- 003	3.0000e- 005	1.4000e- 003	0.0000	4.5399	4.5399	1.5000e- 004	0.0000	4.5437

3.3 Grading - 2020

Unmitigated Construction On-Site

Category					tons	s/yr							MT	/yr		
Fugitive Dust					0.2375	0.0000	0.2375	0.0866	0.0000	0.0866	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1736	1.9577	1.2464	2.4200e- 003		0.0848	0.0848		0.0780	0.0780	0.0000	212.4887	212.4887	0.0687	0.0000	214.2068
Total	0.1736	1.9577	1.2464	2.4200e- 003	0.2375	0.0848	0.3223	0.0866	0.0780	0.1646	0.0000	212.4887	212.4887	0.0687	0.0000	214.2068

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Hauling	0.0232	0.9236	0.1414	2.8400e- 003	0.0629	2.7000e- 003	0.0656	0.0173	2.5800e- 003	0.0199	0.0000	273.1944	273.1944	0.0155	0.0000	273.5812
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	3.8500e- 003	3.0300e- 003	0.0303	8.0000e- 005	8.5500e- 003	6.0000e- 005	8.6100e- 003	2.2700e- 003	5.0000e- 005	2.3200e- 003	0.0000	7.3306	7.3306	2.2000e- 004	0.0000	7.3361
Total	0.0270	0.9267	0.1716	2.9200e- 003	0.0715	2.7600e- 003	0.0742	0.0196	2.6300e- 003	0.0222	0.0000	280.5250	280.5250	0.0157	0.0000	280.9173

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Fugitive Dust					0.0926	0.0000	0.0926	0.0338	0.0000	0.0338	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1736	1.9577	1.2464	2.4200e- 003		0.0848	0.0848		0.0780	0.0780	0.0000	212.4885	212.4885	0.0687	0.0000	214.2066

Г	Total	0.1736	1.9577	1.2464	2.4200e-	0.0926	0.0848	0.1774	0.0338	0.0780	0.1118	0.0000	212.4885	212.4885	0.0687	0.0000	214.2066
					003												

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Hauling	0.0232	0.9236	0.1414	2.8400e- 003	0.0629	2.7000e- 003	0.0656	0.0173	2.5800e- 003	0.0199	0.0000	273.1944	273.1944	0.0155	0.0000	273.5812
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	3.8500e- 003	3.0300e- 003	0.0303	8.0000e- 005	8.5500e- 003	6.0000e- 005	8.6100e- 003	2.2700e- 003	5.0000e- 005	2.3200e- 003	0.0000	7.3306	7.3306	2.2000e- 004	0.0000	7.3361
Total	0.0270	0.9267	0.1716	2.9200e- 003	0.0715	2.7600e- 003	0.0742	0.0196	2.6300e- 003	0.0222	0.0000	280.5250	280.5250	0.0157	0.0000	280.9173

3.4 Building Construction - 2020

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	s/yr							MT	/yr		
Off-Road	0.0827	0.7483	0.6571	1.0500e- 003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3279	90.3279	0.0220	0.0000	90.8788
Total	0.0827	0.7483	0.6571	1.0500e- 003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3279	90.3279	0.0220	0.0000	90.8788

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/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	6.0000e- 004	0.0208	4.3500e- 003	5.0000e- 005	1.2300e- 003	1.0000e- 004	1.3200e- 003	3.5000e- 004	9.0000e- 005	4.5000e- 004	0.0000	4.9787	4.9787	3.4000e- 004	0.0000	4.9873
Worker	3.8500e- 003	3.0300e- 003	0.0303	8.0000e- 005	8.5500e- 003	6.0000e- 005	8.6100e- 003	2.2700e- 003	5.0000e- 005	2.3200e- 003	0.0000	7.3306	7.3306	2.2000e- 004	0.0000	7.3361
Total	4.4500e- 003	0.0239	0.0346	1.3000e- 004	9.7800e- 003	1.6000e- 004	9.9300e- 003	2.6200e- 003	1.4000e- 004	2.7700e- 003	0.0000	12.3093	12.3093	5.6000e- 004	0.0000	12.3234

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	s/yr							MT	/yr		
Off-Road	0.0827	0.7483	0.6571	1.0500e- 003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3278	90.3278	0.0220	0.0000	90.8787
Total	0.0827	0.7483	0.6571	1.0500e- 003		0.0436	0.0436		0.0410	0.0410	0.0000	90.3278	90.3278	0.0220	0.0000	90.8787

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/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	6.0000e-	0.0208	4.3500e-	5.0000e-	1.2300e-	1.0000e-	1.3200e-	3.5000e-	9.0000e-	4.5000e-	0.0000	4.9787	4.9787	3.4000e-	0.0000	4.9873
	004		003	005	003	004	003	004	005	004				004		
Worker	3.8500e-	3.0300e-	0.0303	8.0000e-	8.5500e-	6.0000e-	8.6100e-	2.2700e-	5.0000e-	2.3200e-	0.0000	7.3306	7.3306	2.2000e-	0.0000	7.3361
	003	003		005	003	005	003	003	005	003				004		
Total	4.4500e-	0.0239	0.0346	1.3000e-	9.7800e-	1.6000e-	9.9300e-	2.6200e-	1.4000e-	2.7700e-	0.0000	12.3093	12.3093	5.6000e-	0.0000	12.3234
	003			004	003	004	003	003	004	003				004		

3.5 Paving - 2020

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	s/yr							MT	/yr		
Off-Road	0.0149	0.1547	0.1612	2.5000e- 004		8.2800e- 003	8.2800e- 003		7.6200e- 003	7.6200e- 003	0.0000	22.0310	22.0310	7.1300e- 003	0.0000	22.2092
Paving	3.5400e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0185	0.1547	0.1612	2.5000e- 004		8.2800e- 003	8.2800e- 003		7.6200e- 003	7.6200e- 003	0.0000	22.0310	22.0310	7.1300e- 003	0.0000	22.2092

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519
Total	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519

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	s/yr							MT	/yr		
Off-Road	0.0149	0.1547	0.1612	2.5000e- 004		8.2800e- 003	8.2800e- 003		7.6200e- 003	7.6200e- 003	0.0000	22.0310	22.0310	7.1300e- 003	0.0000	22.2092
Paving	3.5400e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0185	0.1547	0.1612	2.5000e- 004		8.2800e- 003	8.2800e- 003		7.6200e- 003	7.6200e- 003	0.0000	22.0310	22.0310	7.1300e- 003	0.0000	22.2092

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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519
Total	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519

3.6 Architectural Coating - 2020

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	s/yr							MT	/yr		
Archit. Coating	0.0630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e- 003	0.0185	0.0202	3.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	2.8086	2.8086	2.2000e- 004	0.0000	2.8140
Total	0.0657	0.0185	0.0202	3.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	2.8086	2.8086	2.2000e- 004	0.0000	2.8140

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519
Total	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519

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	s/yr							MT	/yr		
Archit. Coating	0.0630					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.6600e- 003	0.0185	0.0202	3.0000e- 005	1.2200e- 003	1.2200e- 003	1.2200e- 003	1.2200e- 003	0.0000	2.8086	2.8086	2.2000e- 004	0.0000	2.8140
Total	0.0657	0.0185	0.0202	3.0000e- 005	1.2200e- 003	1.2200e- 003	1.2200e- 003	1.2200e- 003	0.0000	2.8086	2.8086	2.2000e- 004	0.0000	2.8140

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519
Total	8.2000e- 004	6.4000e- 004	6.4000e- 003	2.0000e- 005	1.8100e- 003	1.0000e- 005	1.8200e- 003	4.8000e- 004	1.0000e- 005	4.9000e- 004	0.0000	1.5507	1.5507	5.0000e- 005	0.0000	1.5519

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	/yr		
Mitigated	0.3704	0.7737	4.7059	0.0129	1.2969	9.9700e- 003	1.3069	0.3460	9.2700e- 003	0.3552	0.0000	1,175.336 5	1,175.3365	0.0510	0.0000	1,176.612 4
Unmitigated	0.3704	0.7737	4.7059	0.0129	1.2969	9.9700e- 003	1.3069	0.3460	9.2700e- 003	0.3552	0.0000	1,175.336 5	1,175.3365	0.0510	0.0000	1,176.612 4

4.2 Trip Summary Information

	Avera	age Daily Trip F	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	571.01	3,238.95	2303.29	3,451,929	3,451,929
Golf Course	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	571.01	3,238.95	2,303.29	3,451,929	3,451,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Golf Course	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Parking Lot	16.60	8.40	6.90	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
City Park	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Golf Course	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096
Parking Lot	0.596831	0.040287	0.194963	0.129640	0.018698	0.005716	0.001085	0.001085	0.001463	0.001744	0.006511	0.000881	0.001096

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive 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	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	60.5134	60.5134	1.7500e- 003	3.6000e- 004	60.6652
Electricity Unmitigated	0					0.0000	0.0000		0.0000	0.0000	0.0000	60.5134	60.5134	1.7500e- 003	3.6000e- 004	60.6652
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
City Park	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
Golf Course	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

	NaturalGa s 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		
City Park	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

Golf Course	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	 0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	133200	60.5134	1.7500e- 003	3.6000e- 004	60.6652
Total		60.5134	1.7500e- 003	3.6000e- 004	60.6652

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	Г/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	133200	60.5134	1.7500e- 003	3.6000e- 004	60.6652
Total		60.5134	1.7500e- 003	3.6000e- 004	60.6652

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	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003
Unmitigated	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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	6.3000e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0514		0			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e- 004	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003
Total	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003

	ROG	NOx	CO	SO2	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	s/yr							MT	/yr		
Architectural Coating	6.3000e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0514					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e- 004	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003
Total	0.0580	4.0000e- 005	4.0800e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.9000e- 003	7.9000e- 003	2.0000e- 005	0.0000	8.4300e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	110.9545	3.2100e- 003	6.6000e- 004	111.2328
Unmitigated	110.9545	3.2100e- 003	6.6000e- 004	111.2328

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	Г/yr	
City Park	0 / 19.9573	100.7310	2.9200e- 003	6.0000e- 004	100.9838
Golf Course	0 / 2.02552	10.2235	3.0000e- 004	6.0000e- 005	10.2491
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		110.9545	3.2200e- 003	6.6000e- 004	111.2329

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		M	Г/yr	
City Park	0 / 19.9573	100.7310	2.9200e- 003	6.0000e- 004	100.9838
Golf Course	0 / 2.02552	10.2235	3.0000e- 004	6.0000e- 005	10.2491
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		110.9545	3.2200e- 003	6.6000e- 004	111.2329

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	0.6130	0.0362	0.0000	1.5188
Unmitigated	0.6130	0.0362	0.0000	1.5188

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	Г/yr	
City Park	1.44	0.2923	0.0173	0.0000	0.7242
Golf Course	1.58	0.3207	0.0190	0.0000	0.7946
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.6130	0.0362	0.0000	1.5188

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		M	Г/yr	
City Park	1.44	0.2923	0.0173	0.0000	0.7242
Golf Course	1.58	0.3207	0.0190	0.0000	0.7946

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.6130	0.0362	0.0000	1.5188

9.0 Operational Offroad

-							
ſ	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	
Jser Defined Equipment						