

APPENDICES

IDA Criteria for Community Friendly Sports Lighting

IDA Evaluation of Proposed Stadium Lights

Air Quality Monitoring Results

Cultural Resources Records Search

Noise Study Ambient Noise Measurements



IDA Community Friendly Outdoor Sports Lighting

Lighting Performance Summary

Project: Hiram Johnson High School
Location: Sacramento, CA
Curfew: 11:00pm
Submitted: 14 April 22 - 8:46 AM PDT

Field: Football
 Field type: Football - Class IV
 Environmental Zone: E2

Applicable Lighting Standard

	Standard	Measured	Result
Meets IES or HS Standard	—	Yes	PASS

Applied BUG Analysis

	Standard	Measured	Result
Total Fixture Lumens	—	5,314,990 lumens	—
Backlight: Lumens	15% or less	0.87%	PASS
Backlight: Spill	2.0 lux or less	0.13 lux	PASS
Uplight: Lumens	8% or less	7.9%	PASS
Glare: Max Candela	1000 candela or less	941 candela	PASS
Glare: 80° - 90°	250 lumens	0 lumens	PASS

Lighting Performance Result

PASS



INTERNATIONAL DARK-SKY ASSOCIATION

IDA-Criteria for Community-Friendly Outdoor Sports Lighting v1.1

1. Compliance with all applicable Codes and Standards (e.g. Underwriter Laboratories, CEC, National Building Codes with Local Amendments)
2. **Target Illumination** – Measured on-field illuminance values appropriate for the application per IESNA RP-6-15 Sports and Recreational Area Lighting criteria CIE: 057-1983 together with modeled initial illuminance targets. To limit over-lighting, the design may vary by no more than 10% above the average target illuminance levels for each Class.
3. A modified approach to controlling backlight, uplight, and glare is applied with the following metrics:
 - A. **Backlight** – Directionality and application efficiency will be addressed indirectly through two methods that quantify off-site performance, one using the design luminance and another using measured illuminance. Backlight criteria will be difficult to meet without sufficient and appropriate setback of sports fields from the property line.
 - a. Total designed lumens not contained within the area encompassing the field perimeter and an area immediately adjacent to that area that has a 33 foot (10 meter) offset. As modeled, no more than 15% of the total lumens may be outside of this region.
 - b. Measured spill illuminance values, as measured with the light meter aimed in the direction of the brightest reading, shall not exceed criteria for the respective Environmental Zone nor shall it exceed the maximum initial spill illuminance values as modeled and specified in the design process. These measurements shall be taken a distance equal to 150' (45 meters) beyond the edge of the field. Measurements should be conducted with and without the facility lighting operating so that the sports facility lighting can be isolated from other natural and artificial light sources. For fields demanding higher illuminance levels and taller poles, the distance at which compliance is evaluated shall be 150' beyond the edge of the field or one pole height distance from the field, whichever is greater. If access to the 150' distance perimeter is inaccessible, The field should be evaluated from representative locations as practicable.

B. **Uplight** – All luminaires must be designed such as to not emit direct light above the horizon, unless required for the activity (i.e. aerial sports) being played. In those cases, only 8% of the total (directly) applied lumens as modeled may be in this zone. For fields that have multiple kinds of sports, those not requiring aerial illumination, e.g. baseball, soft ball, the uplight component must not be active, turned off, or otherwise detectable. For modeling purposes, a horizontal ceiling grid shall be placed 5 feet (1.5 meters) above the top of the tallest pole, extending out to 150 feet (45 meters) beyond the edge of the field to determine compliance. Installation shall not deviate from the design.

C. **Glare** – Modeled luminous intensity from any luminaire for any viewing angle at 5' above grade level, at a distance equal to 150' beyond the edge of the field shall not exceed 1000 candela (absolute). For fields demanding higher illuminance levels and taller poles, the distance at which compliance is evaluated shall be 150' beyond the edge of the field or one pole height distance from the field, whichever is greater. If access to the 150' distance perimeter is inaccessible, The field should be evaluated from representative locations as practicable. This shall be verified through a luminaire photometric report and aiming summary report and visual inspection, or through an equivalent software application and visual inspection. CIE 150-2017

4. **Lighting Zoning** – Community-Friendly Outdoor Sports Lighting will only be certified if located in IES environmental zones E2 through E4, CIE E1 through E4, or MLO lighting zone LZ1 through LZ4. Areas especially sensitive to lighting such as E1 or LZ0 are not appropriate for this award program.

5. **Controls** – Provide advanced controls and documentation for the following:

- a. Automatic and/or remote control system via smartphone apps, or direct remote communication to the company facility responsible for handling the lighting controls, to enforce shut-off at locally established curfew time, not to be later than 11:00 PM (2300 hrs).
- b. On-site manual and/or remote control system shall also be provided to allow for the lights to be turned on or off at will (before curfew) to assure that only active sports fields are lighted.
- c. Provide readily accessible controls to implement uniform and variable adaptive illumination levels for different task lighting needs on field, e.g. class of play, competition athletics, band practice, striping, mowing, sports practice, etc.

Adaptive dimming shall be possible across the range of 25% to 100% of full illumination.²

- d. A formal policy defining the appropriate level of illumination necessary for the specific activities and curfew times must be established and enforced. A copy of the policy will be included in the application for the Award of Excellence.
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6. **Other Lighting** – The installed field lighting is not to be used for illuminating other area tasks. For example, if parking and concession areas lighting is desired, those areas shall be illuminated by separate luminaires and systems not associated with sports field illuminance needs. Other outdoor lighting at the site must, at a minimum, meet the lighting standards and lighting codes established by the community, and demonstrate how they are consistent with IDAs Values-Centered Lighting Policy.

References - List of References Standards

CIE 150 link:

https://www.techstreet.com/cie/standards/cie-150-2017?gateway_code=cie&product_id=1997388

CIE 057-1983 Lighting for football:

https://www.techstreet.com/cie/standards/cie-057-1983?product_id=1209990

Ref IES tm-15, LM-79, CIE: S 025, CIE: 126, CIE: 150-2017, CIE: 057-1983

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Hiram Johnson Sport Fields Improvements
Sacramento Metropolitan AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.92	1000sqft	0.04	1,920.00	0
City Park	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 14 acres of play fields of which approximately 5 acres is currently developed with artificial turf and will not be graded. Includes a 2 portable restroom and concession stand buildings each 960 sf in size for a total building square footage of 1,920 sf.

Construction Phase - Modular building unit

Demolition -

Energy Use -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
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2.0 Emissions Summary

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6973	38.8801	29.6330		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,828.2255	6,828.2255	1.9486	0.3835	6,960.7858
2023	2.6426	19.7846	25.2809		2.7366	0.7382	3.4748	0.7405	0.6948	1.4353	0.0000	6,699.2929	6,699.2929	0.7169	0.3686	6,827.0360
Maximum	3.6973	38.8801	29.6330		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,828.2255	6,828.2255	1.9486	0.3835	6,960.7858

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6973	38.8801	29.6330		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,828.2255	6,828.2255	1.9486	0.3835	6,960.7858
2023	2.6426	19.7846	25.2809		2.7366	0.7382	3.4748	0.7405	0.6948	1.4353	0.0000	6,699.2929	6,699.2929	0.7169	0.3686	6,827.0360
Maximum	3.6973	38.8801	29.6330		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,828.2255	6,828.2255	1.9486	0.3835	6,960.7858

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Energy	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Mobile	0.1548	0.1336	1.0869		0.2092	1.6200e-003	0.2109	0.0558	1.5100e-003	0.0573		220.6325	220.6325	0.0147	0.0105	224.1156
Total	0.2355	0.1418	1.0954		0.2092	2.2500e-003	0.2115	0.0558	2.1400e-003	0.0579		230.4327	230.4327	0.0149	0.0106	233.9743

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Energy	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Mobile	0.1548	0.1336	1.0869		0.2092	1.6200e-003	0.2109	0.0558	1.5100e-003	0.0573		220.6325	220.6325	0.0147	0.0105	224.1156
Total	0.2355	0.1418	1.0954		0.2092	2.2500e-003	0.2115	0.0558	2.1400e-003	0.0579		230.4327	230.4327	0.0149	0.0106	233.9743

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/28/2022	5/25/2022	5	20	
2	Site Preparation	Site Preparation	5/26/2022	6/8/2022	5	10	
3	Grading	Grading	6/9/2022	7/20/2022	5	30	
4	Building Construction	Building Construction	7/21/2022	9/13/2023	5	300	
5	Paving	Paving	9/14/2023	10/11/2023	5	20	
6	Architectural Coating	Architectural Coating	10/12/2023	11/8/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,880; Non-Residential Outdoor: 960; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	275.00	107.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0275	0.4436		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		109.6128	109.6128	3.2500e-003	2.8300e-003	110.5382
Total	0.0544	0.0275	0.4436		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		109.6128	109.6128	3.2500e-003	2.8300e-003	110.5382

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0544	0.0275	0.4436		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		109.6128	109.6128	3.2500e-003	2.8300e-003	110.5382
Total	0.0544	0.0275	0.4436		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		109.6128	109.6128	3.2500e-003	2.8300e-003	110.5382

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978			1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978		19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.0619	3,686.0619	1.1922		3,715.8655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0652	0.0329	0.5324		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		131.5353	131.5353	3.9000e-003	3.4000e-003	132.6458
Total	0.0652	0.0329	0.5324		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		131.5353	131.5353	3.9000e-003	3.4000e-003	132.6458

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978			1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978		19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0652	0.0329	0.5324		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		131.5353	131.5353	3.9000e-003	3.4000e-003	132.6458
Total	0.0652	0.0329	0.5324		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		131.5353	131.5353	3.9000e-003	3.4000e-003	132.6458

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415			1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415		9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0725	0.0366	0.5915		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		146.1503	146.1503	4.3400e-003	3.7800e-003	147.3843
Total	0.0725	0.0366	0.5915		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		146.1503	146.1503	4.3400e-003	3.7800e-003	147.3843

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415			1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415		9.2036	1.6349	10.8385	3.6538	1.5041	5.1579	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0725	0.0366	0.5915		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		146.1503	146.1503	4.3400e-003	3.7800e-003	147.3843
Total	0.0725	0.0366	0.5915		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		146.1503	146.1503	4.3400e-003	3.7800e-003	147.3843

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.2315	5.8284	1.7548		0.6447	0.0566	0.7013	0.1856	0.0542	0.2397		2,264.3248	2,264.3248	0.0592	0.3316	2,364.6199
Worker	0.9964	0.5032	8.1334		2.0919	0.0114	2.1033	0.5549	0.0105	0.5654		2,009.5671	2,009.5671	0.0596	0.0519	2,026.5337
Total	1.2279	6.3316	9.8882		2.7367	0.0680	2.8046	0.7405	0.0646	0.8051		4,273.8919	4,273.8919	0.1188	0.3835	4,391.1536

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2315	5.8284	1.7548		0.6447	0.0566	0.7013	0.1856	0.0542	0.2397		2,264.3248	2,264.3248	0.0592	0.3316	2,364.6199
Worker	0.9964	0.5032	8.1334		2.0919	0.0114	2.1033	0.5549	0.0105	0.5654		2,009.5671	2,009.5671	0.0596	0.0519	2,026.5337
Total	1.2279	6.3316	9.8882		2.7367	0.0680	2.8046	0.7405	0.0646	0.8051		4,273.8919	4,273.8919	0.1188	0.3835	4,391.1536

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.1432	4.9545	1.5424		0.6447	0.0277	0.6723	0.1856	0.0265	0.2120		2,186.9111	2,186.9111	0.0541	0.3206	2,283.7922
Worker	0.9267	0.4452	7.4945		2.0919	0.0108	2.1027	0.5549	9.9300e-003	0.5648		1,957.1719	1,957.1719	0.0537	0.0481	1,972.8377
Total	1.0698	5.3998	9.0369		2.7366	0.0384	2.7750	0.7405	0.0364	0.7768		4,144.0830	4,144.0830	0.1078	0.3686	4,256.6299

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1432	4.9545	1.5424		0.6447	0.0277	0.6723	0.1856	0.0265	0.2120		2,186.9111	2,186.9111	0.0541	0.3206	2,283.7922
Worker	0.9267	0.4452	7.4945		2.0919	0.0108	2.1027	0.5549	9.9300e-003	0.5648		1,957.1719	1,957.1719	0.0537	0.0481	1,972.8377
Total	1.0698	5.3998	9.0369		2.7366	0.0384	2.7750	0.7405	0.0364	0.7768		4,144.0830	4,144.0830	0.1078	0.3686	4,256.6299

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0505	0.0243	0.4088		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		106.7548	106.7548	2.9300e-003	2.6200e-003	107.6093
Total	0.0505	0.0243	0.4088		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		106.7548	106.7548	2.9300e-003	2.6200e-003	107.6093

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0505	0.0243	0.4088		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		106.7548	106.7548	2.9300e-003	2.6200e-003	107.6093
Total	0.0505	0.0243	0.4088		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		106.7548	106.7548	2.9300e-003	2.6200e-003	107.6093

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.8899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	1.0816	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1853	0.0891	1.4989		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		391.4344	391.4344	0.0107	9.6100e-003	394.5676
Total	0.1853	0.0891	1.4989		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		391.4344	391.4344	0.0107	9.6100e-003	394.5676

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.8899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	1.0816	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1853	0.0891	1.4989		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		391.4344	391.4344	0.0107	9.6100e-003	394.5676
Total	0.1853	0.0891	1.4989		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		391.4344	391.4344	0.0107	9.6100e-003	394.5676

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1548	0.1336	1.0869		0.2092	1.6200e-003	0.2109	0.0558	1.5100e-003	0.0573		220.6325	220.6325	0.0147	0.0105	224.1156
Unmitigated	0.1548	0.1336	1.0869		0.2092	1.6200e-003	0.2109	0.0558	1.5100e-003	0.0573		220.6325	220.6325	0.0147	0.0105	224.1156

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	11.70	29.40	32.85	31,825	31,825
General Office Building	18.70	4.24	1.34	29,233	29,233
Total	30.40	33.64	34.19	61,059	61,059

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	10.00	5.00	6.50	33.00	48.00	19.00	66	28	6
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351
City Park	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
NaturalGas Unmitigated	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
General Office Building	83.2701	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Total		9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
General Office Building	0.0832701	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Total		9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

6.0 Area Detail

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Unmitigated	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.8800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Total	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.8800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.7000e-003	3.7000e-003	1.0000e-005	3.9400e-003
Total	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.7000e-003	3.7000e-003	1.0000e-005	3.9400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

Equipment Type	Number
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11.0 Vegetation

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Hiram Johnson Sport Fields Improvements
Sacramento Metropolitan AQMD Air District, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.92	1000sqft	0.04	1,920.00	0
City Park	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 14 acres of play fields of which approximately 5 acres is currently developed with artificial turf and will not be graded. Includes a 2 portable restroom and concession stand buildings each 960 sf in size for a total building square footage of 1,920 sf.

Construction Phase - Modular building unit

Demolition -

Energy Use -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
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2.0 Emissions Summary

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6889	38.8884	29.5539		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,605.290 2	6,605.290 2	1.9492	0.3918	6,740.511 2
2023	2.5319	20.2562	24.3839		2.7366	0.7385	3.4751	0.7405	0.6951	1.4356	0.0000	6,484.653 3	6,484.653 3	0.7235	0.3765	6,614.927 1
Maximum	3.6889	38.8884	29.5539		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,605.290 2	6,605.290 2	1.9492	0.3918	6,740.511 2

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.6889	38.8884	29.5539		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,605.290 2	6,605.290 2	1.9492	0.3918	6,740.511 2
2023	2.5319	20.2562	24.3839		2.7366	0.7385	3.4751	0.7405	0.6951	1.4356	0.0000	6,484.653 3	6,484.653 3	0.7235	0.3765	6,614.927 1
Maximum	3.6889	38.8884	29.5539		19.7939	1.6357	21.4073	10.1388	1.5049	11.6230	0.0000	6,605.290 2	6,605.290 2	1.9492	0.3918	6,740.511 2

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Energy	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Mobile	0.1179	0.1545	1.1035		0.2092	1.6200e-003	0.2109	0.0558	1.5200e-003	0.0573		201.9781	201.9781	0.0170	0.0115	205.8152
Total	0.1986	0.1627	1.1121		0.2092	2.2500e-003	0.2115	0.0558	2.1500e-003	0.0579		211.7783	211.7783	0.0172	0.0116	215.6738

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Energy	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Mobile	0.1179	0.1545	1.1035		0.2092	1.6200e-003	0.2109	0.0558	1.5200e-003	0.0573		201.9781	201.9781	0.0170	0.0115	205.8152
Total	0.1986	0.1627	1.1121		0.2092	2.2500e-003	0.2115	0.0558	2.1500e-003	0.0579		211.7783	211.7783	0.0172	0.0116	215.6738

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/28/2022	5/25/2022	5	20	
2	Site Preparation	Site Preparation	5/26/2022	6/8/2022	5	10	
3	Grading	Grading	6/9/2022	7/20/2022	5	30	
4	Building Construction	Building Construction	7/21/2022	9/13/2023	5	300	
5	Paving	Paving	9/14/2023	10/11/2023	5	20	
6	Architectural Coating	Architectural Coating	10/12/2023	11/8/2023	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,880; Non-Residential Outdoor: 960; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	275.00	107.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0337	0.3843		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		97.4671	97.4671	3.7200e-003	3.2500e-003	98.5290
Total	0.0480	0.0337	0.3843		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		97.4671	97.4671	3.7200e-003	3.2500e-003	98.5290

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941			1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0480	0.0337	0.3843		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		97.4671	97.4671	3.7200e-003	3.2500e-003	98.5290
Total	0.0480	0.0337	0.3843		0.1141	6.2000e-004	0.1147	0.0303	5.7000e-004	0.0308		97.4671	97.4671	3.7200e-003	3.2500e-003	98.5290

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978			1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978		19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.0619	3,686.0619	1.1922		3,715.8655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0404	0.4612		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		116.9605	116.9605	4.4700e-003	3.9000e-003	118.2347
Total	0.0576	0.0404	0.4612		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		116.9605	116.9605	4.4700e-003	3.9000e-003	118.2347

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978			1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978		19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0404	0.4612		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		116.9605	116.9605	4.4700e-003	3.9000e-003	118.2347
Total	0.0576	0.0404	0.4612		0.1369	7.4000e-004	0.1377	0.0363	6.8000e-004	0.0370		116.9605	116.9605	4.4700e-003	3.9000e-003	118.2347

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415			1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415		9.2036	1.6349	10.8385	3.6538	1.5041	5.1579		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0640	0.0449	0.5124		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		129.9561	129.9561	4.9700e-003	4.3300e-003	131.3719
Total	0.0640	0.0449	0.5124		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		129.9561	129.9561	4.9700e-003	4.3300e-003	131.3719

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415			1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415		9.2036	1.6349	10.8385	3.6538	1.5041	5.1579	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0640	0.0449	0.5124		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		129.9561	129.9561	4.9700e-003	4.3300e-003	131.3719
Total	0.0640	0.0449	0.5124		0.1521	8.3000e-004	0.1530	0.0404	7.6000e-004	0.0411		129.9561	129.9561	4.9700e-003	4.3300e-003	131.3719

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

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	0.2276	6.2599	1.8324		0.6447	0.0570	0.7017	0.1856	0.0545	0.2401		2,264.0606	2,264.0606	0.0590	0.3322	2,364.5149
Worker	0.8804	0.6178	7.0455		2.0919	0.0114	2.1033	0.5549	0.0105	0.5654		1,786.8960	1,786.8960	0.0683	0.0596	1,806.3641
Total	1.1080	6.8777	8.8779		2.7367	0.0684	2.8050	0.7405	0.0650	0.8055		4,050.9566	4,050.9566	0.1273	0.3918	4,170.8790

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634			0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2276	6.2599	1.8324		0.6447	0.0570	0.7017	0.1856	0.0545	0.2401		2,264.0606	2,264.0606	0.0590	0.3322	2,364.5149
Worker	0.8804	0.6178	7.0455		2.0919	0.0114	2.1033	0.5549	0.0105	0.5654		1,786.8960	1,786.8960	0.0683	0.0596	1,806.3641
Total	1.1080	6.8777	8.8779		2.7367	0.0684	2.8050	0.7405	0.0650	0.8055		4,050.9566	4,050.9566	0.1273	0.3918	4,170.8790

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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	0.1384	5.3250	1.6126		0.6447	0.0280	0.6726	0.1856	0.0268	0.2123		2,188.4785	2,188.4785	0.0538	0.3213	2,285.5823
Worker	0.8207	0.5463	6.5273		2.0919	0.0108	2.1027	0.5549	9.9300e-003	0.5648		1,740.9649	1,740.9649	0.0619	0.0551	1,758.9387
Total	0.9591	5.8713	8.1399		2.7366	0.0388	2.7753	0.7405	0.0367	0.7771		3,929.4434	3,929.4434	0.1157	0.3765	4,044.5211

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440			0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1384	5.3250	1.6126		0.6447	0.0280	0.6726	0.1856	0.0268	0.2123		2,188.4785	2,188.4785	0.0538	0.3213	2,285.5823
Worker	0.8207	0.5463	6.5273		2.0919	0.0108	2.1027	0.5549	9.9300e-003	0.5648		1,740.9649	1,740.9649	0.0619	0.0551	1,758.9387
Total	0.9591	5.8713	8.1399		2.7366	0.0388	2.7753	0.7405	0.0367	0.7771		3,929.4434	3,929.4434	0.1157	0.3765	4,044.5211

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0448	0.0298	0.3560		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		94.9617	94.9617	3.3700e-003	3.0100e-003	95.9421
Total	0.0448	0.0298	0.3560		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		94.9617	94.9617	3.3700e-003	3.0100e-003	95.9421

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842			0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0448	0.0298	0.3560		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		94.9617	94.9617	3.3700e-003	3.0100e-003	95.9421
Total	0.0448	0.0298	0.3560		0.1141	5.9000e-004	0.1147	0.0303	5.4000e-004	0.0308		94.9617	94.9617	3.3700e-003	3.0100e-003	95.9421

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.8899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	1.0816	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1641	0.1093	1.3055		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		348.1930	348.1930	0.0124	0.0110	351.7878
Total	0.1641	0.1093	1.3055		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		348.1930	348.1930	0.0124	0.0110	351.7878

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.8899					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	1.0816	1.3030	1.8111			0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1641	0.1093	1.3055		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		348.1930	348.1930	0.0124	0.0110	351.7878
Total	0.1641	0.1093	1.3055		0.4184	2.1600e-003	0.4205	0.1110	1.9900e-003	0.1130		348.1930	348.1930	0.0124	0.0110	351.7878

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1179	0.1545	1.1035		0.2092	1.6200e-003	0.2109	0.0558	1.5200e-003	0.0573		201.9781	201.9781	0.0170	0.0115	205.8152
Unmitigated	0.1179	0.1545	1.1035		0.2092	1.6200e-003	0.2109	0.0558	1.5200e-003	0.0573		201.9781	201.9781	0.0170	0.0115	205.8152

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	11.70	29.40	32.85	31,825	31,825
General Office Building	18.70	4.24	1.34	29,233	29,233
Total	30.40	33.64	34.19	61,059	61,059

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	10.00	5.00	6.50	33.00	48.00	19.00	66	28	6
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351
City Park	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
NaturalGas Unmitigated	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
General Office Building	83.2701	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Total		9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
General Office Building	0.0832701	9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547
Total		9.0000e-004	8.1600e-003	6.8600e-003			6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		9.7965	9.7965	1.9000e-004	1.8000e-004	9.8547

6.0 Area Detail

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Unmitigated	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.8800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003
Total	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7000e-003	3.7000e-003	1.0000e-005		3.9400e-003

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.8800e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0748					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.7000e-003	3.7000e-003	1.0000e-005	3.9400e-003
Total	0.0798	2.0000e-005	1.7200e-003			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			3.7000e-003	3.7000e-003	1.0000e-005	3.9400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Hiram Johnson Sport Fields Improvements
Sacramento Metropolitan AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.92	1000sqft	0.04	1,920.00	0
City Park	15.00	Acre	15.00	653,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 14 acres of play fields of which approximately 5 acres is currently developed with artificial turf and will not be graded. Includes a 2 portable restroom and concession stand buildings each 960 sf in size for a total building square footage of 1,920 sf.

Construction Phase - Modular building unit

Demolition -

Energy Use -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
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2.0 Emissions Summary

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2610	2.3114	2.2213		0.3951	0.0964	0.4915	0.1484	0.0899	0.2383	0.0000	488.7916	488.7916	0.0805	0.0206	496.9544
2023	0.2520	1.9543	2.3971		0.2473	0.0734	0.3207	0.0671	0.0690	0.1361	0.0000	568.6422	568.6422	0.0664	0.0310	579.5395
Maximum	0.2610	2.3114	2.3971		0.3951	0.0964	0.4915	0.1484	0.0899	0.2383	0.0000	568.6422	568.6422	0.0805	0.0310	579.5395

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2610	2.3114	2.2213		0.3951	0.0964	0.4915	0.1484	0.0899	0.2383	0.0000	488.7913	488.7913	0.0805	0.0206	496.9541
2023	0.2520	1.9543	2.3971		0.2473	0.0734	0.3207	0.0671	0.0690	0.1361	0.0000	568.6419	568.6419	0.0664	0.0310	579.5392
Maximum	0.2610	2.3114	2.3971		0.3951	0.0964	0.4915	0.1484	0.0899	0.2383	0.0000	568.6419	568.6419	0.0805	0.0310	579.5392

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-28-2022	7-27-2022	1.1670	1.1670
2	7-28-2022	10-27-2022	0.8216	0.8216
3	10-28-2022	1-27-2023	0.8072	0.8072
4	1-28-2023	4-27-2023	0.7290	0.7290
5	4-28-2023	7-27-2023	0.7289	0.7289
6	7-28-2023	9-30-2023	0.4531	0.4531
		Highest	1.1670	1.1670

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	6.9250	6.9250	5.2000e-004	9.0000e-005	6.9645
Mobile	0.0137	0.0162	0.1142		0.0226	1.8000e-004	0.0228	6.0500e-003	1.7000e-004	6.2200e-003	0.0000	20.8731	20.8731	1.5800e-003	1.1000e-003	21.2415
Waste						0.0000	0.0000		0.0000	0.0000	0.6252	0.0000	0.6252	0.0370	0.0000	1.5489
Water						0.0000	0.0000		0.0000	0.0000	0.1207	10.5521	10.6728	1.3900e-003	3.8000e-004	10.8209
Total	0.0284	0.0177	0.1157		0.0226	2.9000e-004	0.0229	6.0500e-003	2.8000e-004	6.3300e-003	0.7459	38.3506	39.0965	0.0404	1.5700e-003	40.5763

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	6.9250	6.9250	5.2000e-004	9.0000e-005	6.9645
Mobile	0.0137	0.0162	0.1142		0.0226	1.8000e-004	0.0228	6.0500e-003	1.7000e-004	6.2200e-003	0.0000	20.8731	20.8731	1.5800e-003	1.1000e-003	21.2415
Waste						0.0000	0.0000		0.0000	0.0000	0.6252	0.0000	0.6252	0.0370	0.0000	1.5489
Water						0.0000	0.0000		0.0000	0.0000	0.1207	10.5521	10.6728	1.3900e-003	3.8000e-004	10.8209
Total	0.0284	0.0177	0.1157		0.0226	2.9000e-004	0.0229	6.0500e-003	2.8000e-004	6.3300e-003	0.7459	38.3506	39.0965	0.0404	1.5700e-003	40.5763

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/28/2022	5/25/2022	5	20	
2	Site Preparation	Site Preparation	5/26/2022	6/8/2022	5	10	
3	Grading	Grading	6/9/2022	7/20/2022	5	30	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	7/21/2022	9/13/2023	5	300
5	Paving	Paving	9/14/2023	10/11/2023	5	20
6	Architectural Coating	Architectural Coating	10/12/2023	11/8/2023	5	20

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,880; Non-Residential Outdoor: 960; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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

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Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	275.00	107.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0264	0.2572	0.2059			0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059			0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	4.6000e-004	3.0000e-004	3.7800e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9072	0.9072	3.0000e-005	3.0000e-005	0.9161
Total	4.6000e-004	3.0000e-004	3.7800e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9072	0.9072	3.0000e-005	3.0000e-005	0.9161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0264	0.2572	0.2059			0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059			0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	4.6000e-004	3.0000e-004	3.7800e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9072	0.9072	3.0000e-005	3.0000e-005	0.9161
Total	4.6000e-004	3.0000e-004	3.7800e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9072	0.9072	3.0000e-005	3.0000e-005	0.9161

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985			8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985		0.0983	8.0600e-003	0.1064	0.0505	7.4200e-003	0.0579	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.8000e-004	1.8000e-004	2.2700e-003		6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5443	0.5443	2.0000e-005	2.0000e-005	0.5496
Total	2.8000e-004	1.8000e-004	2.2700e-003		6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5443	0.5443	2.0000e-005	2.0000e-005	0.5496

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985			8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985		0.0983	8.0600e-003	0.1064	0.0505	7.4200e-003	0.0579	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	2.8000e-004	1.8000e-004	2.2700e-003		6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5443	0.5443	2.0000e-005	2.0000e-005	0.5496
Total	2.8000e-004	1.8000e-004	2.2700e-003		6.6000e-004	0.0000	6.6000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5443	0.5443	2.0000e-005	2.0000e-005	0.5496

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356			0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356		0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	9.2000e-004	6.0000e-004	7.5700e-003		2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.8143	1.8143	6.0000e-005	5.0000e-005	1.8321
Total	9.2000e-004	6.0000e-004	7.5700e-003		2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.8143	1.8143	6.0000e-005	5.0000e-005	1.8321

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356			0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0544	0.5827	0.4356		0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	9.2000e-004	6.0000e-004	7.5700e-003		2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.8143	1.8143	6.0000e-005	5.0000e-005	1.8321
Total	9.2000e-004	6.0000e-004	7.5700e-003		2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.8143	1.8143	6.0000e-005	5.0000e-005	1.8321

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0998	0.9135	0.9573			0.0473	0.0473		0.0445	0.0445	0.0000	135.5593	135.5593	0.0325	0.0000	136.3712
Total	0.0998	0.9135	0.9573			0.0473	0.0473		0.0445	0.0445	0.0000	135.5593	135.5593	0.0325	0.0000	136.3712

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.3593	0.1046		0.0367	3.3200e-003	0.0400	0.0106	3.1800e-003	0.0138	0.0000	120.1620	120.1620	3.1400e-003	0.0176	125.4900
Worker	0.0496	0.0323	0.4058		0.1182	6.6000e-004	0.1188	0.0314	6.1000e-004	0.0320	0.0000	97.2928	97.2928	3.3200e-003	2.9300e-003	98.2483
Total	0.0629	0.3915	0.5104		0.1548	3.9800e-003	0.1588	0.0420	3.7900e-003	0.0458	0.0000	217.4548	217.4548	6.4600e-003	0.0206	223.7383

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0998	0.9135	0.9573			0.0473	0.0473		0.0445	0.0445	0.0000	135.5591	135.5591	0.0325	0.0000	136.3710
Total	0.0998	0.9135	0.9573			0.0473	0.0473		0.0445	0.0445	0.0000	135.5591	135.5591	0.0325	0.0000	136.3710

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.3593	0.1046		0.0367	3.3200e-003	0.0400	0.0106	3.1800e-003	0.0138	0.0000	120.1620	120.1620	3.1400e-003	0.0176	125.4900
Worker	0.0496	0.0323	0.4058		0.1182	6.6000e-004	0.1188	0.0314	6.1000e-004	0.0320	0.0000	97.2928	97.2928	3.3200e-003	2.9300e-003	98.2483
Total	0.0629	0.3915	0.5104		0.1548	3.9800e-003	0.1588	0.0420	3.7900e-003	0.0458	0.0000	217.4548	217.4548	6.4600e-003	0.0206	223.7383

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1439	1.3162	1.4863			0.0640	0.0640		0.0603	0.0603	0.0000	212.1013	212.1013	0.0505	0.0000	213.3627
Total	0.1439	1.3162	1.4863			0.0640	0.0640		0.0603	0.0603	0.0000	212.1013	212.1013	0.0505	0.0000	213.3627

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0128	0.4772	0.1439		0.0573	2.5400e-003	0.0599	0.0166	2.4300e-003	0.0190	0.0000	181.5837	181.5837	4.4800e-003	0.0266	189.6356
Worker	0.0722	0.0446	0.5866		0.1848	9.9000e-004	0.1858	0.0492	9.1000e-004	0.0501	0.0000	148.2527	148.2527	4.6900e-003	4.2400e-003	149.6327
Total	0.0849	0.5219	0.7305		0.2421	3.5300e-003	0.2457	0.0657	3.3400e-003	0.0691	0.0000	329.8364	329.8364	9.1700e-003	0.0309	339.2682

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1439	1.3162	1.4863			0.0640	0.0640		0.0603	0.0603	0.0000	212.1011	212.1011	0.0505	0.0000	213.3625
Total	0.1439	1.3162	1.4863			0.0640	0.0640		0.0603	0.0603	0.0000	212.1011	212.1011	0.0505	0.0000	213.3625

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0128	0.4772	0.1439		0.0573	2.5400e-003	0.0599	0.0166	2.4300e-003	0.0190	0.0000	181.5837	181.5837	4.4800e-003	0.0266	189.6356
Worker	0.0722	0.0446	0.5866		0.1848	9.9000e-004	0.1858	0.0492	9.1000e-004	0.0501	0.0000	148.2527	148.2527	4.6900e-003	4.2400e-003	149.6327
Total	0.0849	0.5219	0.7305		0.2421	3.5300e-003	0.2457	0.0657	3.3400e-003	0.0691	0.0000	329.8364	329.8364	9.1700e-003	0.0309	339.2682

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0103	0.1019	0.1458			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	4.3000e-004	2.7000e-004	3.5000e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8838	0.8838	3.0000e-005	3.0000e-005	0.8920
Total	4.3000e-004	2.7000e-004	3.5000e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8838	0.8838	3.0000e-005	3.0000e-005	0.8920

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0103	0.1019	0.1458			5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	4.3000e-004	2.7000e-004	3.5000e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8838	0.8838	3.0000e-005	3.0000e-005	0.8920
Total	4.3000e-004	2.7000e-004	3.5000e-003		1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8838	0.8838	3.0000e-005	3.0000e-005	0.8920

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181			7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.0108	0.0130	0.0181			7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

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3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	1.5800e-003	9.8000e-004	0.0128		4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.2405	3.2405	1.0000e-004	9.0000e-005	3.2707
Total	1.5800e-003	9.8000e-004	0.0128		4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.2405	3.2405	1.0000e-004	9.0000e-005	3.2707

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	8.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181			7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.0108	0.0130	0.0181			7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Worker	1.5800e-003	9.8000e-004	0.0128		4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.2405	3.2405	1.0000e-004	9.0000e-005	3.2707
Total	1.5800e-003	9.8000e-004	0.0128		4.0400e-003	2.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.0900e-003	0.0000	3.2405	3.2405	1.0000e-004	9.0000e-005	3.2707

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive 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	0.0137	0.0162	0.1142		0.0226	1.8000e-004	0.0228	6.0500e-003	1.7000e-004	6.2200e-003	0.0000	20.8731	20.8731	1.5800e-003	1.1000e-003	21.2415
Unmitigated	0.0137	0.0162	0.1142		0.0226	1.8000e-004	0.0228	6.0500e-003	1.7000e-004	6.2200e-003	0.0000	20.8731	20.8731	1.5800e-003	1.1000e-003	21.2415

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	11.70	29.40	32.85	31,825	31,825
General Office Building	18.70	4.24	1.34	29,233	29,233
Total	30.40	33.64	34.19	61,059	61,059

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	10.00	5.00	6.50	33.00	48.00	19.00	66	28	6
General Office Building	10.00	5.00	6.50	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351
City Park	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

5.0 Energy Detail

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.3031	5.3031	4.9000e-004	6.0000e-005	5.3330
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5.3031	5.3031	4.9000e-004	6.0000e-005	5.3330
Natural Gas Mitigated	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316
Natural Gas Unmitigated	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
General Office Building	30393.6	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316
Total		1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
General Office Building	30393.6	1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316
Total		1.6000e-004	1.4900e-003	1.2500e-003			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6219	1.6219	3.0000e-005	3.0000e-005	1.6316

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	32659.2	5.3031	4.9000e-004	6.0000e-005	5.3330
Total		5.3031	4.9000e-004	6.0000e-005	5.3330

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	32659.2	5.3031	4.9000e-004	6.0000e-005	5.3330
Total		5.3031	4.9000e-004	6.0000e-005	5.3330

6.0 Area Detail

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Unmitigated	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0136					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0136					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	0.0146	0.0000	2.2000e-004			0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	10.6728	1.3900e-003	3.8000e-004	10.8209
Unmitigated	10.6728	1.3900e-003	3.8000e-004	10.8209

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	10.1571	9.4000e-004	1.1000e-004	10.2144
General Office Building	0.341249 / 0.209152	0.5157	4.5000e-004	2.7000e-004	0.6066
Total		10.6728	1.3900e-003	3.8000e-004	10.8209

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	10.1571	9.4000e-004	1.1000e-004	10.2144
General Office Building	0.341249 / 0.209152	0.5157	4.5000e-004	2.7000e-004	0.6066
Total		10.6728	1.3900e-003	3.8000e-004	10.8209

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.6252	0.0370	0.0000	1.5489
Unmitigated	0.6252	0.0370	0.0000	1.5489

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
General Office Building	1.79	0.3634	0.0215	0.0000	0.9002
Total		0.6252	0.0370	0.0000	1.5489

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
General Office Building	1.79	0.3634	0.0215	0.0000	0.9002
Total		0.6252	0.0370	0.0000	1.5489

9.0 Operational Offroad

Hiram Johnson Sport Fields Improvements - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation



4/22/2022

NCIC File No.: SAC-22-93

Trish Davey
Planning Dynamics Group
PO Box 160607
Sacramento, CA 95816

Records Search Results for

Hiram W. Johnson High School Athletic Improvements, 6879 14th Ave., Sacramento, CA 95820, APN: 01503010010000

Trish Davey:

Per your request received by our office on 4/22/2022, a complete records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in Sacramento County within a 1/4-mile radius of the proposed project area.

Review of this information indicates that the proposed project area contains 0 recorded indigenous-period/ethnographic-period resource(s) and 0 recorded historic-period cultural resource(s). Additionally, 0 cultural resources study report(s) on file at this office cover(s) a portion of the proposed project area.

Outside the proposed project area, but within the 1/4-mile radius, the broader search area contains 0 recorded indigenous-period/ethnographic-period resource(s) and 0 recorded historic-period cultural resource(s). Additionally, 2 cultural resources study report(s) on file at this office cover(s) a portion of the broader search area: 5814 and 9236.

In this part of Sacramento County, archaeologists locate indigenous-period/ethnographic-period habitation sites “along streams or on ridges or knolls, especially those with southern exposure” (Moratto 1984: 290). This region is known as the ethnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan maintained permanent settlements along major rivers in the Sacramento Valley and foothills; they also periodically traveled to higher elevations (Wilson and Towne 1978: 387-389). The proposed project search area is situated in the Sacramento Valley about 1.2 miles southwest of the American River. The project area consists of athletic fields and a stadium. Given the extent of known cultural resources and the environmental setting, there is **low potential** for locating indigenous-period/ethnographic-period cultural resources in the immediate vicinity of the proposed project area.

The 1865 GLO plat of T8N, R5E shows evidence of nineteenth-century fences and a house in the broader vicinity. The 1967 Sacramento East 7.5' USGS topographical map shows evidence of twentieth-century Hiram Johnson High School athletic fields in the project area. Given the extent of known cultural resources and patterns of local history, there is **low potential** for locating historic-period cultural resources in the immediate vicinity of the proposed project area.

LITERATURE REFERENCED DURING SEARCH:

In addition to the official records and maps for sites and studies in Sacramento County, the following inventories and references were also reviewed: National Register of Historic Places and California Register of Historical Resources - Listed properties; California Inventory of Historic Resources (1976); California State Historical Landmarks; California Points of Historical Interest; Office of Historic Preservation Built Environment Resources Directory (2020); Office of Historic Preservation Archaeological Determinations of Eligibility (2012); Caltrans State and Local Bridge Surveys; Gold Districts of California (Clark 1970); California Gold Camps (Gudde 1975); California Place Names (Gudde 1969); Historic Spots in California (Hoover et al. 1966 [1990]); Trail of the First Wagons Over the Sierra Nevada (Graydon 1986); California Archaeology (Moratto 1984); and the Smithsonian Institution's Handbook of North American Indians, Volume 8, California (Wilson and Towne 1978).

SENSITIVITY STATEMENT:

- 1) With respect to cultural resources, it appears that the proposed project area **is not sensitive**.
- 2) Should the lead agency/authority require a cultural resources survey, a list of qualified local cultural resources consultants can be found at <http://chrisinfo.org>. Please forward copies of any resulting reports and resource records from this project to the North Central Information Center (NCIC) as soon as possible. The lead agency/authority and cultural resources consultant should coordinate sending documentation to NCIC. Digital materials are preferred and can be sent to our office through our file transfer system or on a CD by mail via USPS to the address on the top of the first page.
- 3) If cultural resources are encountered during the project, avoid altering the materials and their context until a qualified cultural resources professional has evaluated the project area. Project personnel should not collect cultural resources. Indigenous-period/ethnographic-period resources include: chert or obsidian flakes, projectile points, and other flaked-stone artifacts; mortars, grinding slicks, pestles, and other groundstone tools; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include: stone or adobe foundations or walls; structures and remains with square nails; mine shafts, tailings, or ditches/flumes; and refuse deposits or bottle dumps, often located in old wells or privies.
- 4) Identified cultural resources should be recorded on DPR 523 (A-L) historic resource recordation forms, available at https://ohp.parks.ca.gov/?page_id=28351.
- 5) Review for possible historic-period cultural resources has included only those sources listed in the referenced literature and should not be considered comprehensive. The Office of Historic Preservation has determined that buildings, structures, and objects 45 years or older may be of historical value. If the area of potential effect contains such properties not noted in our research, they should be assessed by an architectural historian before commencement of project activities.

Due to processing delays and other factors, it is possible that not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information

in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact North Central Information Center at ncic@csus.edu or (916) 278-6217 if you have any questions about this records search.

Sincerely,

Paul Rendes, Coordinator
North Central Information Center

Appendix B: Continuous Ambient Noise Measurement Results



Appendix B1a: Continuous Noise Monitoring Results

Site: LT-1

Project: Hiram Johnson Stadium

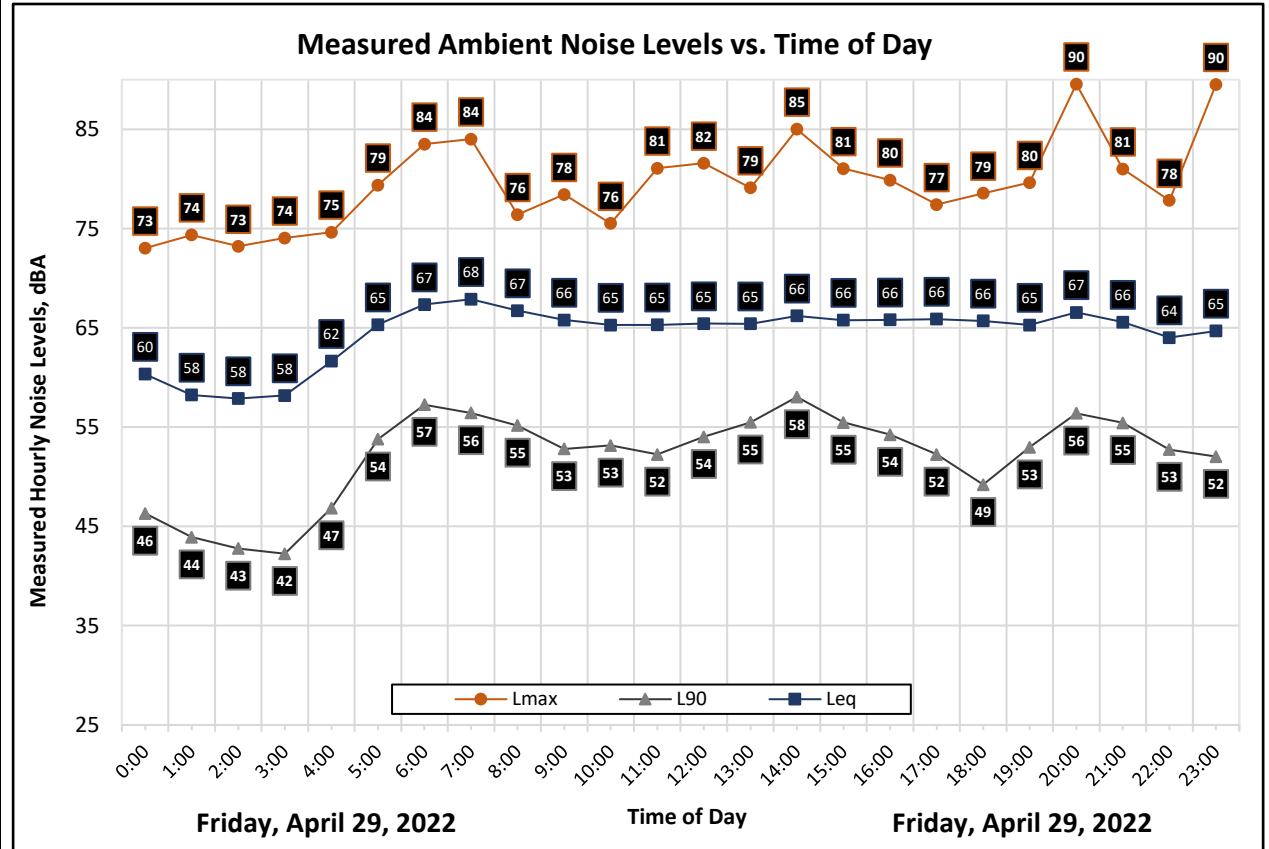
Meter: LDL 820-2

Location: North-West of Project Boundary

Calibrator: CAL200

Coordinates: 38.5431339°, -121.4274655°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Friday, April 29, 2022	0:00	60	73	46	46
Friday, April 29, 2022	1:00	58	74	44	44
Friday, April 29, 2022	2:00	58	73	43	43
Friday, April 29, 2022	3:00	58	74	42	42
Friday, April 29, 2022	4:00	62	75	47	47
Friday, April 29, 2022	5:00	65	79	54	54
Friday, April 29, 2022	6:00	67	84	57	57
Friday, April 29, 2022	7:00	68	84	56	56
Friday, April 29, 2022	8:00	67	76	55	55
Friday, April 29, 2022	9:00	66	78	53	53
Friday, April 29, 2022	10:00	65	76	53	53
Friday, April 29, 2022	11:00	65	81	52	52
Friday, April 29, 2022	12:00	65	82	54	54
Friday, April 29, 2022	13:00	65	79	55	55
Friday, April 29, 2022	14:00	66	85	58	58
Friday, April 29, 2022	15:00	66	81	55	55
Friday, April 29, 2022	16:00	66	80	54	54
Friday, April 29, 2022	17:00	66	77	52	52
Friday, April 29, 2022	18:00	66	79	49	49
Friday, April 29, 2022	19:00	65	80	53	53
Friday, April 29, 2022	20:00	67	90	56	56
Friday, April 29, 2022	21:00	66	81	55	55
Friday, April 29, 2022	22:00	64	78	53	53
Friday, April 29, 2022	23:00	65	90	52	52



Statistics	Leq	Lmax	L50	L90
Day Average	66	81	54	54
Night Average	63	78	49	49
Day Low	65	76	49	49
Day High	68	90	58	58
Night Low	58	73	42	42
Night High	67	90	57	57
Ldn	70	Day %		78
CNEL	70	Night %		22



Appendix B1b: Continuous Noise Monitoring Results

Site: LT-1

Project: Hiram Johnson Stadium

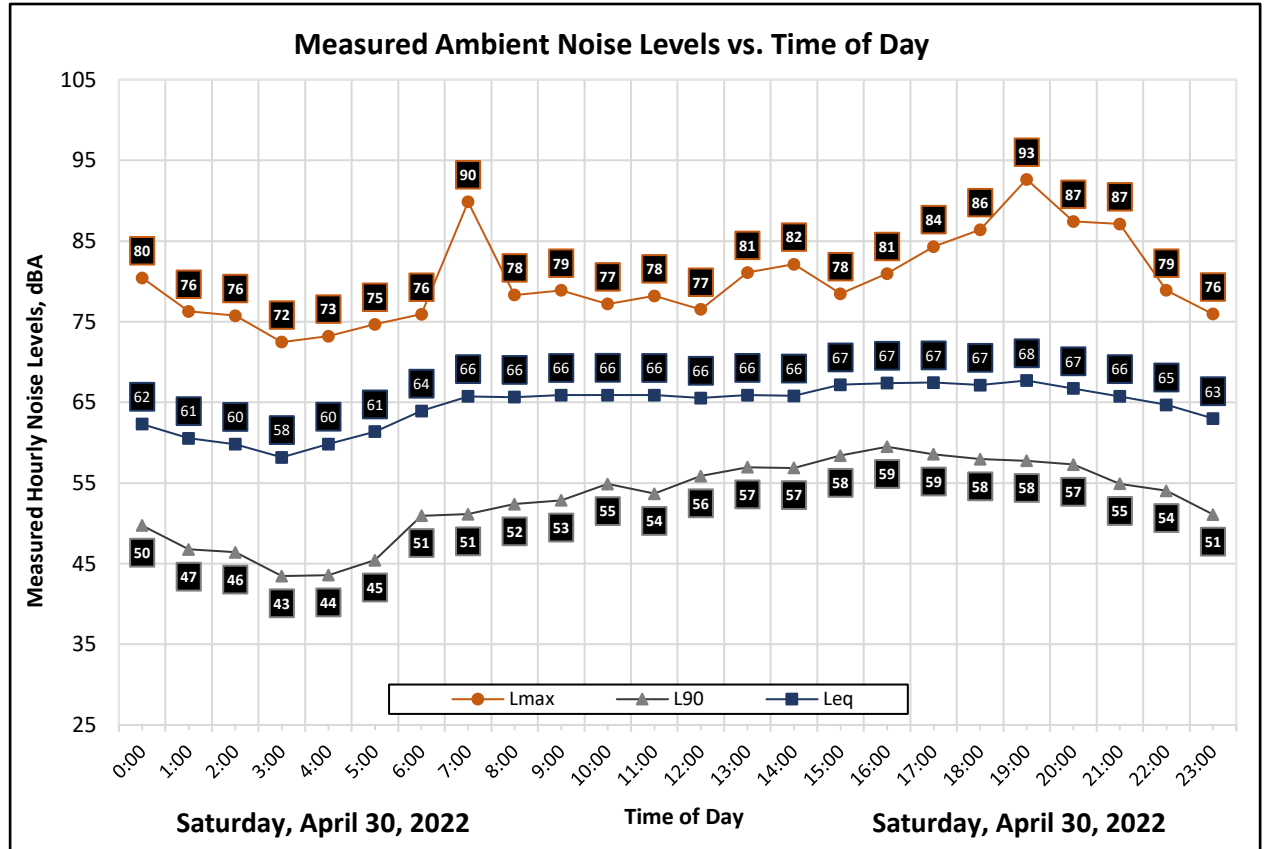
Meter: LDL 820-2

Location: North-West of Project Boundary

Calibrator: CAL200

Coordinates: 38.5431339°, -121.4274655°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Saturday, April 30, 2022	0:00	62	80	50	50
Saturday, April 30, 2022	1:00	61	76	47	47
Saturday, April 30, 2022	2:00	60	76	46	46
Saturday, April 30, 2022	3:00	58	72	43	43
Saturday, April 30, 2022	4:00	60	73	44	44
Saturday, April 30, 2022	5:00	61	75	45	45
Saturday, April 30, 2022	6:00	64	76	51	51
Saturday, April 30, 2022	7:00	66	90	51	51
Saturday, April 30, 2022	8:00	66	78	52	52
Saturday, April 30, 2022	9:00	66	79	53	53
Saturday, April 30, 2022	10:00	66	77	55	55
Saturday, April 30, 2022	11:00	66	78	54	54
Saturday, April 30, 2022	12:00	66	77	56	56
Saturday, April 30, 2022	13:00	66	81	57	57
Saturday, April 30, 2022	14:00	66	82	57	57
Saturday, April 30, 2022	15:00	67	78	58	58
Saturday, April 30, 2022	16:00	67	81	59	59
Saturday, April 30, 2022	17:00	67	84	59	59
Saturday, April 30, 2022	18:00	67	86	58	58
Saturday, April 30, 2022	19:00	68	93	58	58
Saturday, April 30, 2022	20:00	67	87	57	57
Saturday, April 30, 2022	21:00	66	87	55	55
Saturday, April 30, 2022	22:00	65	79	54	54
Saturday, April 30, 2022	23:00	63	76	51	51



Statistics	Leq	Lmax	L50	L90
Day Average	66	83	56	56
Night Average	61	76	48	48
Day Low	66	77	51	51
Day High	68	93	59	59
Night Low	58	72	43	43
Night High	64	80	54	54
Ldn	69	Day %		85
CNEL	69	Night %		15



Appendix B1c: Continuous Noise Monitoring Results

Site: LT-1

Project: Hiram Johnson Stadium

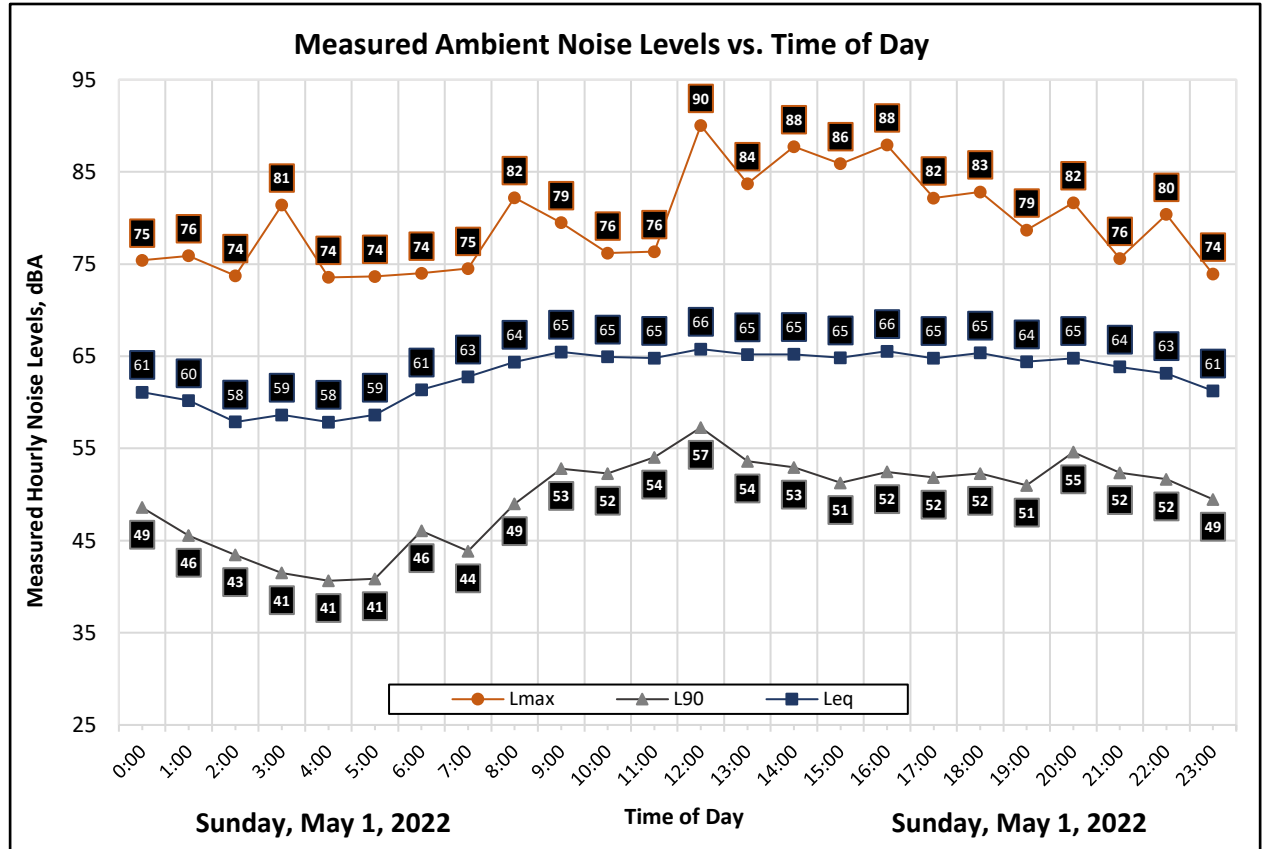
Meter: LDL 820-2

Location: North-West of Project Boundary

Calibrator: CAL200

Coordinates: 38.5431339°, -121.4274655°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Sunday, May 1, 2022	0:00	61	75	49	49
Sunday, May 1, 2022	1:00	60	76	46	46
Sunday, May 1, 2022	2:00	58	74	43	43
Sunday, May 1, 2022	3:00	59	81	41	41
Sunday, May 1, 2022	4:00	58	74	41	41
Sunday, May 1, 2022	5:00	59	74	41	41
Sunday, May 1, 2022	6:00	61	74	46	46
Sunday, May 1, 2022	7:00	63	75	44	44
Sunday, May 1, 2022	8:00	64	82	49	49
Sunday, May 1, 2022	9:00	65	79	53	53
Sunday, May 1, 2022	10:00	65	76	52	52
Sunday, May 1, 2022	11:00	65	76	54	54
Sunday, May 1, 2022	12:00	66	90	57	57
Sunday, May 1, 2022	13:00	65	84	54	54
Sunday, May 1, 2022	14:00	65	88	53	53
Sunday, May 1, 2022	15:00	65	86	51	51
Sunday, May 1, 2022	16:00	66	88	52	52
Sunday, May 1, 2022	17:00	65	82	52	52
Sunday, May 1, 2022	18:00	65	83	52	52
Sunday, May 1, 2022	19:00	64	79	51	51
Sunday, May 1, 2022	20:00	65	82	55	55
Sunday, May 1, 2022	21:00	64	76	52	52
Sunday, May 1, 2022	22:00	63	80	52	52
Sunday, May 1, 2022	23:00	61	74	49	49



Statistics	Leq	Lmax	L50	L90
Day Average	65	82	52	52
Night Average	60	76	45	45
Day Low	63	75	44	44
Day High	66	90	57	57
Night Low	58	74	41	41
Night High	61	81	52	52
Ldn	67	Day %		86
CNEL	68	Night %		14



Appendix B2a: Continuous Noise Monitoring Results

Site: LT-2

Project: Hiram Johnson Stadium

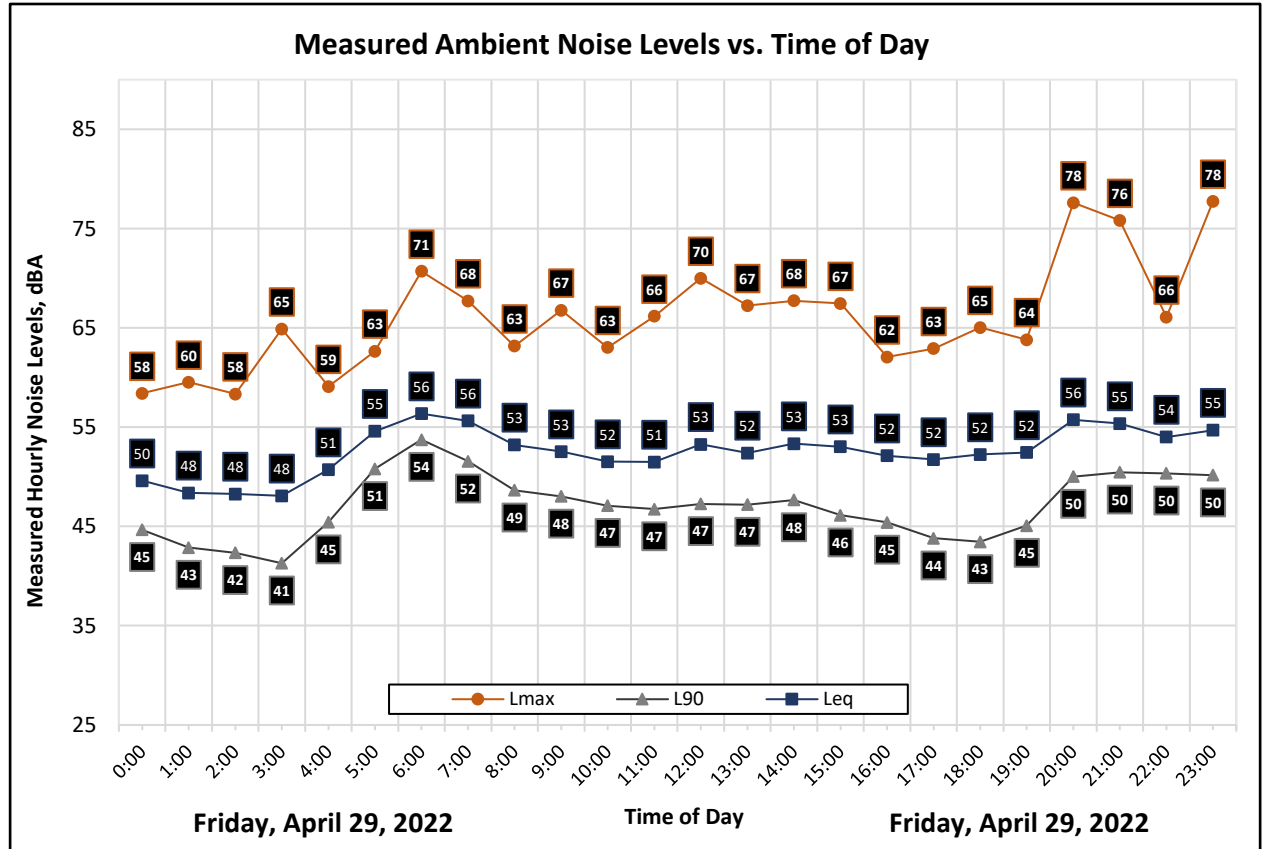
Meter: LDL 820-1

Location: North of Project Boundary

Calibrator: CAL200

Coordinates: 38.5432246°, -121.4262253°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Friday, April 29, 2022	0:00	50	58	48	45
Friday, April 29, 2022	1:00	48	60	47	43
Friday, April 29, 2022	2:00	48	58	46	42
Friday, April 29, 2022	3:00	48	65	44	41
Friday, April 29, 2022	4:00	51	59	49	45
Friday, April 29, 2022	5:00	55	63	54	51
Friday, April 29, 2022	6:00	56	71	56	54
Friday, April 29, 2022	7:00	56	68	55	52
Friday, April 29, 2022	8:00	53	63	53	49
Friday, April 29, 2022	9:00	53	67	51	48
Friday, April 29, 2022	10:00	52	63	51	47
Friday, April 29, 2022	11:00	51	66	50	47
Friday, April 29, 2022	12:00	53	70	51	47
Friday, April 29, 2022	13:00	52	67	51	47
Friday, April 29, 2022	14:00	53	68	52	48
Friday, April 29, 2022	15:00	53	67	52	46
Friday, April 29, 2022	16:00	52	62	51	45
Friday, April 29, 2022	17:00	52	63	51	44
Friday, April 29, 2022	18:00	52	65	51	43
Friday, April 29, 2022	19:00	52	64	51	45
Friday, April 29, 2022	20:00	56	78	54	50
Friday, April 29, 2022	21:00	55	76	54	50
Friday, April 29, 2022	22:00	54	66	53	50
Friday, April 29, 2022	23:00	55	78	53	50



Statistics	Leq	Lmax	L50	L90
Day Average	53	67	52	47
Night Average	53	64	50	47
Day Low	51	62	50	43
Day High	56	78	55	52
Night Low	48	58	44	41
Night High	56	78	56	54
Ldn	59	Day %		69
CNEL	59	Night %		31



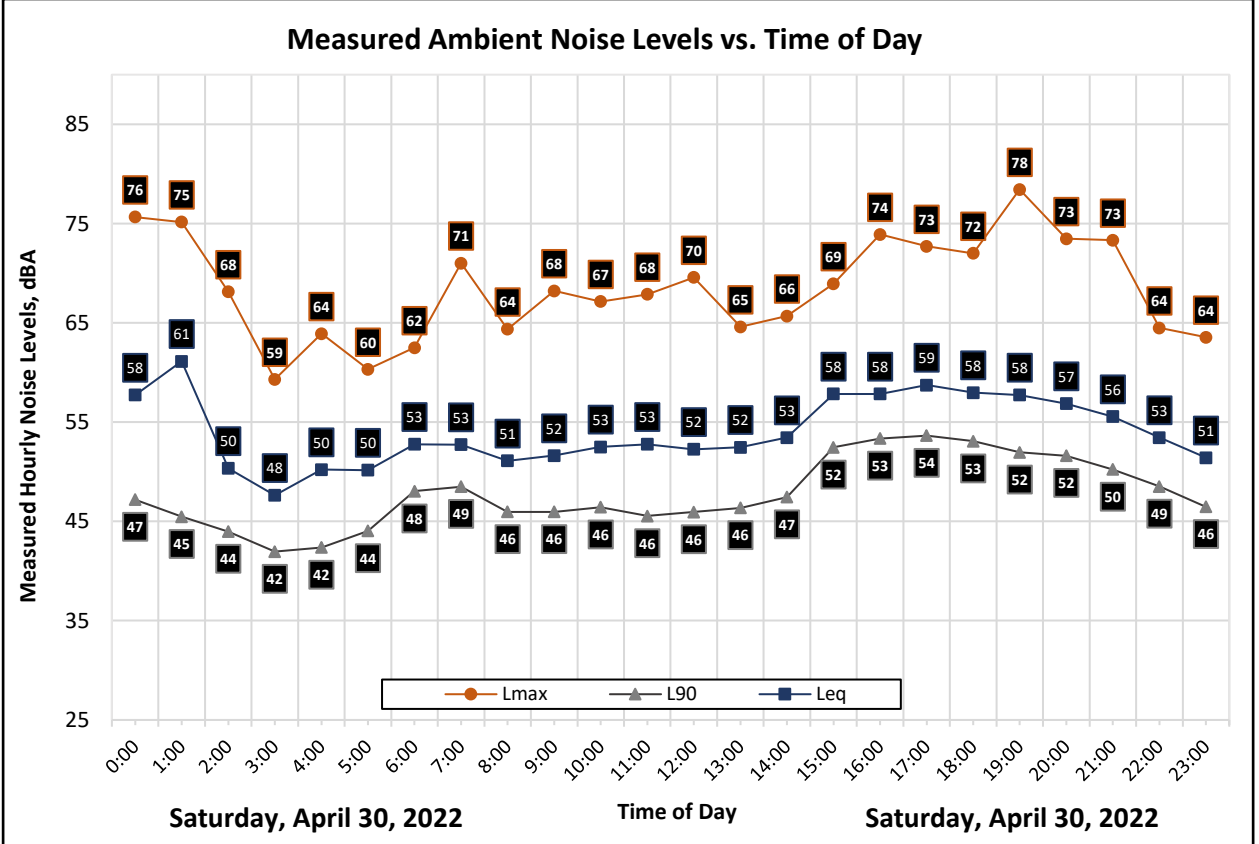
Appendix B2b: Continuous Noise Monitoring Results

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Saturday, April 30, 2022	0:00	58	76	50	47
Saturday, April 30, 2022	1:00	61	75	49	45
Saturday, April 30, 2022	2:00	50	68	48	44
Saturday, April 30, 2022	3:00	48	59	46	42
Saturday, April 30, 2022	4:00	50	64	47	42
Saturday, April 30, 2022	5:00	50	60	48	44
Saturday, April 30, 2022	6:00	53	62	52	48
Saturday, April 30, 2022	7:00	53	71	51	49
Saturday, April 30, 2022	8:00	51	64	50	46
Saturday, April 30, 2022	9:00	52	68	50	46
Saturday, April 30, 2022	10:00	53	67	51	46
Saturday, April 30, 2022	11:00	53	68	51	46
Saturday, April 30, 2022	12:00	52	70	51	46
Saturday, April 30, 2022	13:00	52	65	51	46
Saturday, April 30, 2022	14:00	53	66	52	47
Saturday, April 30, 2022	15:00	58	69	57	52
Saturday, April 30, 2022	16:00	58	74	57	53
Saturday, April 30, 2022	17:00	59	73	58	54
Saturday, April 30, 2022	18:00	58	72	57	53
Saturday, April 30, 2022	19:00	58	78	56	52
Saturday, April 30, 2022	20:00	57	73	56	52
Saturday, April 30, 2022	21:00	56	73	54	50
Saturday, April 30, 2022	22:00	53	64	52	49
Saturday, April 30, 2022	23:00	51	64	51	46

Statistics	Leq	Lmax	L50	L90
Day Average	56	70	53	49
Night Average	55	66	49	45
Day Low	51	64	50	46
Day High	59	78	58	54
Night Low	48	59	46	42
Night High	61	76	52	49
Ldn	61	Day %		68
CNEL	62	Night %		32

Site: LT-2
 Project: Hiram Johnson Stadium
 Location: North of Project Boundary
 Coordinates: 38.5432246°, -121.4262253°

Meter: LDL 820-1
 Calibrator: CAL200



Appendix B2c: Continuous Noise Monitoring Results

Site: LT-2

Project: Hiram Johnson Stadium

Meter: LDL 820-1

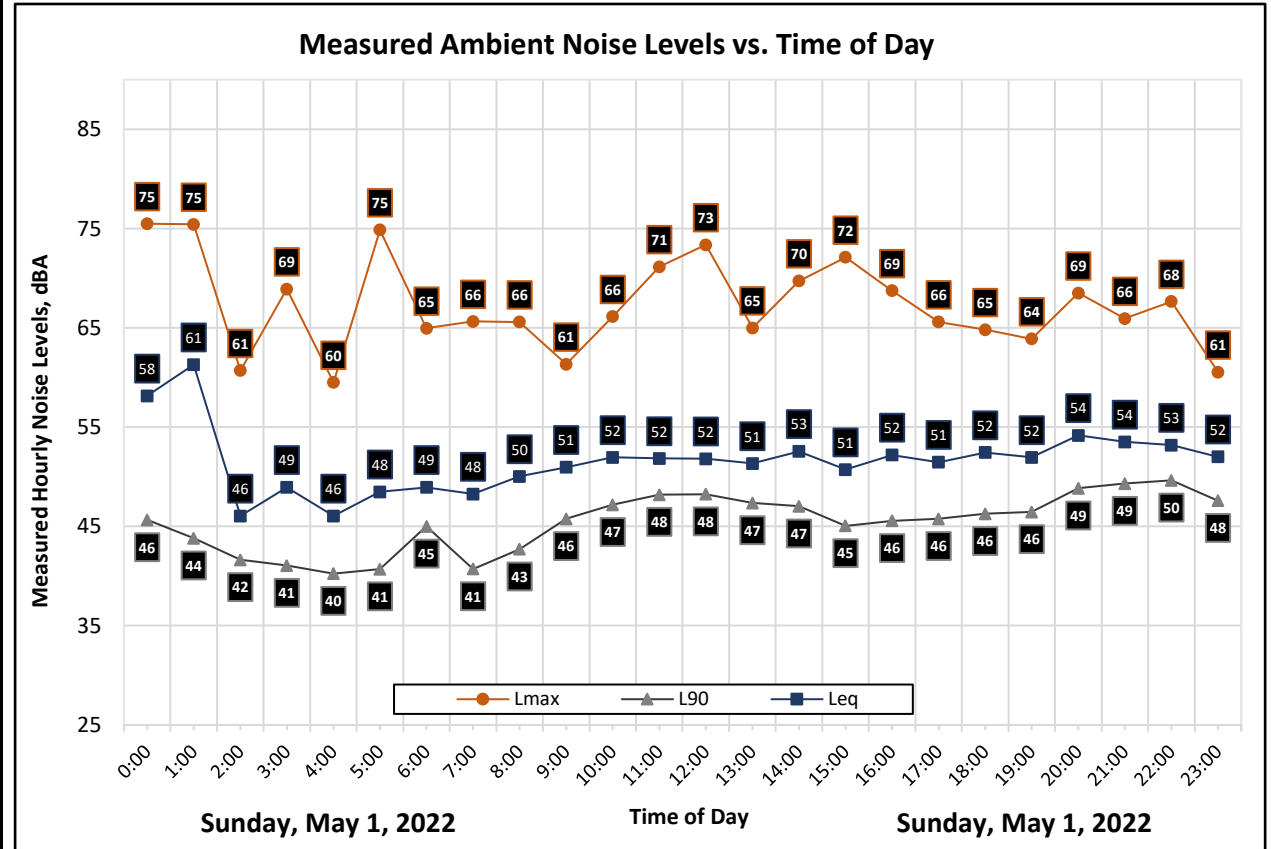
Location: North of Project Boundary

Calibrator: CAL200

Coordinates: 38.5432246°, -121.4262253°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Sunday, May 1, 2022	0:00	58	75	50	46
Sunday, May 1, 2022	1:00	61	75	49	44
Sunday, May 1, 2022	2:00	46	61	45	42
Sunday, May 1, 2022	3:00	49	69	44	41
Sunday, May 1, 2022	4:00	46	60	43	40
Sunday, May 1, 2022	5:00	48	75	44	41
Sunday, May 1, 2022	6:00	49	65	47	45
Sunday, May 1, 2022	7:00	48	66	45	41
Sunday, May 1, 2022	8:00	50	66	48	43
Sunday, May 1, 2022	9:00	51	61	50	46
Sunday, May 1, 2022	10:00	52	66	51	47
Sunday, May 1, 2022	11:00	52	71	51	48
Sunday, May 1, 2022	12:00	52	73	51	48
Sunday, May 1, 2022	13:00	51	65	50	47
Sunday, May 1, 2022	14:00	53	70	51	47
Sunday, May 1, 2022	15:00	51	72	49	45
Sunday, May 1, 2022	16:00	52	69	50	46
Sunday, May 1, 2022	17:00	51	66	50	46
Sunday, May 1, 2022	18:00	52	65	52	46
Sunday, May 1, 2022	19:00	52	64	51	46
Sunday, May 1, 2022	20:00	54	69	53	49
Sunday, May 1, 2022	21:00	54	66	53	49
Sunday, May 1, 2022	22:00	53	68	52	50
Sunday, May 1, 2022	23:00	52	61	51	48

Statistics	Leq	Lmax	L50	L90
Day Average	52	67	50	46
Night Average	55	68	47	44
Day Low	48	61	45	41
Day High	54	73	53	49
Night Low	46	60	43	40
Night High	61	75	52	50
Ldn	61	Day %		48
CNEL	61	Night %		52



Appendix B3a: Continuous Noise Monitoring Results

Site: LT-3

Project: Hiram Johnson Stadium

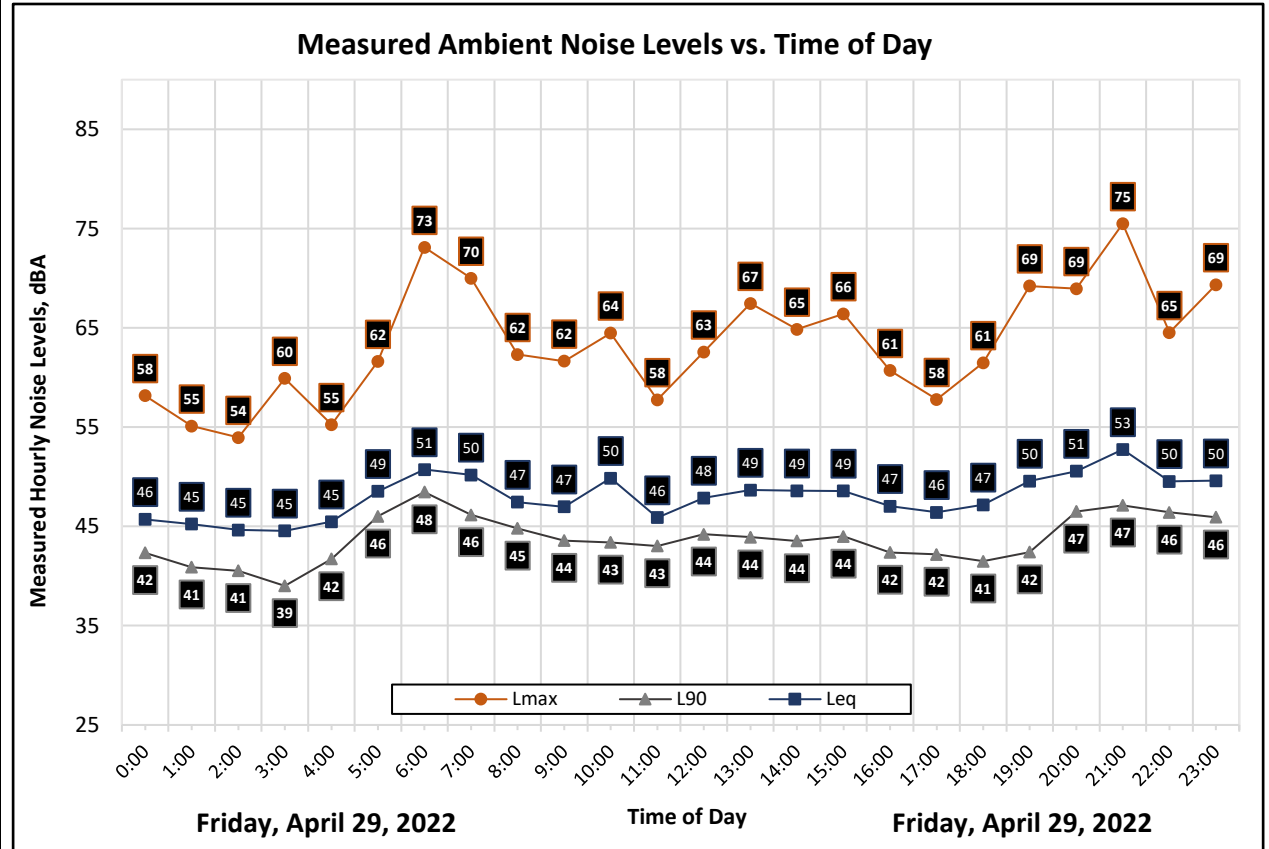
Meter: LDL 820-3

Location: North-East of Project Boundary

Calibrator: CAL200

Coordinates: 38.54323276°, -121.4242519°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Friday, April 29, 2022	0:00	46	58	45	42
Friday, April 29, 2022	1:00	45	55	44	41
Friday, April 29, 2022	2:00	45	54	44	41
Friday, April 29, 2022	3:00	45	60	42	39
Friday, April 29, 2022	4:00	45	55	45	42
Friday, April 29, 2022	5:00	49	62	48	46
Friday, April 29, 2022	6:00	51	73	50	48
Friday, April 29, 2022	7:00	50	70	49	46
Friday, April 29, 2022	8:00	47	62	47	45
Friday, April 29, 2022	9:00	47	62	46	44
Friday, April 29, 2022	10:00	50	64	46	43
Friday, April 29, 2022	11:00	46	58	45	43
Friday, April 29, 2022	12:00	48	63	47	44
Friday, April 29, 2022	13:00	49	67	47	44
Friday, April 29, 2022	14:00	49	65	47	44
Friday, April 29, 2022	15:00	49	66	47	44
Friday, April 29, 2022	16:00	47	61	46	42
Friday, April 29, 2022	17:00	46	58	45	42
Friday, April 29, 2022	18:00	47	61	45	41
Friday, April 29, 2022	19:00	50	69	46	42
Friday, April 29, 2022	20:00	51	69	49	47
Friday, April 29, 2022	21:00	53	75	49	47
Friday, April 29, 2022	22:00	50	65	49	46
Friday, April 29, 2022	23:00	50	69	48	46



Statistics	L _{eq}	L _{max}	L ₅₀	L ₉₀
Day Average	49	65	47	44
Night Average	47	61	46	43
Day Low	46	58	45	41
Day High	53	75	49	47
Night Low	45	54	42	39
Night High	51	73	50	48
L _{dn}	54	Day %		72
CNEL	54	Night %		28



Appendix B3b: Continuous Noise Monitoring Results

Site: LT-3

Project: Hiram Johnson Stadium

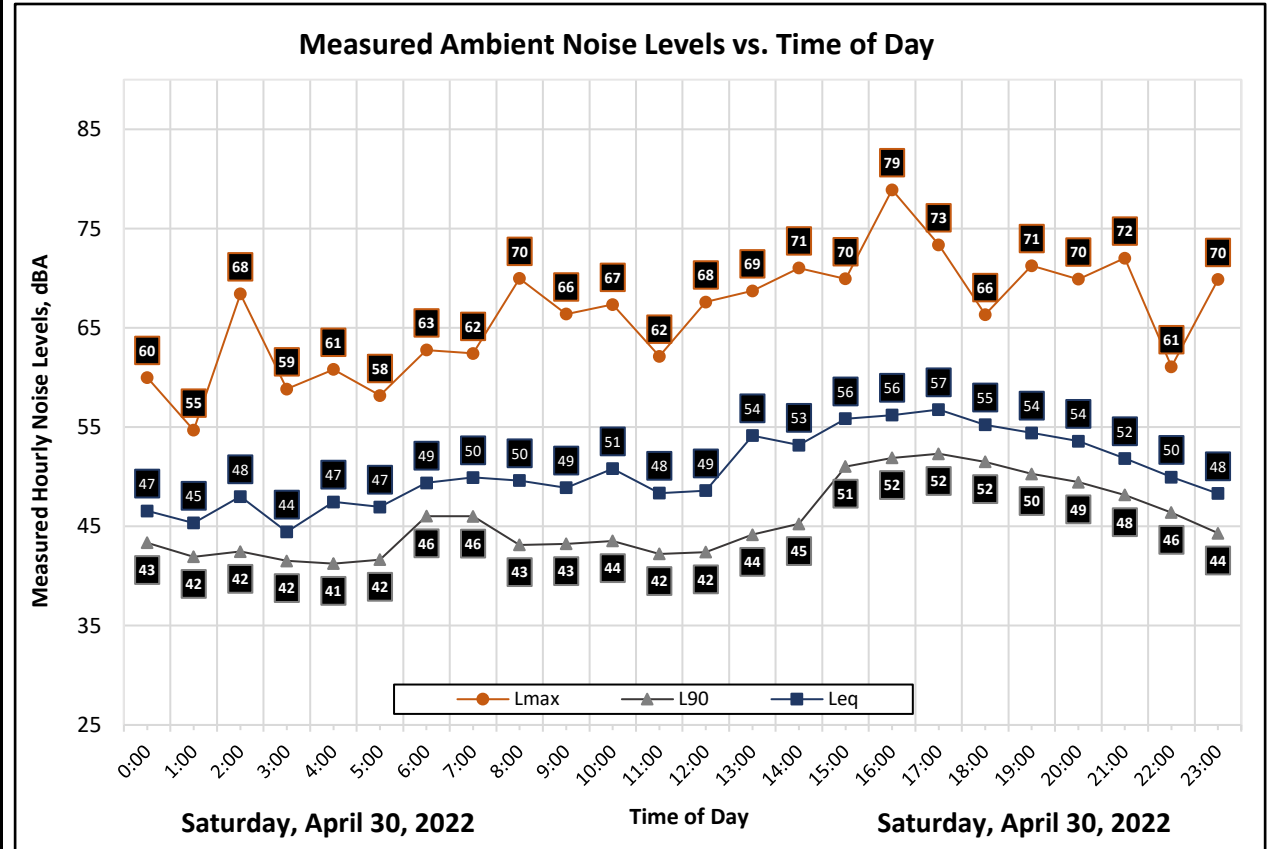
Meter: LDL 820-3

Location: North-East of Project Boundary

Calibrator: CAL200

Coordinates: 38.54323276°, -121.4242519°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Saturday, April 30, 2022	0:00	47	60	46	43
Saturday, April 30, 2022	1:00	45	55	44	42
Saturday, April 30, 2022	2:00	48	68	45	42
Saturday, April 30, 2022	3:00	44	59	44	42
Saturday, April 30, 2022	4:00	47	61	43	41
Saturday, April 30, 2022	5:00	47	58	45	42
Saturday, April 30, 2022	6:00	49	63	48	46
Saturday, April 30, 2022	7:00	50	62	48	46
Saturday, April 30, 2022	8:00	50	70	46	43
Saturday, April 30, 2022	9:00	49	66	45	43
Saturday, April 30, 2022	10:00	51	67	46	44
Saturday, April 30, 2022	11:00	48	62	46	42
Saturday, April 30, 2022	12:00	49	68	45	42
Saturday, April 30, 2022	13:00	54	69	51	44
Saturday, April 30, 2022	14:00	53	71	49	45
Saturday, April 30, 2022	15:00	56	70	54	51
Saturday, April 30, 2022	16:00	56	79	55	52
Saturday, April 30, 2022	17:00	57	73	55	52
Saturday, April 30, 2022	18:00	55	66	54	52
Saturday, April 30, 2022	19:00	54	71	53	50
Saturday, April 30, 2022	20:00	54	70	52	49
Saturday, April 30, 2022	21:00	52	72	51	48
Saturday, April 30, 2022	22:00	50	61	49	46
Saturday, April 30, 2022	23:00	48	70	47	44



Statistics	Leq	Lmax	L50	L90
Day Average	53	69	50	47
Night Average	47	62	46	43
Day Low	48	62	45	42
Day High	57	79	55	52
Night Low	44	55	43	41
Night High	49	70	49	46
Ldn	55	Day %		88
CNEL	56	Night %		12



Appendix B3c: Continuous Noise Monitoring Results

Site: LT-3

Project: Hiram Johnson Stadium

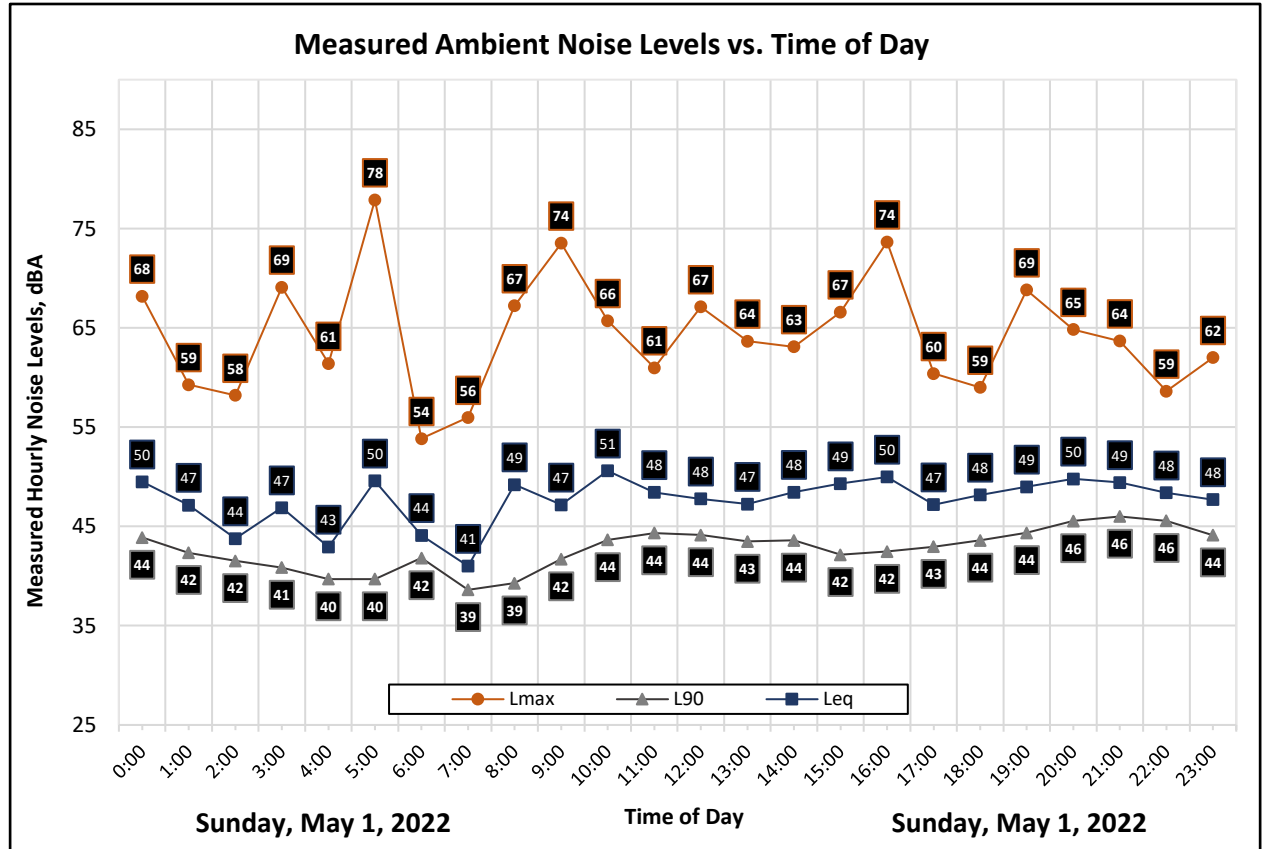
Meter: LDL 820-3

Location: North-East of Project Boundary

Calibrator: CAL200

Coordinates: 38.54323276°, -121.4242519°

Date	Time	Measured Level, dBA			
		L _{eq}	L _{max}	L ₅₀	L ₉₀
Sunday, May 1, 2022	0:00	50	68	46	44
Sunday, May 1, 2022	1:00	47	59	44	42
Sunday, May 1, 2022	2:00	44	58	43	42
Sunday, May 1, 2022	3:00	47	69	42	41
Sunday, May 1, 2022	4:00	43	61	41	40
Sunday, May 1, 2022	5:00	50	78	42	40
Sunday, May 1, 2022	6:00	44	54	44	42
Sunday, May 1, 2022	7:00	41	56	40	39
Sunday, May 1, 2022	8:00	49	67	42	39
Sunday, May 1, 2022	9:00	47	74	44	42
Sunday, May 1, 2022	10:00	51	66	47	44
Sunday, May 1, 2022	11:00	48	61	47	44
Sunday, May 1, 2022	12:00	48	67	46	44
Sunday, May 1, 2022	13:00	47	64	46	43
Sunday, May 1, 2022	14:00	48	63	47	44
Sunday, May 1, 2022	15:00	49	67	45	42
Sunday, May 1, 2022	16:00	50	74	46	42
Sunday, May 1, 2022	17:00	47	60	46	43
Sunday, May 1, 2022	18:00	48	59	47	44
Sunday, May 1, 2022	19:00	49	69	48	44
Sunday, May 1, 2022	20:00	50	65	48	46
Sunday, May 1, 2022	21:00	49	64	48	46
Sunday, May 1, 2022	22:00	48	59	48	46
Sunday, May 1, 2022	23:00	48	62	47	44



Statistics	Leq	Lmax	L50	L90
Day Average	49	65	46	43
Night Average	47	63	44	42
Day Low	41	56	40	39
Day High	51	74	48	46
Night Low	43	54	41	40
Night High	50	78	48	46
Ldn	53	Day %		73
CNEL	54	Night %		27

