

# **Appendix A**

## **Notice of Preparation (NOP)**





DATE: March 19, 2020

TO: Interested Persons

FROM: Scott Johnson, Senior Planner  
Community Development Department

RE: **NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT  
FOR THE KLOTZ RANCH APARTMENTS PROJECT (P19-070)**

### **COMMENT PERIOD**

March 20, 2019 – April 20, 2019

### **INTRODUCTION**

The City of Sacramento (City) is the Lead Agency for preparation of an Environmental Impact Report (EIR) for the proposed Klotz Ranch Apartments project. The EIR will evaluate potential significant environmental effects of the proposed Klotz Ranch Apartments project and other actions and transactions associated with the proposed project. Written comments regarding the issues that should be covered in the EIR, including potential alternatives to the proposed Klotz Ranch Apartments project and the scope of the analysis, are invited.

The EIR is being prepared in compliance with the California Environmental Quality Act (CEQA). Under CEQA, upon deciding to prepare an EIR, the City as lead agency must issue a Notice of Preparation (NOP) to inform trustee agencies, responsible agencies, and the public of that decision. The purpose of the NOP is to provide information describing the project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be included in the EIR. Agencies should comment on such information as it relates to their statutory responsibilities in connection with the project.

The EIR will provide an evaluation of potential environmental impacts associated with development of the proposed project. The proposed project description, location, and environmental issue areas that may be affected by development of the proposed project are described below. The EIR will evaluate the potentially significant environmental impacts of the proposed project, on both a direct and cumulative basis, identify mitigation measures that may be feasible to lessen or avoid such impacts, and identify alternatives to the proposed project.

## **PROJECT LOCATION/SETTING**

The project site is a 12.7-acre site that is generally located south of Pocket Road between Interstate 5 (I-5) and Freeport Boulevard adjacent to the Pocket Area in south Sacramento. Access to the project site is provided by Klotz Ranch Court, which intersects with Pocket Road approximately 400 feet to the north of the site. The project site is bounded by three commercial buildings adjacent to Pocket Road to the north, and vacant parcels to the east, south, and west. The commercial buildings include a gas station (Shell Oil), located to the west of Klotz Ranch Court, and a fast food restaurant (McDonald's) and a car wash (Kelly's Express Car Wash) located to the east of Klotz Ranch Court. The project site was previously graded and is currently vacant; a telecommunications facility (cell phone tower) is located in the southeastern corner of the site.

## **PROJECT DESCRIPTION**

The proposed project includes the construction of a 266-unit apartment complex consisting of six, four-story residential buildings and a two-story clubhouse. Two multi-family residential buildings would each contain 49 units while the remaining four multi-family residential buildings would each contain 42 units. The clubhouse would provide 6,300 square feet (sf) of community space accessible to residents.

The complex would include 128 one-bedroom units, 120 two-bedroom units, and 18 three-bedroom units and would have a density of approximately 21 units per acre. The one-bedroom units would range in size from 506 to 676 sf, the two-bedroom units would range in size from 746 to 971 sf, and the three-bedroom units would be 1,251 sf in size. Each of the apartment buildings would be approximately 48 feet in height.

The clubhouse/pool area would be located on the northwestern portion of the site. The clubhouse would include a leasing office, a fitness and yoga studio, a great room with kitchen and sitting area, mail package room, game room, cyber/conference center, and an outdoor amenity deck; the structure would be approximately 32 feet in height. The entry to the pool area would be from the clubhouse area. Amenities within the pool area would include a pool, spa, outdoor kitchen, television and fire place lounges, hammock area, yoga lawn, two bocce ball courts, and a passive recreation lawn lounge area. Other amenities on the project site include a tot lot on the northeastern corner of the site and a dog run and sports court on the southwest corner of the site.

Parking for the project would be provided in covered carports, private garages, driveways, and surface lots adjacent to the apartment buildings. A total of 525 parking spaces would be provided, including 353 parking spaces for residents and 172 parking spaces for visitors. A total of 165 bicycle parking spaces would also be provided consisting of 28 exterior spaces and 137 interior spaces. Bicycle racks and interior storage would be provided for each building. In addition, bicycle racks and a bicycle locker would be provided in front of the clubhouse.

The main vehicle access point would be from Klotz Ranch Drive, which provides access to I-5 via Pocket Road. An emergency vehicle access point from the parking lot of the car wash would also be provided in the northeastern corner of the project site.

Pedestrian paths would be provided on-site that lead to building entrance areas. These paths would also connect to the existing sidewalks on Klotz Ranch Court. In addition, the proposed project would provide direct access to the future Del Rio trail, a proposed 4.8-mile pedestrian and bicycle trail that runs through the Land Park, South Land Park, Freeport Manor, Z'Berg, Pocket and Meadowview neighborhoods between Interstate 5 and Freeport Boulevard. The right-of-way for the future trail is located directly to the east of the project site. Finally, the nearest bus stop is located approximately 100 feet to the east of the intersection of Pocket Road/Klotz Ranch Court.

## **ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR**

The EIR will analyze potentially significant impacts that result from implementation of the proposed project.

The City has prepared and attached an Initial Study to describe the project and (1) review the discussions of cumulative impacts, growth-inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)); and (2) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR, as well as, and any mitigation measures or alternatives that may avoid or mitigate the identified effects, if any, to a less-than-significant level. Based on the findings of the Initial Study, it is anticipated that the following topics could have potentially significant impacts:

- Aesthetics, Light and Glare
- Air Quality
- Cultural and Tribal Cultural Resources
- Greenhouse Gas Emissions and Climate Change
- Noise and Vibration
- Transportation/Traffic

In addition, the EIR will describe and evaluate project alternatives that may reduce or avoid any identified significant adverse impacts of the project. Unless new information is presented during the NOP comment process, the following topics are expected to have less-than-significant impacts and will be discussed only in the Initial Study: agricultural resources; biological resources; energy; geology, soils, and seismicity; hazards; hydrology and water quality; noise; population and housing; public services; recreation; and utilities and services systems.

## **SUBMITTING COMMENTS**

Comments and suggestions as to the appropriate scope of analysis in the EIR are invited from all interested parties. Written comments or questions concerning the EIR for the proposed project should be directed to the City at the following address by 4:00 p.m. on April 20, 2019. Please include the commenter's full name and address.

Scott Johnson, Environmental Planning Services  
City of Sacramento Community Development Department  
300 Richards Blvd., Third Floor, Sacramento, CA 95811  
Telephone: (916) 808-5842  
E-mail: [SRJohnson@cityofsacramento.org](mailto:SRJohnson@cityofsacramento.org)

NOTE: The Initial Study is available online with the Notice of Preparation at the City's web at <http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports> and at the offices of the Community Development Department at 300 Richards Boulevard, Third Floor, Sacramento, CA 95811. Please contact the environmental project manager, Scott Johnson, at the phone and email above with any questions regarding the availability of hard copies of the Initial Study.

# **Appendix B**

## **Notice of Preparation (NOP)**

## **Comment Letters**







DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT  
1325 J STREET  
SACRAMENTO CA 95814-2922

March 25, 2020

Regulatory Division (SPK-2020-00257)

City of Sacramento Community Development Dept.

Attn: Mr. Scott Johnson, Senior Planner

300 Richards Boulevard, Third Floor

Sacramento, CA 95811

[SRJohnson@CityofSacramento.org](mailto:SRJohnson@CityofSacramento.org)

Dear Mr. Johnson:

We are responding to your March 24, 2020, request for comments on preparation of an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA) for the proposed Klotz Ranch Apartments project. The City of Sacramento project identification number is P19-070. The approximately 12.7-acre project site is located at the terminus of Klotz Ranch Court, south of Pocket Road between Interstate 5 and Freeport Boulevard, Latitude 38.47902°, Longitude -121.50669°, City of Sacramento, Sacramento County, California.

The Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

To ascertain the extent of waters on the project site, the applicant should prepare a wetland delineation, in accordance with the "Minimum Standards for Acceptance of Preliminary Wetlands Delineations" and "Final Map and Drawing Standards for the South Pacific Division Regulatory Program" under "Jurisdiction" on our website at the address below, and submit it to this office for verification. A list of consultants that prepare wetland delineations and permit application documents is also available on our website at the same location.

The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation.

Please refer to identification number SPK-2020-00257 in any correspondence concerning this project. If you have any questions, please contact me at U.S. Army Corps of Engineers Regulatory Division, California Delta Section, 1325 J Street, Room 1350, Sacramento, CA 95814-2922, by email at [Mary.R.Pakenham-Walsh@usace.army.mil](mailto:Mary.R.Pakenham-Walsh@usace.army.mil), or telephone at (916) 557-7718. For more information regarding our program, please visit our website at [www.spk.usace.army.mil/Missions/Regulatory.aspx](http://www.spk.usace.army.mil/Missions/Regulatory.aspx),

Sincerely,

Mary R. Pakenham-Walsh  
Senior Project Manager  
California Delta Section

**From:** [Wood, Dylan@Wildlife](mailto:Wood, Dylan@Wildlife)  
**To:** [Scott Johnson](mailto:Scott Johnson)  
**Cc:** [Wildlife R2 CEQA; state.clearinghouse@opr.ca.gov](mailto:Wildlife R2 CEQA; state.clearinghouse@opr.ca.gov)  
**Subject:** Comments on the NOP for the Klotz Ranch Apartment Project (SCH: 2020039059)  
**Date:** Monday, April 20, 2020 5:44:22 PM  
**Attachments:** [image001.png](#)  
[Attachment 1 Homegrown Plant List\\_Final-1.pdf](#)

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Dear Mr. Johnson:

The California Department of Fish and Wildlife (CDFW) received the Notice of Preparation (NOP) of an Environmental Impact Report for the Klotz Ranch Apartment Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines<sup>1</sup>.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the project that may affect California fish and wildlife.

## CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) Although not anticipated, CDFW may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed and to the extent implementation of the Project as proposed may result in take<sup>2</sup> as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

<sup>1</sup>CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

<sup>2</sup>Section 86 of the Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Lead Agency in adequately identifying and/or mitigating the project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

**Comment 1: Mitigation Measure BIO-1 revisions needed to mitigate impacts to Swainson's hawks to a level of less-than-significant.** As identified in the Initial Study (IS), Swainson's hawk (*Buteo swainsoni*) has been observed near the project site and CNDB records indicate potential nesting activity along the Sacramento River. Swainson's hawk is a species listed as *threatened* under CESA, so potential take of the species resulting from the construction disturbance described in the IS could constitute a potentially significant impact under CEQA.

To address this, CDFW recommends making the following revisions to Biological Resources Mitigation Measure BIO-1 to more effectively mitigate to a level-of-less than significant:

- Disclose and adhere to the survey protocol: *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000)
- Define survey radius as 0.5 miles in accordance with the above protocol
- Consult with a qualified biologist and CDFW if active nests are found during project surveys

**Comment 2: Mitigation Measure BIO-1 revisions needed to mitigate impacts white-tailed kite to a level of less-than-significant.** As identified in the NOP, White-tailed kite (*Elanus leucurus*) been observed near the project site. White-tailed kite is a fully protected species under Section 3511 of the California Fish and Game Code. Surveys described in the IS do not necessarily capture potential impacts needed to ensure appropriate avoidance measures implemented.

To address this, CDFW recommends making the following revisions to Biological Resources Mitigation Measure 1 to more effectively mitigate to a level-of-less than significant:

- Disclose and adhere to the survey protocol: *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000)
- Define survey radius as 0.25 miles
- Consult with a qualified biologist and CDFW if active nests are found during project surveys
- Include the following language: "*If it is determined during surveys or project implementation that project activities may impact White-tailed kite, project personnel shall fully avoid any impacts and immediately notify CDFW if White-tailed kite is observed to be utilizing the project area or adjacent area.*"

**Comment 3: Potential impacts to special-status species (burrowing owls) are not mitigated to a level of less-than-significant.** A review of CDFW records (CDFW BIOS 2020) indicates occupied habitat for burrowing owls (*Athene cunicularia*) is present within 1 miles of the project area. It should be noted that burrowing owls are a species that is known to utilize urban infrastructure for nesting habitat, such as utility conduits and graded subdivision lots that have laid dormant. The IS does not does specifically identify a survey protocol to detect burrowing owls within the project area. The measure also does not define avoidance measures in the event burrowing owls are discovered.

To address this comment, CDFW recommends the IS be revised to include adherence to

survey protocol and the mitigation strategies defined in the CDFW *Staff Report on Burrowing Owl Mitigation* (2012) to mitigate to a level of less-than significant.

**Comment 4: Mitigation Measure BIO-2 revisions suggested.** CDFW notes that the project will mitigate from a CDFW-approved mitigation bank. Although typically an acceptable option, CDFW recommends also including mitigation at a CDFW-approved conservation site or CDFW-approved conservation bank in the event that either mitigation bank credits are not available (i.e. either sold out or not available to the project). Likewise, CDFW recommends adding an appropriate reference to the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFW 1994) for determination of the mitigation ratio and considerations.

**Comment 5: CDFW recommends enhancing habitat value of landscaping.** CDFW has noted that the IS includes project plans for landscaping improvements in the project area. CDFW recommends consideration of the Homegrown Habitat Plant List (Sacramento Valley Chapter, California Native Plant Society)(Attachment 1) when developing the final planting palette. The Homegrown Habitat Plant List (HHPL) is the result of a coordinated effort of regional stakeholders with the intent of improving landscape plantings for the benefit of property owners and ecosystem. Including plants from the HHPL is intended to produce the following outcomes for landscaping:

- Increased drought tolerance
- Decreased water use
- Decreased maintenance and replacement planting costs
- Increased functionality for local pollinators and wildlife
  - Increase in overall biodiversity and ecosystem health
- Increased carbon sequestration and climate change resilience
- Educational opportunities for residents

## ENVIRONMENTAL DATA

CEQA requires that information developed in environmental documents be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during project surveys to the California Natural Diversity Database (CNDDB). The types of information reported to CNDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>. The completed form can be sent electronically to CNDDB at the following email address: [CNDDB@wildlife.ca.gov](mailto:CNDDB@wildlife.ca.gov).

## CONCLUSION

CDFW appreciates the opportunity to comment and assist the Lead Agency in identifying and mitigating project impacts on biological resources.

Please contact me at 916-358-2384 or [dylan.a.wood@wildlife.ca.gov](mailto:dylan.a.wood@wildlife.ca.gov) if you have any questions.

Sincerely,  
**Dylan Wood**  
California Department of Fish and Wildlife

Environmental Scientist  
(916) 358-2384



# Homegrown Habitat Plant List 2019

	A	B	C	D	E	F	G	H
1	Bloom	Common Name	Scientific Name	Life Cycle	Height	WUCOL	Sun	Notes
2	<b>Early</b>	<a href="#">Western Redbud</a>	<i>Cercis occidentalis</i>	P	10'-20'	L	S/PS	Drought-tolerant; also tolerates semi-riparian conditions
3		<a href="#">Red Willow</a>	<i>Salix laevigata</i>	P	30'-50'	H	FS	Wetland-semi riparian; tolerates clay soils; fast grower, semi-deciduous
4		<a href="#">Arroyo Willow</a>	<i>Salix lasiolepis</i>	P	7'-35'	H	FS	Likes marshes/wet areas; spreads by root runners; deciduous
5		<a href="#">Sandbar Willow</a>	<i>Salix exigua</i>	P	10'-23'	H	FS	Constant moisture; spreads by basal shoots to any moisture
6		<a href="#">Valley Oak</a>	<i>Quercus lobata</i>	P	60'-100'	L	FS	Fast growing (20' in 5 years); drought tolerant
7		<a href="#">Scrub Oak</a>	<i>Quercus berberidifolia</i>	P	15'-20'	L	FS/PS	Smaller, drought tolerant, likes medium fast drainage
8		<a href="#">Buck Brush</a>	<i>Ceanothus cuneatus</i>	P	5'-12'	VL	FS	Needs fast drainage; fast to moderate growth, evergreen
9		<a href="#">California Everlasting</a>	<i>Psuedognaphalium californicum</i>	P	3'	VL/L	FS	Semi deciduous, may like some afternoon shade in summer
10		<a href="#">California Blackberry</a>	<i>Rubus ursinus</i>	P	6'	M/H	FS/PS/S	Requires substantial moisture, wide spreading
11		<a href="#">Dutchmans Pipe</a>	<i>Aristolochia californica</i>	P	20'	L/M	S/PS	Deciduous vine, grows in moist woods along streams
12		<a href="#">Baby Blue Eyes</a>	<i>Nemophila menziesii</i>	A	.25'	L	FS/PS	Annual herb
13		<a href="#">Chinese Houses</a>	<i>Collinsia heterophylla</i>	A	.5'	M	S/PS	Annual purple flowering herb, good in containers
14		<a href="#">Lacy Phacelia</a>	<i>Phacelia tanacetifolia</i>	A	3'	VL/L	FS	Tolerates clay soils; good plant for biological pest control
15		<a href="#">Miners Lettuce</a>	<i>Claytonia perfoliata</i>	A	1.3'	L/M	PS	Edible spreading annual herb; in the valley, does best in part shade
16								
17	<b>Early-Mid</b>	<a href="#">Blue Elderberry</a>	<i>Sambucus nigra var. cerulea</i>	P	20'-30'	M	FS	Easy to grow, fast growing deciduous shrub/tree; host plant for endangered Valley Elderberry Longhorn Beetle
18		<a href="#">Interior Live Oak</a>	<i>Quercus wislizenii</i>	P	15'-50'	VL	S/PS	Medium to large evergreen, moderate grower
19		<a href="#">Blue Oak</a>	<i>Quercus douglasii</i>	P	16'-82'	VL	FS/PS	Slow grower deciduous, supports many species
20		<a href="#">Toyon</a>	<i>Heteromeles arbutifolia</i>	P	12'	L	FS/PS	Evergreen shrub easy to grow, white flowers early summer, red berries in fall
21		<a href="#">Shining Willow</a>	<i>Salix lasiandra</i>	P	3'-30'	M/H	FS/PS	Winter deciduous riparian plant, good for restoration projects
22		<a href="#">Mountain Mahogany</a>	<i>Cercocarpus betuloides</i>	P	8'-20'	VL/L	FS/PS	In the valley this plant will do better with PM shade
23		<a href="#">Hollyleaf Redberry</a>	<i>Rhamnus ilicifolia</i>	P	9'	L	PS	PM shade in the valley, siting is critical for success
24		<a href="#">California Broom/Deerwe</a>	<i>Acmsipon glaber</i>	P	3'	VL	FS	Not too showy subshrub with high habitat value
25		<a href="#">Skunkbush, Fragrant Sum</a>	<i>Rhus aromatica</i>	P	8'	L	FS/PS	Winter deciduous shrub, may like PM shade in valley
26		<a href="#">Chaparral Honeysuckle</a>	<i>Lonicera interrupta (hispida)</i>	P		VL/L	FS/PS	Hardy, woody chaparral shrub/vine, summer flowering, edible/bitter berries
27		<a href="#">Silver Bush Lupine</a>	<i>Lupinus albifrons</i>	P	3'	L	FS/PS	Requires good drainage, PM shade in valley
28		<a href="#">Foothill Penstemon</a>	<i>Penstemon heterophyllus</i>	P	5'	L	FS/PS	Perennial evergreen herb. May need pm shade in valley
29		<a href="#">Sonoma Sage</a>	<i>Salvia sonomensis</i>	P	1.3'	VL	PS	Moderately drought tolerant if given part shade
30		<a href="#">Purple Needlegrass</a>	<i>Stipa pulchra</i>	P	3'	VL/L	FS	CA state grass, perennial with deep roots
31		<a href="#">California Poppy</a>	<i>Eschscholzia californica</i>	A	.5'	VL/L	FS	CA State flower, tolerates clay soil, readily reseeds
32		<a href="#">Elegant Clarkia</a>	<i>Clarkia unguiculata</i>	A	.5'	L	FS/PS	Showy pink flowers, reseeds readily
33		<a href="#">Globe Gilia</a>	<i>Gilia capitata</i>	A	1'	L/M	FS	Showy pink to lavender flowers
34		<a href="#">Miniature Lupine</a>	<i>Lupinus bicolor</i>	A	1.3'	L	FS	Showy purple and white flowers, plant with CA poppies
35		<a href="#">Sky Lupine</a>	<i>Lupinus nanus</i>	A	2'	L	FS	Chaparral annual herb

## Homegrown Habitat Plant List 2019

	A	B	C	D	E	F	G	H
	Bloom	Common Name	Scientific Name	Life Cycle	Height	WUCOL	Sun	Notes
36								
37	<b>Mid</b>	<a href="#">California Buckwheat</a>	<i>Eriogonum fasciculatum</i>	P	2.5'	VL/L	FS	Tough, easy to grow, prefer good drainage
38		<a href="#">Hoary Coffeberry</a>	<i>Frangula californica</i> var <i>tomei</i>	P	20'	L	FS/PS	May prefer PM shade in valley
39		<a href="#">California Wildrose</a>	<i>Rosa californica</i>	P	8'	M	FS/PS	Tolerates clay soils; drought-tolerant; spreads through underground runners
40		<a href="#">California Wild Grape</a>	<i>Vitis californica</i>	P	10'-40'	L/M	FS/PS	Common along rivers and streams, winter deciduous
41		<a href="#">Common Yarrow</a>	<i>Achillea millefolium</i>	P	3'	L-H	FS/PS	Looks best with regular water; semi deciduous in drier conditions; can be aggressive
42		<a href="#">Coyote Mint</a>	<i>Monardella villosa</i>	P	2'	L	PS/S	Requires good drainage, needs PM shade in the valley
43		<a href="#">Showy Milkweed</a>	<i>Asclepias speciosa</i>	P	5'	L/M	FS	Tolerates clay soils; spreads through underground rhizomes
44		<a href="#">Imbricate Phacelia</a>	<i>Phacelia imbricata</i>	P	1'	L	FS/PS	Perennial herb; tolerates clay soil; can re-seed
45		<a href="#">Woolly Sunflower</a>	<i>Eriophyllum lanatum</i>	P	2'	L	FS/PS	Summer semi-deciduous; can be extremely drought-tolerant
46		<a href="#">Nude Buckwheat</a>	<i>Eriogonum nudum</i>	P	6'	L	FS	Summer semi-deciduous; leafless stems
47		<a href="#">Blue Wild Rye</a>	<i>Elymus glaucus</i>	P	5'	L	FS/PS	Popular accent grass for gardens; summer semi-deciduous
48		<a href="#">Deergrass</a>	<i>Muhlenbergia rigens</i>	P	5'	L	FS	Attractive bunch grass; easy to grow; grows in most soils
49		<a href="#">Fleabane Daisy</a>	<i>Erigeron foliosus</i>	P	3.3'	L	PS	
50		<a href="#">Lippia</a>	<i>Phyla nodiflora</i>	P	6"	L	FS/PS	Flowering ground cover; spreads rapidly
51		<a href="#">Spider Lupine</a>	<i>Lupinus benthamii</i>	A	2.3'	VL	FS	
52		<a href="#">Seep Monkeyflower</a>	<i>Erythranthe guttata</i>	A	5'	M/H	FS/PS	Aquatic annual plant; good in ponds or rain gardens
53								
54	<b>Mid-Late</b>	<a href="#">Narrowleaf Milkweed</a>	<i>Asclepias fascicularis</i>	P	1.5'	M	FS	Not showy; tolerates clay; host to Monarchs
55		<a href="#">Virgin's Bower</a>	<i>Clematis ligusticifolia</i>	P	30'	L/M	PS/SH	vine; showy white flowers; summer deciduous; part shade to shade
56		<a href="#">Hooker's Evening Primros</a>	<i>Oenothera elata</i>	P	5'	M-H	FS/PS	Wetland-riparian but still drought tolerant; reseeds aggressively
57		<a href="#">California Fuchsia</a>	<i>Epilobium canum</i>	P	3'	L	FS	Hummingbird favorite; spreads; cut back in winter
58		<a href="#">Gumplant</a>	<i>Grindelia camporum</i>	P	4'	L	FS	Tolerates most soils; can be cut back in winter
59		<a href="#">Snowberry</a>	<i>Symphoricarpos albus</i>	P	6'	L	PS/SH	Moist shady areas; winter deciduous; spreads by rhizomes
60		<a href="#">Slender Woolly Buckwheat</a>	<i>Eriogonum gracile</i>	A	5'	EL/VL	FS/PS	Small annual; tolerates most soils; winter semi-deciduous
61		<a href="#">Common Madia</a>	<i>Madia elegans</i>	A	7'	L	FS/PS	Annual herb; showy yellow flowers; tolerates many soils
62		<a href="#">Common Sunflower</a>	<i>Helianthus annuus</i>	A	5'	M	FS	Tolerates most soils; can get very large
63								
64	<b>Late</b>	<a href="#">California Aster</a>	<i>Symphyotrichum chilense</i>	P	5'	VL/L	FS/PS	Tolerates clay soil; winter deciduous; cut back in winter; aggressive spreader
65		<a href="#">California Goldenrod</a>	<i>Solidago californica</i>	P	3'	VL/M	FS/PS/S	Easy to grow; for late color plant with <i>Epilobium canum</i> ; spreader
66		<a href="#">Sulphur Buckwheat</a>	<i>Eriogonum umbellatum</i>	P	7'	VL/M	FS	Showy yellow flowers; variable plant; evergreen
67		<a href="#">Bee Plant</a>	<i>Scrophularia californica</i>	P	4'	L	PS	Strong bee attractant; tolerates most soils; needs good drainage
68		<a href="#">Coyote Brush</a>	<i>Baccharis pilularis</i>	P	10'	VL/L	FS/PS	Tour easy to grow shrub; variable forms; blooms into winter
69		<a href="#">Rubber Rubberbrush</a>	<i>Ericameria nauseosa</i>	P	9'	L	FS	Needs good drainage; summer/fall bloom
70		<a href="#">Vinegarweed</a>	<i>Trichostema lanceolatum</i>	A	1'	L	FS	Does not do well in seed mixes; sow individually; tolerates dry clay soils



GAVIN NEWSOM  
GOVERNOR



JARED BLUMENFELD  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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## Central Valley Regional Water Quality Control Board

20 April 2020

Scott Johnson  
City of Sacramento  
300 Richards Boulevard, Third Floor  
Sacramento, CA 95811

### **COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT, KLOTZ RANCH APARTMENTS (P19-070) PROJECT, SCH#2020039059, SACRAMENTO COUNTY**

Pursuant to the State Clearinghouse's 20 March 2020 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation of an Environmental Impact Report* for the Klotz Ranch Apartments (P19-070) Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Central Valley Water Board staff noticed that wetland restoration was not listed as a mitigation option in Mitigation Measure BIO-5, only wetland preservation and creation were listed. Wetland restoration, which includes re-establishment and rehabilitation, may be a suitable mitigation option to offset impacts. Mitigation banks and in-lieu fee programs may have wetland re-establishment credits available for purchase, as well as preservation and establishment credits. Central Valley Water Board staff recommends updating Mitigation Measure BIO-5 to either include restoration as a mitigation option or to explain why restoration is not considered a mitigation option for this project.

Central Valley Water Board staff also noticed that several standard checklist questions do not seem to be included, or were altered, in the Hydrology & Water Quality section of the Initial Study. Central Valley Water Board staff recommends including additional checklist questions and including regulatory setting of additional agencies that have jurisdiction on hydrology and water quality within this section. Central Valley Water Board staff recommends listing and describing Clean Water Act Sections 404 and 401, and the Porter-Cologne Act under the Regulatory Setting in the Hydrology and Water Quality section of the Environmental Impact Report (EIR). Further, potential project impacts to waters of the State, including waters of the United States, should be included in the Hydrology and Water Quality section of the EIR with reference to best management practices and Mitigation Measures that will result in reduction of significance of impact of project activities.

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KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

## I. Regulatory Setting

### Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/)

### Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr\\_2018\\_05.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_2018_05.pdf)

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

## **II. Permitting Requirements**

### **Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)

### **Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>**

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/municipal\\_permits/](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/)

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml)

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<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

### **Clean Water Act Section 404 Permit**

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

### **Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:  
[https://www.waterboards.ca.gov/centralvalley/water\\_issues/water\\_quality\\_certification/](https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/)

### **Waste Discharge Requirements – Discharges to Waters of the State**

If USACE determines that only non-jurisdictional waters of the State (i.e., “non-federal” waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:[https://www.waterboards.ca.gov/centralvalley/water\\_issues/waste\\_to\\_surface\\_water/](https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/)

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at:

[https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2004/wqo/wqo2004-0004.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf)

### **Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf)

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/waivers/r5-2018-0085.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf)

### **Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

[https://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2016-0076-01.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf)

### **NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: <https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4812  
or [Jordan.Hensley@waterboards.ca.gov](mailto:Jordan.Hensley@waterboards.ca.gov).



Jordan Hensley  
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research,  
Sacramento (via email)

**From:** [kasdvm@aol.com](mailto:kasdvm@aol.com)  
**To:** [Scott Johnson; margit.spencer@vca.com](mailto:Scott.Johnson@margit.spencer@vca.com)  
**Subject:** Klotz Ranch Apartment Project  
**Date:** Wednesday, March 25, 2020 10:02:34 AM

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City of Sacramento

March 25, 2020

The following thoughts are in regards to the proposed Klotz Ranch Apartment Project (P19-070).

I have lived in the Greenhaven Pocket area for close to 50 years. I have had the pleasure of providing Veterinary service to the community for most of those years. And I presently own the Veterinary Hospital, VCA Mueller Pet Medical Center, across Freeport Blvd from the proposed site.

My biggest concern for this project is the apparent gross underestimation of the traffic impact that it will create. Your notice notes that the only primary access for this project will be through the already present road bordering McDonalds and the Shell station. I have had the pleasure of using both of these businesses and have often found congestion due to the already busy area. Adding 300 to 500 vehicles to this area will simply not work.

Many, if not most of the occupants of this need development will be commuting to work each day. That area is already extremely congested during the 7-8:30am commute time. Adding hundreds of new vehicles will severely impact this already congested traffic flow.

One consideration that I'm sure has been considered would be to allow the primary traffic flow to occur along Freeport Blvd. instead of Klotz Ranch Dr. That would require new storm drains along

Freeport Blvd to replace the open ditch. But, once again, the impact of this many cars on Freeport Blvd. would stagnate the region, especially during the commute hours. The traffic flow along Freeport Blvd has been severely impacted when the new Delta Shores road and shopping center were added to the south. This has already impacted my business with the inability, at times, of my clients (especially emergency clients and patients) and staff from turning left on Freeport to enter my parking area due to this congestion.

Though I truly understand the need for more housing, especially affordable housing, in the Sacramento area, I really don't think this site is appropriate for that usage. In my humble evaluation, Sacramento has spent a great amount of money creating a very nice rapid transit system. Why are we not planning for these housing units to be placed adjacent, or very close to these already present stations? The regional traffic would be not be impacted as severely, and the new residents would be very pleased to have an alternative way to get to work.

As for the Klotz site, have they considered a small industrial center. Though large trucks would need to be accommodated, the traffic would be significantly less. And having a close freeway access would be a huge selling point for occupancy.

Thank you for your time.

Dr. Ken Schenck



## NATIVE AMERICAN HERITAGE COMMISSION

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**Christina Snider**  
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March 23, 2020

Scott Johnson  
City of Sacramento  
300 Richards Blvd., Third Floor  
Sacramento, CA 95811

**Re: 2020039059, Klotz Ranch Apartment Project, Sacramento County**

Dear Mr. Johnson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

**1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:**

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- a. A brief description of the project.
- b. The lead agency contact information.
- c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

**2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

**3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

**4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.
- d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

**5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

**6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

**7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

**8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

**9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

**10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**

- a. Avoidance and preservation of the resources in place, including, but not limited to:
  - i. Planning and construction to avoid the resources and protect the cultural and natural context.
  - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - i. Protecting the cultural character and integrity of the resource.
  - ii. Protecting the traditional use of the resource.
  - iii. Protecting the confidentiality of the resource.
- c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
- e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
- f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

**11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

## NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([http://ohp.parks.ca.gov/?page\\_id=1068](http://ohp.parks.ca.gov/?page_id=1068)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: [Nancy.Gonzalez-Lopez@nahc.ca.gov](mailto:Nancy.Gonzalez-Lopez@nahc.ca.gov).

Sincerely,



Nancy Gonzalez-Lopez  
Staff Services Analyst

cc: State Clearinghouse



March 23, 2020

Mr. Scott Johnson  
City of Sacramento – Community Development Department  
300 Richards Boulevard, 3<sup>rd</sup> Floor  
Sacramento CA 95811

**Main Office**

10060 Goethe Road  
Sacramento, CA 95827-3555  
Tel: 916.876.6000  
Fax: 916.876.6160

**Treatment Plant**

8521 Laguna Station Road  
Elk Grove, CA 95758-9550  
Tel: 916.875.9000  
Fax: 916.875.9068

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[www.regionalsan.com](http://www.regionalsan.com)

**Subject: Notice of Preparation of an Environmental Impact Report for the Klotz Ranch Apartment Project (P19-070)**

Dear Mr. Johnson,

Sacramento Regional County Sanitation District (Regional San) has the following comments pertaining to the Notice of Preparation of an Environmental Impact Report for the Klotz Ranch Apartment project (P19-070).

The proposed project includes construction of a 266-unit apartment complex consisting of six, four-story residential buildings and a two-story clubhouse on a 12.7-acre site.

Regional San is not a land-use authority. Projects identified within Regional San planning documents are based on growth projections provided by land-use authorities. Sewer studies may need to be completed to assess the impacts of any proposed project that has the potential to increase flow demands. Onsite and offsite impacts associated with constructing sanitary sewer facilities to provide service to the subject project site should be included in this environmental impact report.

Customers receiving service from Regional San are responsible for rates and fees outlined within the latest Regional San ordinances. Fees for connecting to the sewer system are set up to recover the capital investment of sewer treatment facilities that provides service to new customers. The Regional San ordinance is located on the Regional San website at: [www.regionalsan.com](http://www.regionalsan.com).

Local sanitary sewer service for the proposed project site will be provided by the City of Sacramento's (City) local sewer collection system. Ultimate conveyance of wastewater from the City collection system to the Sacramento Regional Wastewater Treatment Plant (SRWTP) for treatment and disposal will be provided via Sump 2/2A and the Regional San City Interceptor system. Cumulative impacts of the proposed project will need to be quantified by the project proponents to ensure that wet and dry weather capacity limitations within Sump 2/2A and the City Interceptor are not exceeded.

Mr. Scott Johnson

March 23, 2020

(P19-070)

Page 2

On March 13, 2013, Regional San approved the Wastewater Operating Agreement between Regional San and the City. The following limitations are outlined in the subject Agreement:

Service Area	Flow Rate (MGD)
Combined Flows from Sump 2 and Sump 2A	60
Combined flows from Sumps 2, 2A, 21, 55, and 119	98
Total to City Interceptor of combined flows from Sumps 2, 2A, 21, 55, 119, and five trunk connections	108.5

The SRWTP provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens through a primary sedimentation process. This allows most of the heavy organic solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally occurring microscopic organisms, which consume the organic particles in the wastewater. These organisms eventually settle on the bottom of the secondary clarifiers. Clean water pours off the top of these clarifiers and is chlorinated, removing any pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two mile “outfall” pipeline to the Sacramento River, near the town of Freeport, California. Before entering the river, sulfur dioxide is added to neutralize the chlorine. The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet weather flows while minimizing idle SRWTP facilities during dry weather. The SRWTP was designed to accommodate some wet weather flows while the storage basins and interceptors were designed to accommodate the remaining wet weather flows.

A NPDES Discharge Permit was issued to Regional San by the Central Valley Regional Water Quality Control Board (Water Board) in December 2010. In adopting the new Discharge Permit, the Water Board required Regional San to meet significantly more restrictive treatment levels over its current levels. Regional San believed that many of these new conditions go beyond what is reasonable and necessary to protect the environment, and appealed the permit decision to the State Water Resources Control Board (State Board). In December 2012, the State Board issued an Order that effectively upheld the Permit. As a result, Regional San filed litigation in California Superior Court. Regional San and the Water Board agreed to a partial settlement in October 2013 to address several issues and a final settlement on the remaining issues were heard by the Water Board in August 2014. Regional San began the necessary activities, studies and projects to meet the permit conditions. The new treatment facilities to achieve the permit and settlement requirements must be completed by May 2021 for ammonia and nitrate and May 2023 for the pathogen requirements

Mr. Scott Johnson

March 23, 2020

(P19-070)

Page 3

Regional San currently owns and operates a 5-mgd Water Reclamation (WRF) that has been producing Title 22 tertiary recycled since 2003. The WRF is located within the SRWTP property in Elk Grove. A portion of the recycled water is used by Regional San at the SRWTP and the rest is wholesaled to the Sacramento County Water Agency (SCWA).

SCWA retails the recycled water, primarily for landscape irrigation use, to select customers in the City of Elk Grove. It should be noted that Regional San currently does not have any planned facilities that could provide recycled water to the proposed project or its vicinity. Additionally, Regional San is not a water purveyor and any potential use of recycled water in the project area must be coordinated between the key stakeholders, e.g. land use jurisdictions, water purveyors, users, and the recycled water producers.

If you have any questions regarding this letter, please feel free to contact me at (916) 876-6104 or by email: [armstrongro@sacsewer.com](mailto:armstrongro@sacsewer.com).

Sincerely,

*Robb Armstrong*

Robb Armstrong

Regional San Development Services & Plan Check



**SACRAMENTO AREA  
SEWER DISTRICT**

SERVING YOU 24 / 7

10060 Goethe Road  
Sacramento, CA 95827-3553  
Tel 916.876.6000  
Fax 916.876.6160  
[www.sacsewer.com](http://www.sacsewer.com)

April 3, 2020

Scott Johnson  
City of Sacramento  
Community Development Department  
300 Richards Boulevard, 3<sup>rd</sup> Floor  
Sacramento, CA 95811

**Subject:** Klotz Ranch Apartments  
**APN:** 031-1550-002  
**File No.:** P19-070

Dear Mr. Johnson,

The Sacramento Area Sewer District (SASD) has reviewed the subject documents.

The applicant is requesting comment on the NOP of an EIR for the Klotz Ranch Apartment Project.

The subject property is outside the boundaries of SASD but within the Urban Service Boundary and Sacramento Regional County Sanitation District (Regional San) boundaries. Regional San will provide ultimate conveyance and treatment of the sewer generated from this site, but the Sacramento City Utilities Department's approval will be required for local sewage service.

If you have any questions regarding these comments, please call me at 916-876-9991 or Yadira Lewis 916-876-6336.

Sincerely,

*Haley MacGowan*

Haley MacGowan, EIT  
SASD Development Services

[www.sacsewer.com](http://www.sacsewer.com)

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Director of Internal Services

**Joseph Maestretti**

Chief Financial Officer

**Nicole Coleman**

Public Affairs Manager

**From:** [Justin Le](#)  
**To:** [Scott Johnson](#)  
**Subject:** SCH# 2020039059  
**Date:** Tuesday, April 21, 2020 1:51:22 PM

---

The State Clearinghouse would like to inform you that our office will be transitioning from providing a hard copy of acknowledging the close of review period on your project to electronic mail system.

**Please visit:** <https://ceqanet.opr.ca.gov/2020039059/2> for full details about your project and if any state agencies submitted comments by close of review period (note: any state agencies in **bold**, submitted comments and are available).

This email acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please email the State Clearinghouse at [state.clearinghouse@opr.ca.gov](mailto:state.clearinghouse@opr.ca.gov) for any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Justin Le | Student Assistant  
**Governor's Office of Planning and Research**  
**State Clearinghouse Unit**  
1400 10th Street, Room 113  
Sacramento, CA 95814  
(916) 445-0613



April 15, 2020

SENT VIA E-MAIL ONLY

Scott Johnson  
City of Sacramento  
Community Development Department  
300 Richards Blvd., 3<sup>rd</sup> Floor  
Sacramento, CA 95811

**RE: Notice of Preparation of an Environmental Impact Report for the Klotz Ranch Apartments Project (P19-070) (SAC201902268)**

Dear Mr. Johnson:

Thank you for providing the Notice of Preparation of the Environmental Impact Report for the Klotz Ranch Apartments project to the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District). The proposed project consists of the construction and operation of a 266-unit apartment complex (six four-story buildings) and a two-story clubhouse on an approximately 12.7-acre property located south of Pocket Road between Interstate 5 and Freeport Boulevard in south Sacramento. An initial study (IS) has been prepared to evaluate the environmental effects of this project and to ensure compliance under the California Environmental Quality Act (CEQA). Based on the findings of the Initial Study, the City determined that potentially significant impacts to air quality, greenhouse gas emissions, transportation and traffic could result from implementation of the project. A focused EIR will be prepared to analyze potential impacts related to these topics.

**Air Quality Impacts**

The Notice of Preparation states that the impacts of the project on air quality will be evaluated. Please examine the types and levels of emissions generated by the project, the existing air quality conditions, and the impact of the project on emissions of nitrogen oxides, reactive organic gases, particulate matter (PM10 and PM2.5) including from exhaust and fugitive dust, and toxic air contaminants. Analyze and disclose both construction and operational emissions. Evaluate possible onsite and offsite mitigation measures to reduce construction and operational emissions from this project. Please see our [CEQA Guidance, Guide to Air Quality Assessment in Sacramento County \(CEQA Guide\)](#), which provides direction on analysis and includes [thresholds of significance](#) for particulate matter and other criteria pollutants.

**Greenhouse Gas Emissions**

The Notice of Preparation states that the impacts of the project on greenhouse gas emissions and climate change will be evaluated. Please evaluate the project's consistency with the City of Sacramento's Climate Action Plan.

In addition, the Sac Metro Air District recommends that the project achieve consistency with the applicable recommendations of the Mayors' Commission on Climate Change. Sacramento Mayor Darrell Steinberg and Mayor Christopher Cabaldon of West Sacramento

Mr. Scott Johnson

April 15, 2020

Klotz Ranch Apartments Notice of Preparation

Page 2

are leading an effort to develop a common vision and set of strategies for both cities to achieve net zero greenhouse gas emissions by 2045. The Commission's recommendations to help achieve this goal include: *Mandate all-electric construction to eliminate fossil fuel use in new buildings by 2023.* Please analyze the impact of building all-electric residences, and installing no natural gas connections, on project GHG emissions.

#### Urban Heat Island Effect

The Sac Metro Air District recommends an analysis of the proposed project's features that contribute to increases in the urban heat island effect. Impervious surfaces, such as those created with traditional urban paving materials, have less surface moisture available for evapotranspiration than natural ground cover. This characteristic contributes to higher surface and air temperatures, known as heat island effect. As a result, air temperatures in the project's parking lots and other paved areas may contribute to increased area temperatures. Higher ambient temperatures increase formation of ozone, a respiratory system irritant. During extreme heat and extended heat waves, these higher temperatures can lead to heat stress, heat stroke, and even heat mortality, especially for the elderly, the young, and those with pre-existing health conditions. The urban heat island effect also contributes to increased greenhouse gas emissions by increasing use of electricity for air conditioning.

Analyze the feasibility of deploying measures such as tree canopy, cool roofs, and cool pavements to reduce the urban heat island effect. The widespread use of these measures and other strategies can help to cool ambient temperatures, lower building energy use, and protect the public from excessive heat.

#### Consistency with Existing Plans

Please evaluate the project's consistency with existing plans, especially those that reduce emissions of criteria air pollutants and greenhouse gases. Such plans include, but are not limited to: (1) the current Metropolitan Transportation Plan/Sustainable Communities Strategy; (2) the City of Sacramento 2035 General Plan; (3) the City of Sacramento's Pedestrian Master Plan and 2016 Bicycle Master Plan.

#### Design Recommendation - Emissions Exposure Reduction Measures

Due to this project's proximity to Interstate 5, the proponent should consider reducing exposure to toxic air contaminants of project residents by planting a vegetation barrier along the western boundary of the project. Vegetation barriers designed, installed and maintained in accordance with the Sac Metro Air District's [Landscaping Guidance to Improve Air Quality Near Major Roadways](#) can reduce exposure of project residents to particulate matter and other toxic air contaminants emitted by vehicles on Interstate 5. For more information on the effectiveness of near-roadway vegetation barriers, please refer to the US EPA's [Recommendations for Constructing Vegetation Barriers to Improve Near-Roadway Air Quality](#). See also the California Air Resources Board's [Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways](#).

As an additional measure to reduce resident exposure to air pollutants generated by traffic on Interstate 5, the Sac Metro Air District recommends the planting of as many trees as possible throughout the project site. Urban trees improve air quality by absorbing gaseous pollutants such as ozone and nitrogen dioxide; intercepting particulate matter; increasing

Mr. Scott Johnson  
April 15, 2020  
Klotz Ranch Apartments Notice of Preparation  
Page 3

oxygen levels through photosynthesis; and providing shade, resulting in lower local air temperatures, thereby reducing ozone formation. Lower VOC-emitting tree species should be selected, which can be identified on the [Sacramento Tree Foundation's website](#). Tree canopy can provide additional health benefits: for example, shaded parking spaces help reduce emissions of volatile organic compounds (VOCs), an ozone precursor, from parked vehicles with internal combustion engines.

Air Quality Rules and Regulations

All projects are subject to Sac Metro Air District rules in effect at the time of construction and any construction project, regardless of the size, is required to implement the Sac Metro Air District's Basic Construction Emission Control Practices. The Basic Construction Emission Control Practices and the Rules & Regulations Statement are attached for your reference. A complete listing of current rules is available at [www.airquality.org](http://www.airquality.org) or by calling 916-874-4800.

Thank you for your consideration of these comments. Please send environmental documents, including air quality analyses, to [projectreview@airquality.org](mailto:projectreview@airquality.org). If you have any questions, please contact me at 916-874-4816 or [tduarte@airquality.org](mailto:tduarte@airquality.org).

Sincerely,



Teri Duarte, MPH  
Planner/Analyst

Cc: Paul Philley, AICP, Sac Metro Air District

Attachment

**Attachment**

**Sac Metro Air District BASIC CONSTRUCTION EMISSION CONTROL PRACTICES  
(BEST MANAGEMENT PRACTICES)**

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds.

Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel powered equipment. The California Air Resources Board enforces the idling limitations.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Lead agencies may add these emission control practices as Conditions of Approval (COA) or include in a Mitigation Monitoring and Reporting Program (MMRP).

**Sac Metro Air District Rules & Regulations Statement** (revised 6/2018)

*The following statement is recommended as standard condition of approval or construction document language for **all** development projects within the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District):*

All projects are subject to Sac Metro Air District rules in effect at the time of construction. A complete listing of current rules is available at [www.airquality.org](http://www.airquality.org) or by calling 916-874-4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

**Rule 201: General Permit Requirements.** Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from Sac Metro Air District prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the Sac Metro Air District early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a permit include, but are not limited to, dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower is required to have a Sac Metro Air District permit or a California Air Resources Board portable equipment registration (PERP) (see Other Regulations below).

**Rule 402: Nuisance.** The developer or contractor is required to prevent dust or any emissions from onsite activities from causing injury, nuisance, or annoyance to the public.

**Rule 403: Fugitive Dust.** The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

**Rule 414: Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 BTU PER Hour.** The developer or contractor is required to install water heaters (including residence water heaters), boilers or process heaters that comply with the emission limits specified in the rule.

**Rule 417: Wood Burning Appliances.** This rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

**Rule 442: Architectural Coatings.** The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

**Rule 453: Cutback and Emulsified Asphalt Paving Materials.** This rule prohibits the use of certain types of cut back or emulsified asphalt for paving, road construction or road maintenance activities.

Mr. Scott Johnson  
April 15, 2020  
Klotz Ranch Apartments Notice of Preparation  
Page 6

**Rule 460: Adhesives and Sealants.** The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

**Rule 902: Asbestos.** The developer or contractor is required to notify the Sac Metro Air District of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

#### **Other Regulations (California Code of Regulations (CCR))**

**17 CCR, Division 3, Chapter 1, Subchapter 7.5, §93105 Naturally Occurring Asbestos:** The developer or contractor is required to notify the Sac Metro Air District of earth moving projects, greater than 1 acre in size in areas “Moderately Likely to Contain Asbestos” within eastern Sacramento County. The developer or contractor is required to comply with specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.

**13 CCR, Division 3, Chapter 9, Article 5, Portable Equipment Registration Program:** The developer or contractor is required to comply with all registration and operational requirements of the portable equipment registration program such as recordkeeping and notification.

**13 CCR, Division 3, Chapter 9, Article 4.8, §2449(d)(2) and 13 CCR, Division 3, Chapter 10, Article 1, §2485 regarding Anti-Idling:** Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes. These apply to diesel powered off-road equipment and on-road vehicles, respectively.



***Sent Via E-Mail***

April 16, 2020

Scott Johnson  
Environmental Planning Services  
City of Sacramento, Community Development Department  
300 Richards Blvd., Third Floor, Sacramento, CA 95811  
(916) 808-5842  
[SRJohnson@cityofsacramento.org](mailto:SRJohnson@cityofsacramento.org)

Subject: **Klotz Ranch Apartments Project / NOP / 2020039059**

Dear Mr. Johnson,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Notice of Preparation (NOP) for the Klotz Ranch Apartments Project (Project, SCH 2020039059). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project EIR will acknowledge any Project impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
  - <https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services>
  - <https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way>
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery
- The potential need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area

More specifically, SMUD would like any subsequent CEQA documents for proposed Project activities, to include adequate evaluation of cumulative impacts to utility systems, the utility facilities needed to serve the Project, and any potential environmental issues associated with extending utility service to the proposed Project.

In addition, per our letter Re: Klotz Ranch (Project No. P19-070) sent January 10, 2020, SMUD requests the following conditions on the Applicant's Project to minimize impacts to SMUD facilities on or adjacent to the Project site

1. SMUD has existing overhead 69kV facilities on the east side of the project site along Freeport Blvd which will need to remain. The Applicant shall be responsible for maintaining all Cal OSHA and State of California Public Utilities Commission General Order No. 95 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation.
2. SMUD has existing underground 12kV facilities on the west of the project site which will need to remain. The Applicant shall be responsible for maintaining all Cal OSHA and State of California Public Utilities Commission General Order No. 128 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation.
3. In the event the Applicant requires the relocation or removal of existing SMUD facilities on or adjacent to the subject property, the Applicant shall coordinate with SMUD. The Applicant shall be responsible for the cost of relocation or removal.
4. The Applicant shall not place any building foundations within 5-feet of any SMUD trench to maintain adequate trench integrity. The Applicant shall verify specific clearance requirements for other utilities (e.g., Gas, Telephone, etc.).
5. In the event the City requires an Irrevocable Offer of Dedication (IOD) for future roadway improvements, the Applicant shall dedicate a 12.5-foot public utility easement (PUE) for overhead and/or underground facilities and appurtenances adjacent to the City's IOD. Road improvements should be evaluated as part of the project.
6. The Applicant shall dedicate and provide all-weather vehicular access for service vehicles that are up to 26,000 pounds. At a minimum: (a) the drivable surface shall be 20-feet wide; and (b) all SMUD underground equipment and appurtenances shall be within 15-feet from the drivable surface.

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NOP. If you have any questions regarding this letter, please do not hesitate to contact me at 916.732.6676, or by email at [rob.ferrera@smud.org](mailto:rob.ferrera@smud.org).

Sincerely,



Rob Ferrera  
Environmental Services Specialist  
Sacramento Municipal Utility District  
6201 S Street  
Sacramento, CA 95817

cc: Entitlements

April 16, 2020

Scott Johnson  
City of Sacramento Community Development Department  
300 Richards Boulevard, 3<sup>rd</sup> Floor  
Sacramento CA 95811

**Re: NOP Comment Letter for Klotz Ranch (P19-070)**

Dear Mr. Johnson:

Thank you for the opportunity to submit comments on the future content and scope of an Environmental Impact Report (EIR) for the Klotz Ranch application for a new development of 266 apartments in a 4-story building configuration. South Pocket Homeowners Association (SPHA) represents approximately 400 homes within the boundaries of Pocket Road, Interstate 5, Sacramento River, and Greenhaven Drive. Our neighborhood association has been working to represent our neighbors for over thirty years.

SPHA received your March 19 Notice of Preparation (NOP) for an EIR, which seeks comments from public agencies and members of the public regarding the content and scope of the EIR. The EIR will analyze potential significant impacts from the project on the environment, as well as analyzing alternatives to the project. SPHA provides our comments below.

**ISSUES THAT SHOULD BE ANALYZED IN THE EIR**

1. **Transportation System Impacts.** The Initial Study/Mitigated Negative Declaration (IS/MND) acknowledges on page 50 that potentially significant impacts could be placed on the existing transportation and circulation system. Our neighbors are already aware of multiple existing transportation problems in the vicinity and have tried to work with City Public Works for remedies, with no success to date.

Existing congestion on Pocket Road between Freeport Boulevard and Greenhaven Drive is significant at the AM and PM peak traffic times. This stretch of Pocket Road has three traffic signals, including the two off-ramps from Interstate 5 and the Klotz Ranch Court traffic signal. This stretch of Pocket Road is one of only three access points to the Pocket Area, the others being Florin Road and Riverside Boulevard, so additional congestion is undesirable.

Existing peak PM commute back-up on S/B Greenhaven Drive to turn east onto Pocket Road (discussed with Eric Poon, City PW, 2018, unmitigated to date) creates general congestion and significant impact on our neighborhood in particular. There are two left turn lanes on south-bound Greenhaven Drive to turn left onto Pocket Road. During the peak PM commute, these lanes fill up and motorists wishing to turn left back up all the way to Rush River Drive. The back-up encourages motorists to make rash and

unpredictable movements, such as darting out of the backed up lanes into the right lane. Many of our neighbors have commented about the problem.

The impact on our South Pocket neighborhood is an unintended and dangerous consequence of these drivers, frustrated at waiting to turn left, proceeding straight into our neighborhood, making a u-turn just south of the median on Greenhaven Drive, going back to Pocket Road and making a right turn to proceed on their way. Our Board of Directors has taken several reports from our neighbors about near accidents due to commuters making this u-turn in an attempt to avoid the back-up on Greenhaven Drive. We are unable to identify any mitigation measure that City Public Works has implemented to date.

Given the existing congestion on Pocket Road between Freeport and Greenhaven, and the existing back-up problem on Greenhaven Drive with direct impact to the safety of our neighbors, any additional traffic will create a dangerous and significant impact.

2. **Aesthetic Impact from Height.** The IS/MND acknowledges that the proposed project exceeds the maximum height for buildings with the SC zone and the Klotz Ranch Planned Unit Development (PUD) Guidelines on page 13. In addition, the IS/MND acknowledges that the proposed four-story project “would feature prominently from public vantage points along Pocket Road, Freeport Boulevard, and I-5” on page 15 because existing development in the surrounding area is all one and two-story structures.
3. **Impacts on Tribal Cultural Resources.** The IS/MND acknowledges on page 53 that impacts to Tribal cultural resources could be potentially significant but does not indicate that Tribal Consultation between the City and potentially affected Tribes is in progress or planned. The proposed project is fully subject to AB 52 Tribal Consultation requirements because the City of Sacramento, as the lead agency, filed a NOP after July 1, 2015.

At a minimum, the Wilton Rancheria Tribe is traditionally and culturally affiliated with the geographic area where the proposed project is located. Evidence for Wilton Rancheria’s affiliation is easily identifiable to the City, as Wilton Rancheria has been a federally recognized Tribe since 2009 and its Service Delivery Area (SDA) is Sacramento County.

United Auburn Indian Community (UAIC) is also traditionally and culturally affiliated with the geographic area where the proposed project is located. Similar to the Wilton Rancheria Tribe, evidence for UAIC’s affiliation is also readily identifiable to the City, as UAIC has been a federal recognized Tribe since 1994 and has demonstrated a consistent and active interest in development projects in the Sacramento region.

In addition, the proposed project's location in close proximity to the Sacramento River underscores the importance of the City's obligations for Tribal Consultation under AB 52.

## **ALTERNATIVES TO THE PROPOSED PROJECT THAT SHOULD BE ANALYZED**

The SPHA Board of Directors met with the applicant and numerous representatives on the evening of February 25, 2020, as requested, and received a full briefing on the proposed project. The briefing included a series of visual simulations from various vantage points. We heard the applicant pledge that Spanos Corporation would retain ownership of the property for a minimum of ten (10) years before selling it to another party, who may not retain the same property management best practices. We also heard the applicant pledge that a property manager would be on site 24 hours a day, 365 days a year, and would be available to triage complaints and problems during the time Spanos retains ownership. Therefore, the SPHA Board of Directors fully understands the proposed project and the applicant's statements.

Given that background, we suggest that the following alternatives to the proposed project be fully analyzed in the EIR.

1. Three-story height limitation
2. Two-story height limitation
3. Adhere to the original, council-approved Klotz Ranch PUD Guidelines and obtain high quality, sit-down restaurants on the property as the community has repeatedly requested over decades

The first two alternatives have the benefit of obtaining most of the project objectives while reducing significant impacts on the environment. The third alternative has the benefit of conforming with the approved PUD Guidelines and responding to the community's consistently expressed desires.

In closing, on behalf of our Board of Directors, thank you for the opportunity to comment on the NOP. SPHA members are concerned with this proposed project and we look forward to the City's response to our comments contained in this letter.

Thank you,

*Patricia A. Clark*

Patricia A. Clark  
President, South Pocket Homeowners Association (SPHA)  
7609 El Douro Drive  
Sacramento CA 95831  
(916) 601-7338



**From:** [Anna Starkey](#)  
**To:** [Scott Johnson](#); [Antonio Ruiz](#); [Ron Bess](#)  
**Cc:** [Rebecca Allen](#); [Matthew Moore](#)  
**Subject:** NOP for the Klotz Ranch site  
**Date:** Tuesday, March 24, 2020 3:51:55 PM  
**Attachments:** [image001.png](#)

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Hello Scott,

We have received the NOP for the Klotz Ranch project. I am writing to you to provide comments on behalf of UAIC. The tribal cultural resources (TCRs) section of the NOP states that no TCRs were identified based on a records search. This is problematic as tribal consultation should be one of the primary methods of identifying TCRs. The NOP stated on page 53 that no TCRs have been identified by Native American representatives even though we have specifically stated in previous emails and letters that we have identified the project area as sensitive with the potential for burials. The NOP seems to ignore this completely and only relies on the information used for the cultural resources section. Can you provide an explanation to this? Thank you.

Best,

Anna Starkey



**Anna M. Starkey, M.A., RPA**  
Cultural Regulatory Specialist  
Tribal Historic Preservation Department | UAIC  
10720 Indian Hill Road  
Auburn, CA 95603  
Direct line: (916) 251-1565 | Cell: (530) 863-6503  
[astarkey@auburnrancheria.com](mailto:astarkey@auburnrancheria.com) | [www.auburnrancheria.com](http://www.auburnrancheria.com)

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Nothing in this e-mail is intended to constitute an electronic signature for purposes of the Electronic Signatures in Global and National Commerce Act (E-Sign Act), 15, U.S.C. §§ 7001 to 7006 or the Uniform Electronic Transactions Act of any state or the federal government unless a specific statement to the contrary is included in this e-mail.

**From:** [Cultural Resource Department Inbox](#)  
**To:** [Scott Johnson](#)  
**Cc:** [Cultural Resource Department Inbox](#)  
**Subject:** Klotz Ranch Apartments Project (P19-070)  
**Date:** Tuesday, April 7, 2020 12:34:21 PM  
**Attachments:** [image001.png](#), [1\\_Mitigation\\_Measures\\_CEOA\\_TCR\\_Avoidance\\_04-19-19.docx](#), [2\\_Mitigation\\_Measures\\_CEQA\\_Discoveries\\_04-19-19.docx](#), [3\\_Mitigation\\_Measures\\_CEOA\\_Discoveries\\_PostGroundDist\\_SiteVisit\\_04-19-19.docx](#), [4\\_Mitigation\\_Measures\\_CEOA\\_Construction\\_Worker\\_Awareness\\_Training\\_04-19-19.docx](#)

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Good afternoon,

Thanks for the notice of preparation of an environmental impact report. Attached are mitigation measures we would like to include considering this project lies within a culturally sensitive area.

Thank you



**Mariah Mayberry**

Wilton Rancheria

Tel: 916.683.6000 ext 2023 | Fax: 916.683.6015

9728 Kent Street | Elk Grove | CA | 95624

[mmayberry@wiltonrancheria-nsn.gov](mailto:mmayberry@wiltonrancheria-nsn.gov)

[wiltonrancheria-nsn.gov](http://wiltonrancheria-nsn.gov)

## Tribal Cultural Resource Avoidance Mitigation Measure

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Avoidance and preservation in place is the preferred manner of mitigating impacts to tribal cultural resources and will be accomplished by several means, including:

- Planning construction to avoid tribal cultural resources, archaeological sites and/ or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by the CEQA lead agency representative, interested Native American Tribes and the appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource. Native American Representatives from interested Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with the CEQA lead agency representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.
- If the resource can be avoided, the construction contractor(s), with paid Native American monitors from culturally affiliated Native American Tribes present, will install protective fencing outside the site boundary, including a buffer area, before construction restarts. The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an “Environmentally Sensitive Area”. Native American representatives from interested Native American Tribes and the CEQA lead agency representative will also consult to develop measures for long term management of the resource and routine operation and maintenance within culturally sensitive areas that retain resource integrity, including tribal cultural integrity, and including archaeological material, Traditional Cultural Properties and cultural landscapes, in accordance with state and federal guidance including National Register Bulletin 30 (*Guidelines for Evaluating and Documenting Rural Historic Landscapes*), Bulletin 36 (*Guidelines for Evaluating and Registering Archaeological Properties*), and Bulletin 38 (*Guidelines for Evaluating and Documenting Traditional Cultural Properties*); National Park Service Preservation Brief 36 (*Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes*) and using the Advisory Council on Historic Preservation (AChP) *Native American Traditional Cultural Landscapes Action Plan* for further guidance. Use of temporary and

## **Tribal Cultural Resource Avoidance Mitigation Measure**

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permanent forms of protective fencing will be determined in consultation with Native American representatives from interested Native American Tribes.

## Inadvertent Discoveries Mitigation Measures

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Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.

If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations will be documented in the project record. For any recommendations made by interested Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

## Post-Ground Disturbance Site Visit Mitigation Measure

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A minimum of seven days prior to beginning earthwork or other soil disturbance activities, the applicant shall notify the CEQA lead agency representative of the proposed earthwork start-date, in order to provide the CEQA lead agency representative with time to contact the Wilton Rancheria tribal representative shall be invited to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days of ground-breaking activity. During this inspection, a site meeting of construction personnel shall also be held in order to afford the tribal representative the opportunity to provide tribal cultural resources awareness information. If any tribal cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains are encountered during this initial inspection or during any subsequent construction activities, work shall be suspended within 100 feet of the find, and the project applicant shall immediately notify the CEQA lead agency representative. The project applicant shall coordinate any necessary investigation of the site with a Wilton Rancheria tribal representative, a qualified archaeologist approved by the City, and as part of the site investigation and resource assessment the archeologist shall consult with the Wilton Rancheria and provide proper management recommendations should potential impacts to the resources be found by the CEQA lead agency representative to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the CEQA lead agency representative by the qualified archaeologist. Possible management recommendations for tribal cultural resources, historical, or unique archaeological resources could include resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, preservation in place or other measures. The contractor shall implement any measures deemed by CEQA lead agency representative staff to be necessary and feasible to avoid or minimize significant effects to the cultural resources, including the use of a Native American Monitor whenever work is occurring within 100 feet of the find.

## Tribal Cultural Resource – Awareness Training - Mitigation Measure

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A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

**From:** [Brianna Moland](#)  
**To:** [Scott Johnson](#)  
**Cc:** [Dana Repan](#); [Raymond Costantino](#)  
**Subject:** RE: Klotz Ranch Apartments (P19-070) - CEQA Notice of Preparation of an EIR  
**Date:** Tuesday, March 24, 2020 3:18:20 PM

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Hi Scott,

This project is anticipated to house approximately 472 individuals, however, negative impacts on our parks system are not anticipated. The closest parks to the proposed project site are Richard Marriot Park, Edwin L. Z'Berg Park, the Bill Conlin Youth Sports Complex, Freeport Park, and LeVar Burton Park.

This project would generate approximately \$595,090 in Park Impact Fees, and based on payment of the park fees, the proposed project would not adversely affect the capacity or physical conditions of existing local parks and recreation facilities.

The project would also provide direct access to the future Del Rio Trail, a proposed 4.8-mile pedestrian and bicycle trail that runs between I-5 and Freeport Boulevard. In our comment memo for this project, we requested that the applicant clearly marks the trail access from the Klotz Ranch development to the Del Rio Trail.

Thank you,

Brianna Moland  
Assistant Planner, Park Planning and Development Services  
Department of Youth, Parks, and Community Enrichment  
**City of Sacramento**  
**915 I Street,**  
**Sacramento, CA 95814**  
[bmoland@cityofsacramento.org](mailto:bmoland@cityofsacramento.org)  
(916) 808-6188

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**From:** Scott Johnson <[SRJohnson@cityofsacramento.org](mailto:SRJohnson@cityofsacramento.org)>  
**Sent:** Friday, March 20, 2020 11:28 AM  
**To:** Scott Johnson <[SRJohnson@cityofsacramento.org](mailto:SRJohnson@cityofsacramento.org)>  
**Cc:** Angel Anguiano <[AAnguiano@cityofsacramento.org](mailto:AAnguiano@cityofsacramento.org)>  
**Subject:** Klotz Ranch Apartments (P19-070) - CEQA Notice of Preparation of an EIR

**NOTICE OF PREPARATION OF AN  
ENVIRONMENTAL IMPACT REPORT FOR  
THE KLOTZ RANCH APARTMENT PROJECT (P19-070)**

**COMMENT PERIOD: March 20, 2020 to April 20, 2020**

The City of Sacramento (City) is the Lead Agency for preparation of an Environmental Impact Report (EIR) for the proposed Klotz Ranch Apartments project. The EIR to be prepared by the City will evaluate potential significant environmental effects of the proposed Klotz Ranch Apartments project and other actions and transactions associated with the proposed project. Written comments regarding the issues that should be covered in the Focused EIR, including potential alternatives to the proposed Klotz Ranch Apartments project and the scope of the analysis, are invited.

The EIR for the proposed Klotz Ranch Apartments project is being prepared in compliance with the California Environmental Quality Act (CEQA). Under CEQA, upon deciding to prepare an EIR, the City as lead agency must issue a Notice of Preparation (NOP) to inform trustee agencies, responsible agencies, and the public of that decision. The purpose of the NOP is to provide information describing the project and its potential environmental effects to those who may wish to comment regarding the scope and content of the information to be included in the EIR. The NOP (attached) and Initial Study are available on the City's Community Development Department webpage at: <http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx>

Direct document links:

**Klotz Ranch Apartments (P19-070)**

- [Notice of Preparation](#)
- [Initial Study](#)

Written Comments in response to the NOP may be submitted to the address or email below. Email would be preferred.

Thank you,

Scott Johnson, Senior Planner  
City of Sacramento  
Community Development Department  
Environmental Planning Services  
300 Richards Blvd., 3<sup>rd</sup> Floor  
Sacramento, CA 95811  
(916) 808-5842  
[srjohnson@cityofsacramento.org](mailto:srjohnson@cityofsacramento.org)



# **Appendix C**

## **Air Quality and Greenhouse Gas Emissions Calculations**





## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**Klotz Ranch Apartments**  
**Sacramento Metropolitan AQMD Air District, Annual**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.00	Acre	5.00	217,800.00	0
Racquet Club	6.30	1000sqft	0.14	6,300.00	0
Apartments Mid Rise	266.00	Dwelling Unit	12.70	266,000.00	710

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.00617

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

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

Project Characteristics - PG&E GHG emission factor based on <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 12.7 acres based on project data. Raquet Club land use represents the 6,300 ft<sup>2</sup>, two-story clubhouse. Parking/roads estimated to be 5 acres.

Construction Phase - Construction phases based on Project Description

Trips and VMT - per project description.

Grading - Cut and fill volumes provided by client.

Vehicle Trips - Trip rates were updated based on traffic study of 1,448 trips per weekday. The racquet club land use represents a clubhouse and does not attract additional trips, so they are set to zero.

Vehicle Emission Factors - Use of EMFAC2017 Emission Factors

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 final mitigation for onsite equipment.

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

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tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.02
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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblFleetMix	LHD1	0.02	0.03
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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

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tblVehicleEF	HHD	0.07	0.06
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tblVehicleEF	HHD	1.77	6.24
tblVehicleEF	HHD	1.03	0.46
tblVehicleEF	HHD	3.02	4.7730e-003
tblVehicleEF	HHD	4,406.18	1,213.68
tblVehicleEF	HHD	1,651.06	1,538.11
tblVehicleEF	HHD	9.15	0.05
tblVehicleEF	HHD	23.04	7.00
tblVehicleEF	HHD	3.15	3.45
tblVehicleEF	HHD	19.77	2.45
tblVehicleEF	HHD	0.03	5.8390e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	9.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	5.5870e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.6320e-003	8.7710e-003
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	8.3000e-005	2.0000e-006
tblVehicleEF	HHD	4.0400e-004	2.5000e-005
tblVehicleEF	HHD	6.4540e-003	3.5200e-004
tblVehicleEF	HHD	0.59	0.49

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	HHD	1.9500e-004	1.2000e-005
tblVehicleEF	HHD	0.11	0.07
tblVehicleEF	HHD	8.4500e-004	1.9180e-003
tblVehicleEF	HHD	0.09	2.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.4200e-004	1.0000e-006
tblVehicleEF	HHD	4.0400e-004	2.5000e-005
tblVehicleEF	HHD	6.4540e-003	3.5200e-004
tblVehicleEF	HHD	0.68	0.57
tblVehicleEF	HHD	1.9500e-004	1.2000e-005
tblVehicleEF	HHD	0.20	0.14
tblVehicleEF	HHD	8.4500e-004	1.9180e-003
tblVehicleEF	HHD	0.10	2.0000e-006
tblVehicleEF	HHD	0.65	0.03
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	3.34	6.59
tblVehicleEF	HHD	1.01	0.46
tblVehicleEF	HHD	3.67	5.7450e-003
tblVehicleEF	HHD	3,818.40	1,218.35
tblVehicleEF	HHD	1,651.06	1,538.11
tblVehicleEF	HHD	9.15	0.06
tblVehicleEF	HHD	21.33	7.39
tblVehicleEF	HHD	3.43	3.75
tblVehicleEF	HHD	19.81	2.45
tblVehicleEF	HHD	0.04	8.0760e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	9.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	7.7270e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.6320e-003	8.7710e-003
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	8.3000e-005	2.0000e-006
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	5.5610e-003	3.0300e-004
tblVehicleEF	HHD	0.68	0.44
tblVehicleEF	HHD	1.6000e-005	1.0000e-006
tblVehicleEF	HHD	0.11	0.07
tblVehicleEF	HHD	8.9700e-004	1.9320e-003
tblVehicleEF	HHD	0.10	2.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.5200e-004	1.0000e-006
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	5.5610e-003	3.0300e-004
tblVehicleEF	HHD	0.78	0.51
tblVehicleEF	HHD	1.6000e-005	1.0000e-006
tblVehicleEF	HHD	0.20	0.14
tblVehicleEF	HHD	8.9700e-004	1.9320e-003
tblVehicleEF	HHD	0.11	2.0000e-006
tblVehicleEF	LDA	4.2860e-003	2.5680e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDA	5.8650e-003	0.06
tblVehicleEF	LDA	0.61	0.69
tblVehicleEF	LDA	1.26	2.30
tblVehicleEF	LDA	252.52	260.95
tblVehicleEF	LDA	57.68	54.67
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.08	0.20
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.04	0.07
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.08	0.26
tblVehicleEF	LDA	2.5290e-003	2.5820e-003
tblVehicleEF	LDA	5.9800e-004	5.4100e-004
tblVehicleEF	LDA	0.04	0.07
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.09	0.28
tblVehicleEF	LDA	5.0150e-003	3.0340e-003
tblVehicleEF	LDA	4.7840e-003	0.05

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDA	0.78	0.89
tblVehicleEF	LDA	1.03	1.90
tblVehicleEF	LDA	280.47	289.33
tblVehicleEF	LDA	57.68	53.88
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.11	0.18
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.08	0.12
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.8110e-003	2.8620e-003
tblVehicleEF	LDA	5.9400e-004	5.3300e-004
tblVehicleEF	LDA	0.11	0.18
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.08	0.12
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.0630e-003	2.3890e-003
tblVehicleEF	LDA	7.0460e-003	0.07
tblVehicleEF	LDA	0.58	0.66

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDA	1.57	2.88
tblVehicleEF	LDA	245.02	253.39
tblVehicleEF	LDA	57.68	55.77
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.09	0.23
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	7.3210e-003	0.01
tblVehicleEF	LDA	0.01	9.6040e-003
tblVehicleEF	LDA	0.05	0.28
tblVehicleEF	LDA	0.10	0.31
tblVehicleEF	LDA	2.4540e-003	2.5070e-003
tblVehicleEF	LDA	6.0400e-004	5.5200e-004
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	7.3210e-003	0.01
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.05	0.28
tblVehicleEF	LDA	0.10	0.34
tblVehicleEF	LDT1	0.01	5.4680e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.36	1.20
tblVehicleEF	LDT1	3.32	2.50

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT1	313.76	308.81
tblVehicleEF	LDT1	71.71	65.78
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.20	0.80
tblVehicleEF	LDT1	0.23	0.41
tblVehicleEF	LDT1	3.1540e-003	3.0560e-003
tblVehicleEF	LDT1	7.7500e-004	6.5100e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.20	0.80
tblVehicleEF	LDT1	0.25	0.45
tblVehicleEF	LDT1	0.01	6.3980e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.70	1.51
tblVehicleEF	LDT1	2.71	2.06
tblVehicleEF	LDT1	346.93	337.97

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT1	71.71	64.82
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.41	0.40
tblVehicleEF	LDT1	0.40	0.30
tblVehicleEF	LDT1	0.25	0.25
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.79
tblVehicleEF	LDT1	0.19	0.34
tblVehicleEF	LDT1	3.4910e-003	3.3440e-003
tblVehicleEF	LDT1	7.6400e-004	6.4100e-004
tblVehicleEF	LDT1	0.41	0.40
tblVehicleEF	LDT1	0.40	0.30
tblVehicleEF	LDT1	0.25	0.25
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.19	0.79
tblVehicleEF	LDT1	0.20	0.37
tblVehicleEF	LDT1	0.01	5.1180e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.31	1.14
tblVehicleEF	LDT1	4.17	3.14
tblVehicleEF	LDT1	304.87	301.05
tblVehicleEF	LDT1	71.71	67.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT1	0.15	0.11
tblVehicleEF	LDT1	0.21	0.32
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.24	0.97
tblVehicleEF	LDT1	0.28	0.49
tblVehicleEF	LDT1	3.0640e-003	2.9790e-003
tblVehicleEF	LDT1	7.9000e-004	6.6400e-004
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.24	0.97
tblVehicleEF	LDT1	0.30	0.54
tblVehicleEF	LDT2	6.1470e-003	3.8830e-003
tblVehicleEF	LDT2	8.5390e-003	0.08
tblVehicleEF	LDT2	0.83	0.94
tblVehicleEF	LDT2	1.80	2.95
tblVehicleEF	LDT2	354.77	334.69
tblVehicleEF	LDT2	81.19	71.98
tblVehicleEF	LDT2	0.08	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT2	0.15	0.33
tblVehicleEF	LDT2	1.7350e-003	1.4940e-003
tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.49
tblVehicleEF	LDT2	0.12	0.36
tblVehicleEF	LDT2	3.5550e-003	3.3110e-003
tblVehicleEF	LDT2	8.4200e-004	7.1200e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.49
tblVehicleEF	LDT2	0.13	0.40
tblVehicleEF	LDT2	7.1660e-003	4.5690e-003
tblVehicleEF	LDT2	6.9600e-003	0.06
tblVehicleEF	LDT2	1.06	1.20
tblVehicleEF	LDT2	1.48	2.42
tblVehicleEF	LDT2	393.11	363.56
tblVehicleEF	LDT2	81.19	70.93
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.30

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT2	1.7350e-003	1.4940e-003
tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.16	0.24
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.12	0.17
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.48
tblVehicleEF	LDT2	0.09	0.30
tblVehicleEF	LDT2	3.9410e-003	3.5970e-003
tblVehicleEF	LDT2	8.3700e-004	7.0200e-004
tblVehicleEF	LDT2	0.16	0.24
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.12	0.17
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.48
tblVehicleEF	LDT2	0.10	0.32
tblVehicleEF	LDT2	5.8250e-003	3.6190e-003
tblVehicleEF	LDT2	0.01	0.09
tblVehicleEF	LDT2	0.79	0.89
tblVehicleEF	LDT2	2.24	3.70
tblVehicleEF	LDT2	344.50	326.99
tblVehicleEF	LDT2	81.19	73.41
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.17	0.37
tblVehicleEF	LDT2	1.7350e-003	1.4940e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.09	0.59
tblVehicleEF	LDT2	0.14	0.43
tblVehicleEF	LDT2	3.4510e-003	3.2350e-003
tblVehicleEF	LDT2	8.5000e-004	7.2600e-004
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.59
tblVehicleEF	LDT2	0.15	0.47
tblVehicleEF	LHD1	5.3360e-003	4.9860e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.29	1.04
tblVehicleEF	LHD1	2.70	1.08
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.85
tblVehicleEF	LHD1	31.04	11.21
tblVehicleEF	LHD1	0.09	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD1	1.97	1.40
tblVehicleEF	LHD1	1.02	0.32
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004
tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	3.5820e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4260e-003	1.1800e-003
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8890e-003	7.8580e-003
tblVehicleEF	LHD1	3.6100e-004	1.1100e-004
tblVehicleEF	LHD1	3.5820e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4260e-003	1.1800e-003
tblVehicleEF	LHD1	0.18	0.15
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.30	0.09

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD1	5.3360e-003	5.0020e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.32	1.07
tblVehicleEF	LHD1	2.48	0.99
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.90
tblVehicleEF	LHD1	31.04	11.06
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.84	1.30
tblVehicleEF	LHD1	0.95	0.30
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004
tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	9.1870e-003	7.6550e-003
tblVehicleEF	LHD1	0.14	0.11
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6360e-003	3.0280e-003
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.26	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8890e-003	7.8590e-003
tblVehicleEF	LHD1	3.5700e-004	1.0900e-004
tblVehicleEF	LHD1	9.1870e-003	7.6550e-003
tblVehicleEF	LHD1	0.14	0.11
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6360e-003	3.0280e-003
tblVehicleEF	LHD1	0.19	0.15
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.29	0.09
tblVehicleEF	LHD1	5.3360e-003	4.9680e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.26	1.02
tblVehicleEF	LHD1	2.99	1.19
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.80
tblVehicleEF	LHD1	31.04	11.41
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.02	1.43
tblVehicleEF	LHD1	1.10	0.35
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	1.0290e-003	8.4400e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.7300e-004	3.0500e-004
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.39	0.67
tblVehicleEF	LHD1	0.30	0.09
tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8880e-003	7.8580e-003
tblVehicleEF	LHD1	3.6700e-004	1.1300e-004
tblVehicleEF	LHD1	1.0290e-003	8.4400e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.7300e-004	3.0500e-004
tblVehicleEF	LHD1	0.18	0.15
tblVehicleEF	LHD1	0.39	0.67
tblVehicleEF	LHD1	0.33	0.10
tblVehicleEF	LHD2	3.6020e-003	3.2890e-003
tblVehicleEF	LHD2	9.9840e-003	8.6010e-003
tblVehicleEF	LHD2	8.8820e-003	9.6210e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.73	0.81
tblVehicleEF	LHD2	1.31	0.64
tblVehicleEF	LHD2	14.25	14.51

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD2	720.74	795.82
tblVehicleEF	LHD2	24.40	7.90
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.35	1.49
tblVehicleEF	LHD2	0.53	0.20
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	1.3190e-003	1.4950e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.6200e-004	6.1600e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.12	0.05
tblVehicleEF	LHD2	7.0120e-003	7.6850e-003
tblVehicleEF	LHD2	2.6800e-004	7.8000e-005
tblVehicleEF	LHD2	1.3190e-003	1.4950e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.6200e-004	6.1600e-004
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.09	0.28

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD2	0.13	0.05
tblVehicleEF	LHD2	3.6020e-003	3.2990e-003
tblVehicleEF	LHD2	0.01	8.7180e-003
tblVehicleEF	LHD2	8.3620e-003	9.0680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.74	0.82
tblVehicleEF	LHD2	1.20	0.59
tblVehicleEF	LHD2	14.25	14.51
tblVehicleEF	LHD2	720.74	795.84
tblVehicleEF	LHD2	24.40	7.81
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.26	1.40
tblVehicleEF	LHD2	0.50	0.19
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	3.3510e-003	3.8230e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4060e-003	1.5620e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.11	0.05

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD2	7.0120e-003	7.6850e-003
tblVehicleEF	LHD2	2.6600e-004	7.7000e-005
tblVehicleEF	LHD2	3.3510e-003	3.8230e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4060e-003	1.5620e-003
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.12	0.05
tblVehicleEF	LHD2	3.6020e-003	3.2780e-003
tblVehicleEF	LHD2	9.7880e-003	8.4740e-003
tblVehicleEF	LHD2	9.5090e-003	0.01
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.72	0.80
tblVehicleEF	LHD2	1.44	0.70
tblVehicleEF	LHD2	14.25	14.51
tblVehicleEF	LHD2	720.74	795.80
tblVehicleEF	LHD2	24.40	8.02
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.38	1.53
tblVehicleEF	LHD2	0.57	0.22
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	4.0000e-004	4.4200e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5100e-004	1.6400e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.10	0.31
tblVehicleEF	LHD2	0.13	0.05
tblVehicleEF	LHD2	7.0110e-003	7.6850e-003
tblVehicleEF	LHD2	2.7000e-004	7.9000e-005
tblVehicleEF	LHD2	4.0000e-004	4.4200e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5100e-004	1.6400e-004
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.10	0.31
tblVehicleEF	LHD2	0.14	0.06
tblVehicleEF	MCY	0.44	0.34
tblVehicleEF	MCY	0.17	0.26
tblVehicleEF	MCY	20.29	20.27
tblVehicleEF	MCY	10.10	8.92
tblVehicleEF	MCY	168.00	210.86
tblVehicleEF	MCY	47.74	63.07
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MCY	1.7870e-003	1.8120e-003
tblVehicleEF	MCY	3.4870e-003	3.0200e-003
tblVehicleEF	MCY	1.41	1.40
tblVehicleEF	MCY	0.93	0.92
tblVehicleEF	MCY	0.67	0.67
tblVehicleEF	MCY	2.37	2.37
tblVehicleEF	MCY	0.69	2.32
tblVehicleEF	MCY	2.26	2.00
tblVehicleEF	MCY	2.0800e-003	2.0870e-003
tblVehicleEF	MCY	7.0900e-004	6.2400e-004
tblVehicleEF	MCY	1.41	1.40
tblVehicleEF	MCY	0.93	0.92
tblVehicleEF	MCY	0.67	0.67
tblVehicleEF	MCY	2.89	2.89
tblVehicleEF	MCY	0.69	2.32
tblVehicleEF	MCY	2.46	2.17
tblVehicleEF	MCY	0.43	0.34
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.52	20.50
tblVehicleEF	MCY	9.12	8.02
tblVehicleEF	MCY	168.00	210.96
tblVehicleEF	MCY	47.74	60.52
tblVehicleEF	MCY	0.97	0.97
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003
tblVehicleEF	MCY	1.7870e-003	1.8120e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MCY	3.4870e-003	3.0200e-003
tblVehicleEF	MCY	3.91	3.89
tblVehicleEF	MCY	1.50	1.50
tblVehicleEF	MCY	2.18	2.16
tblVehicleEF	MCY	2.30	2.30
tblVehicleEF	MCY	0.68	2.28
tblVehicleEF	MCY	1.89	1.66
tblVehicleEF	MCY	2.0810e-003	2.0880e-003
tblVehicleEF	MCY	6.8200e-004	5.9900e-004
tblVehicleEF	MCY	3.91	3.89
tblVehicleEF	MCY	1.50	1.50
tblVehicleEF	MCY	2.18	2.16
tblVehicleEF	MCY	2.81	2.81
tblVehicleEF	MCY	0.68	2.28
tblVehicleEF	MCY	2.06	1.81
tblVehicleEF	MCY	0.46	0.36
tblVehicleEF	MCY	0.21	0.32
tblVehicleEF	MCY	22.39	22.37
tblVehicleEF	MCY	12.10	10.76
tblVehicleEF	MCY	168.00	214.72
tblVehicleEF	MCY	47.74	67.64
tblVehicleEF	MCY	1.27	1.27
tblVehicleEF	MCY	0.35	0.30
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003
tblVehicleEF	MCY	1.7870e-003	1.8120e-003
tblVehicleEF	MCY	3.4870e-003	3.0200e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	0.95	0.94
tblVehicleEF	MCY	0.11	0.11
tblVehicleEF	MCY	2.52	2.52
tblVehicleEF	MCY	0.80	2.71
tblVehicleEF	MCY	2.81	2.50
tblVehicleEF	MCY	2.1190e-003	2.1250e-003
tblVehicleEF	MCY	7.5900e-004	6.6900e-004
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	0.95	0.94
tblVehicleEF	MCY	0.11	0.11
tblVehicleEF	MCY	3.07	3.07
tblVehicleEF	MCY	0.80	2.71
tblVehicleEF	MCY	3.06	2.72
tblVehicleEF	MDV	0.01	5.0650e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.32	1.09
tblVehicleEF	MDV	3.39	3.48
tblVehicleEF	MDV	479.92	410.48
tblVehicleEF	MDV	108.64	88.11
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.30	0.40
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.10	0.12

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.12	0.55
tblVehicleEF	MDV	0.26	0.47
tblVehicleEF	MDV	4.8090e-003	4.0580e-003
tblVehicleEF	MDV	1.1460e-003	8.7200e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.12	0.55
tblVehicleEF	MDV	0.29	0.52
tblVehicleEF	MDV	0.01	5.9710e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.67	1.38
tblVehicleEF	MDV	2.78	2.84
tblVehicleEF	MDV	530.44	440.57
tblVehicleEF	MDV	108.64	86.82
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.28	0.37
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.24	0.29
tblVehicleEF	MDV	0.25	0.21

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MDV	0.18	0.22
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.54
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	5.3190e-003	4.3560e-003
tblVehicleEF	MDV	1.1350e-003	8.5900e-004
tblVehicleEF	MDV	0.24	0.29
tblVehicleEF	MDV	0.25	0.21
tblVehicleEF	MDV	0.18	0.22
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.12	0.54
tblVehicleEF	MDV	0.23	0.43
tblVehicleEF	MDV	0.01	4.7440e-003
tblVehicleEF	MDV	0.02	0.11
tblVehicleEF	MDV	1.26	1.04
tblVehicleEF	MDV	4.24	4.37
tblVehicleEF	MDV	466.38	402.47
tblVehicleEF	MDV	108.64	89.85
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.34	0.45
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.02	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.15	0.66
tblVehicleEF	MDV	0.32	0.57
tblVehicleEF	MDV	4.6730e-003	3.9790e-003
tblVehicleEF	MDV	1.1610e-003	8.8900e-004
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.15	0.66
tblVehicleEF	MDV	0.35	0.62
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.75	1.44
tblVehicleEF	MH	6.42	2.25
tblVehicleEF	MH	1,233.39	1,603.42
tblVehicleEF	MH	60.21	19.55
tblVehicleEF	MH	1.62	1.67
tblVehicleEF	MH	0.93	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004
tblVehicleEF	MH	1.35	1.08
tblVehicleEF	MH	0.09	0.07

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MH	0.34	0.27
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.02	1.50
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.1400e-004	1.9300e-004
tblVehicleEF	MH	1.35	1.08
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.34	0.27
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.02	1.50
tblVehicleEF	MH	0.41	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.87	1.49
tblVehicleEF	MH	5.74	2.03
tblVehicleEF	MH	1,233.39	1,603.52
tblVehicleEF	MH	60.21	19.16
tblVehicleEF	MH	1.48	1.54
tblVehicleEF	MH	0.87	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004
tblVehicleEF	MH	3.50	2.79

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.89	0.72
tblVehicleEF	MH	0.13	0.09
tblVehicleEF	MH	0.02	1.49
tblVehicleEF	MH	0.34	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0200e-004	1.9000e-004
tblVehicleEF	MH	3.50	2.79
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.89	0.72
tblVehicleEF	MH	0.18	0.12
tblVehicleEF	MH	0.02	1.49
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.62	1.38
tblVehicleEF	MH	7.31	2.53
tblVehicleEF	MH	1,233.39	1,603.32
tblVehicleEF	MH	60.21	20.02
tblVehicleEF	MH	1.69	1.73
tblVehicleEF	MH	1.00	0.27
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MH	0.38	0.31
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	1.61
tblVehicleEF	MH	0.40	0.11
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.2900e-004	1.9800e-004
tblVehicleEF	MH	0.38	0.31
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.61
tblVehicleEF	MH	0.44	0.12
tblVehicleEF	MHD	0.02	4.4660e-003
tblVehicleEF	MHD	7.5850e-003	6.6210e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.41	0.56
tblVehicleEF	MHD	0.52	0.57
tblVehicleEF	MHD	6.57	1.40
tblVehicleEF	MHD	147.37	150.83
tblVehicleEF	MHD	1,210.28	1,161.69
tblVehicleEF	MHD	57.55	11.51
tblVehicleEF	MHD	0.76	1.37
tblVehicleEF	MHD	1.79	2.35
tblVehicleEF	MHD	11.25	1.28
tblVehicleEF	MHD	3.8380e-003	2.9080e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	3.6720e-003	2.7830e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	1.5080e-003	8.7100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.3200e-004	3.5700e-004
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.40	0.06
tblVehicleEF	MHD	1.4180e-003	1.4290e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.9100e-004	1.1400e-004
tblVehicleEF	MHD	1.5080e-003	8.7100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	6.3200e-004	3.5700e-004
tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.43	0.07
tblVehicleEF	MHD	0.02	4.2120e-003
tblVehicleEF	MHD	7.7620e-003	6.7130e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.29	0.47
tblVehicleEF	MHD	0.53	0.58

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MHD	6.05	1.29
tblVehicleEF	MHD	156.25	153.88
tblVehicleEF	MHD	1,210.28	1,161.71
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tblVehicleEF	MHD	0.78	1.39
tblVehicleEF	MHD	1.67	2.20
tblVehicleEF	MHD	11.19	1.27
tblVehicleEF	MHD	3.2360e-003	2.4570e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	3.0960e-003	2.3510e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	3.9020e-003	2.2650e-003
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.6400e-003	9.3800e-004
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.37	0.06
tblVehicleEF	MHD	1.5010e-003	1.4580e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8200e-004	1.1200e-004
tblVehicleEF	MHD	3.9020e-003	2.2650e-003
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	1.6400e-003	9.3800e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.41	0.07
tblVehicleEF	MHD	0.02	4.7180e-003
tblVehicleEF	MHD	7.3890e-003	6.5180e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.54	0.66
tblVehicleEF	MHD	0.51	0.56
tblVehicleEF	MHD	7.31	1.55
tblVehicleEF	MHD	135.45	146.78
tblVehicleEF	MHD	1,210.28	1,161.68
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tblVehicleEF	MHD	0.72	1.35
tblVehicleEF	MHD	1.83	2.40
tblVehicleEF	MHD	11.33	1.29
tblVehicleEF	MHD	4.6700e-003	3.5320e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	4.4680e-003	3.3790e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	4.3200e-004	2.4300e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.5900e-004	8.8000e-005
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.18

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	MHD	0.43	0.07
tblVehicleEF	MHD	1.3050e-003	1.3900e-003
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tblVehicleEF	MHD	7.0300e-004	1.1600e-004
tblVehicleEF	MHD	4.3200e-004	2.4300e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	1.5900e-004	8.8000e-005
tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.18
tblVehicleEF	MHD	0.47	0.08
tblVehicleEF	OBUS	0.01	8.0330e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.59
tblVehicleEF	OBUS	0.88	1.14
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tblVehicleEF	OBUS	128.59	95.65
tblVehicleEF	OBUS	1,355.95	1,492.53
tblVehicleEF	OBUS	68.41	18.89
tblVehicleEF	OBUS	0.61	0.48
tblVehicleEF	OBUS	1.94	2.02
tblVehicleEF	OBUS	2.89	0.79
tblVehicleEF	OBUS	1.3800e-004	9.1200e-004
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.3200e-004	8.7300e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	2.2060e-003	2.5060e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	6.9700e-004	7.7500e-004
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.12
tblVehicleEF	OBUS	1.2390e-003	9.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0300e-004	1.8700e-004
tblVehicleEF	OBUS	2.2060e-003	2.5060e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	6.9700e-004	7.7500e-004
tblVehicleEF	OBUS	0.11	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.46	0.13
tblVehicleEF	OBUS	0.01	8.0990e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.57
tblVehicleEF	OBUS	0.90	1.18
tblVehicleEF	OBUS	6.09	2.25
tblVehicleEF	OBUS	135.23	95.59
tblVehicleEF	OBUS	1,355.95	1,492.59

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	OBUS	68.41	18.47
tblVehicleEF	OBUS	0.63	0.47
tblVehicleEF	OBUS	1.81	1.87
tblVehicleEF	OBUS	2.82	0.77
tblVehicleEF	OBUS	1.1600e-004	7.7400e-004
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.1100e-004	7.4100e-004
tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	5.6160e-003	6.4460e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	1.7390e-003	1.9550e-003
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.39	0.11
tblVehicleEF	OBUS	1.3020e-003	9.0900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9100e-004	1.8300e-004
tblVehicleEF	OBUS	5.6160e-003	6.4460e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	1.7390e-003	1.9550e-003
tblVehicleEF	OBUS	0.11	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.12

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	OBUS	0.01	7.9510e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.02
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tblVehicleEF	OBUS	0.86	1.11
tblVehicleEF	OBUS	7.61	2.80
tblVehicleEF	OBUS	119.42	95.73
tblVehicleEF	OBUS	1,355.95	1,492.47
tblVehicleEF	OBUS	68.41	19.41
tblVehicleEF	OBUS	0.58	0.49
tblVehicleEF	OBUS	1.99	2.08
tblVehicleEF	OBUS	2.99	0.81
tblVehicleEF	OBUS	1.6800e-004	1.1030e-003
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.6000e-004	1.0550e-003
tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	7.4300e-004	8.1200e-004
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	2.0300e-004	2.1700e-004
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.06	0.31
tblVehicleEF	OBUS	0.45	0.13
tblVehicleEF	OBUS	1.1510e-003	9.1000e-004
tblVehicleEF	OBUS	0.01	0.01

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	OBUS	8.1700e-004	1.9200e-004
tblVehicleEF	OBUS	7.4300e-004	8.1200e-004
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tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	2.0300e-004	2.1700e-004
tblVehicleEF	OBUS	0.11	0.13
tblVehicleEF	OBUS	0.06	0.31
tblVehicleEF	OBUS	0.49	0.14
tblVehicleEF	SBUS	0.84	0.02
tblVehicleEF	SBUS	0.01	6.3810e-003
tblVehicleEF	SBUS	0.07	2.1290e-003
tblVehicleEF	SBUS	6.73	1.20
tblVehicleEF	SBUS	0.65	0.43
tblVehicleEF	SBUS	6.39	0.33
tblVehicleEF	SBUS	1,201.53	336.95
tblVehicleEF	SBUS	1,096.07	1,113.09
tblVehicleEF	SBUS	44.67	1.81
tblVehicleEF	SBUS	10.71	4.00
tblVehicleEF	SBUS	4.39	6.66
tblVehicleEF	SBUS	13.82	0.61
tblVehicleEF	SBUS	0.01	4.9410e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	0.01	4.7270e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	3.5150e-003	4.4200e-004
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tblVehicleEF	SBUS	1.1040e-003	1.1000e-004
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tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.34	0.01
tblVehicleEF	SBUS	0.01	3.1940e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5700e-004	1.8000e-005
tblVehicleEF	SBUS	3.5150e-003	4.4200e-004
tblVehicleEF	SBUS	0.03	3.0040e-003
tblVehicleEF	SBUS	1.15	0.17
tblVehicleEF	SBUS	1.1040e-003	1.1000e-004
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.37	0.01
tblVehicleEF	SBUS	0.84	0.02
tblVehicleEF	SBUS	0.01	6.4430e-003
tblVehicleEF	SBUS	0.05	1.6980e-003
tblVehicleEF	SBUS	6.59	1.15
tblVehicleEF	SBUS	0.67	0.43
tblVehicleEF	SBUS	4.25	0.22
tblVehicleEF	SBUS	1,259.83	349.09
tblVehicleEF	SBUS	1,096.07	1,113.10
tblVehicleEF	SBUS	44.67	1.62

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	SBUS	11.05	4.11
tblVehicleEF	SBUS	4.10	6.22
tblVehicleEF	SBUS	13.78	0.61
tblVehicleEF	SBUS	9.2190e-003	4.1720e-003
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tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	8.8200e-003	3.9920e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	8.8850e-003	1.1690e-003
tblVehicleEF	SBUS	0.03	3.6410e-003
tblVehicleEF	SBUS	0.80	0.12
tblVehicleEF	SBUS	2.7360e-003	3.0900e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.27	9.6090e-003
tblVehicleEF	SBUS	0.01	3.3090e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2100e-004	1.6000e-005
tblVehicleEF	SBUS	8.8850e-003	1.1690e-003
tblVehicleEF	SBUS	0.03	3.6410e-003
tblVehicleEF	SBUS	1.15	0.17
tblVehicleEF	SBUS	2.7360e-003	3.0900e-004
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	SBUS	0.29	0.01
tblVehicleEF	SBUS	0.84	0.02
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tblVehicleEF	SBUS	0.64	0.42
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tblVehicleEF	SBUS	1,121.03	320.19
tblVehicleEF	SBUS	1,096.07	1,113.08
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tblVehicleEF	SBUS	0.01	6.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	0.01	5.7430e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	1.2060e-003	1.2300e-004
tblVehicleEF	SBUS	0.03	2.9600e-003
tblVehicleEF	SBUS	0.80	0.12
tblVehicleEF	SBUS	3.3100e-004	3.0000e-005
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.03

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	SBUS	0.40	0.01
tblVehicleEF	SBUS	0.01	3.0360e-003
tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	1.2060e-003	1.2300e-004
tblVehicleEF	SBUS	0.03	2.9600e-003
tblVehicleEF	SBUS	1.16	0.17
tblVehicleEF	SBUS	3.3100e-004	3.0000e-005
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.44	0.02
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.08	0.04
tblVehicleEF	UBUS	8.75	36.91
tblVehicleEF	UBUS	12.13	2.78
tblVehicleEF	UBUS	1,890.52	2,058.02
tblVehicleEF	UBUS	137.34	30.05
tblVehicleEF	UBUS	6.32	0.43
tblVehicleEF	UBUS	13.54	0.26
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04
tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	UBUS	7.1780e-003	1.3920e-003
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.8480e-003	6.0800e-004
tblVehicleEF	UBUS	0.52	0.07
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.08	0.15
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.5970e-003	2.9700e-004
tblVehicleEF	UBUS	7.1780e-003	1.3920e-003
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.8480e-003	6.0800e-004
tblVehicleEF	UBUS	2.65	4.84
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.19	0.17
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.07	0.03
tblVehicleEF	UBUS	8.82	36.91
tblVehicleEF	UBUS	9.63	2.22
tblVehicleEF	UBUS	1,890.52	2,058.03
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tblVehicleEF	UBUS	5.87	0.42
tblVehicleEF	UBUS	13.40	0.24
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004
tblVehicleEF	UBUS	0.02	3.6060e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	7.2950e-003	1.6350e-003
tblVehicleEF	UBUS	0.53	0.07
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.95	0.13
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.5530e-003	2.8800e-004
tblVehicleEF	UBUS	0.02	3.6060e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	7.2950e-003	1.6350e-003
tblVehicleEF	UBUS	2.66	4.84
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.04	0.15
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.09	0.04
tblVehicleEF	UBUS	8.69	36.90
tblVehicleEF	UBUS	15.34	3.49
tblVehicleEF	UBUS	1,890.52	2,058.02
tblVehicleEF	UBUS	137.34	31.25
tblVehicleEF	UBUS	6.48	0.44
tblVehicleEF	UBUS	13.69	0.28
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04
tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004
tblVehicleEF	UBUS	2.3740e-003	4.5000e-004
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	9.4300e-004	1.8200e-004
tblVehicleEF	UBUS	0.52	0.07
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	1.24	0.18
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.6530e-003	3.0900e-004
tblVehicleEF	UBUS	2.3740e-003	4.5000e-004
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	9.4300e-004	1.8200e-004
tblVehicleEF	UBUS	2.64	4.84
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	1.36	0.19
tblVehicleTrips	CC_TL	7.50	5.00
tblVehicleTrips	CNW_TL	8.50	6.50
tblVehicleTrips	CW_TL	15.00	10.00
tblVehicleTrips	HO_TL	8.50	6.50
tblVehicleTrips	HS_TL	7.50	5.00
tblVehicleTrips	HW_TL	15.00	10.00
tblVehicleTrips	ST_TR	6.39	5.23

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	SU_TR	5.86	4.80
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	14.03	0.00

## 2.0 Emissions Summary

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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**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					
2020	0.0643	0.9502	0.4355	1.6600e-003	0.2003	0.0286	0.2289	0.0854	0.0264	0.1117	0.0000	155.2783	155.2783	0.0243	0.0000	155.8846
2021	0.2131	1.6670	1.7823	3.8000e-003	0.1276	0.0781	0.2057	0.0342	0.0735	0.1077	0.0000	337.3028	337.3028	0.0504	0.0000	338.5623
2022	1.8843	1.4443	1.6890	3.5800e-003	0.1156	0.0643	0.1799	0.0310	0.0605	0.0915	0.0000	317.5789	317.5789	0.0502	0.0000	318.8350
Maximum	1.8843	1.6670	1.7823	3.8000e-003	0.2003	0.0781	0.2289	0.0854	0.0735	0.1117	0.0000	337.3028	337.3028	0.0504	0.0000	338.5623

**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					
2020	0.0186	0.3965	0.4401	1.6600e-003	0.1028	2.3800e-003	0.1051	0.0419	2.3200e-003	0.0442	0.0000	155.2782	155.2782	0.0243	0.0000	155.8846
2021	0.0873	0.4512	1.8531	3.8000e-003	0.1276	4.7200e-003	0.1323	0.0342	4.6200e-003	0.0389	0.0000	337.3026	337.3026	0.0504	0.0000	338.5621
2022	1.7779	0.3958	1.7931	3.5800e-003	0.1156	4.4800e-003	0.1201	0.0310	4.4000e-003	0.0354	0.0000	317.5787	317.5787	0.0502	0.0000	318.8348
Maximum	1.7779	0.4512	1.8531	3.8000e-003	0.1276	4.7200e-003	0.1323	0.0419	4.6200e-003	0.0442	0.0000	337.3026	337.3026	0.0504	0.0000	338.5621

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	12.86	69.38	-4.59	0.00	22.00	93.23	41.83	28.88	92.92	61.89	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-21-2020	12-20-2020	0.9834	0.4154
3	3-21-2021	6-20-2021	0.2351	0.0674
4	6-21-2021	9-20-2021	0.7725	0.2215
5	9-21-2021	12-20-2021	0.7666	0.2215
6	12-21-2021	3-20-2022	0.6945	0.2122
7	3-21-2022	6-20-2022	0.6988	0.2138
8	6-21-2022	9-20-2022	1.7164	1.4731
9	9-21-2022	9-30-2022	0.1834	0.1819
		Highest	1.7164	1.4731

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3299	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893
Energy	0.0152	0.1305	0.0601	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	479.1810	479.1810	0.0190	6.1900e-003	481.5026
Mobile	0.6829	1.2617	5.3915	0.0147	1.3525	0.0154	1.3679	0.3624	0.0144	0.3769	0.0000	1,365.8568	1,365.8568	0.0804	0.0000	1,367.8662
Waste						0.0000	0.0000		0.0000	0.0000	32.1274	0.0000	32.1274	1.8987	0.0000	79.5942
Water						0.0000	0.0000		0.0000	0.0000	6.2636	34.0726	40.3361	0.0232	0.0140	45.0822
<b>Total</b>	<b>2.0279</b>	<b>1.4239</b>	<b>8.1978</b>	<b>0.0156</b>	<b>1.3525</b>	<b>0.0410</b>	<b>1.3935</b>	<b>0.3624</b>	<b>0.0401</b>	<b>0.4025</b>	<b>38.3909</b>	<b>1,883.5916</b>	<b>1,921.9825</b>	<b>2.0256</b>	<b>0.0202</b>	<b>1,978.6345</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.3299	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893	
Energy	0.0152	0.1305	0.0601	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	479.1810	479.1810	0.0190	6.1900e-003	481.5026	
Mobile	0.6829	1.2617	5.3915	0.0147	1.3525	0.0154	1.3679	0.3624	0.0144	0.3769	0.0000	1,365.8568	1,365.8568	0.0804	0.0000	1,367.8662	
Waste						0.0000	0.0000		0.0000	0.0000	32.1274	0.0000	32.1274	1.8987	0.0000	79.5942	
Water						0.0000	0.0000		0.0000	0.0000	6.2636	34.0726	40.3361	0.0232	0.0140	45.0822	
<b>Total</b>	<b>2.0279</b>	<b>1.4239</b>	<b>8.1978</b>	<b>0.0156</b>	<b>1.3525</b>	<b>0.0410</b>	<b>1.3935</b>	<b>0.3624</b>	<b>0.0401</b>	<b>0.4025</b>	<b>38.3909</b>	<b>1,883.5916</b>	<b>1,921.9825</b>	<b>2.0256</b>	<b>0.0202</b>	<b>1,978.6345</b>	

  

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

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/26/2020	11/6/2020	5	10	
2	Grading	Grading	11/7/2020	11/27/2020	5	15	
3	Building Construction	Building Construction	5/24/2021	7/15/2022	5	300	
4	Paving	Paving	7/25/2022	8/19/2022	5	20	
5	Architectural Coating	Architectural Coating	8/29/2022	9/23/2022	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 5**

**Residential Indoor: 538,650; Residential Outdoor: 179,550; Non-Residential Indoor: 9,450; Non-Residential Outdoor: 3,150; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,513.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	194.00	29.00	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	39.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505	
<b>Total</b>	<b>0.0204</b>	<b>0.2121</b>	<b>0.1076</b>	<b>1.9000e-004</b>	<b>0.0903</b>	<b>0.0110</b>	<b>0.1013</b>	<b>0.0497</b>	<b>0.0101</b>	<b>0.0598</b>	<b>0.0000</b>	<b>16.7153</b>	<b>16.7153</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>16.8505</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.2 Site Preparation - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5857	0.5857	2.0000e-005	0.0000	0.5861
Total	3.4000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5857	0.5857	2.0000e-005	0.0000	0.5861

**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	0.0000	0.0000	0.0000	0.0000	0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3300e-003	0.0101	0.1043	1.9000e-004	0.0407	3.1000e-004	3.1000e-004	0.0223	3.1000e-004	3.1000e-004	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	2.3300e-003	0.0101	0.1043	1.9000e-004	0.0407	3.1000e-004	0.0410	0.0223	3.1000e-004	0.0227	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.2 Site Preparation - 2020****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.4000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5857	0.5857	2.0000e-005	0.0000	0.5861	
Total	3.4000e-004	2.3000e-004	2.4900e-003	1.0000e-005	6.6000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5857	0.5857	2.0000e-005	0.0000	0.5861	

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0870	0.0000	0.0870	0.0294	0.0000	0.0294	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0334	0.3765	0.2397	4.7000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	40.8632	40.8632	0.0132	0.0000	41.1936
Total	0.0334	0.3765	0.2397	4.7000e-004	0.0870	0.0163	0.1033	0.0294	0.0150	0.0444	0.0000	40.8632	40.8632	0.0132	0.0000	41.1936

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.3 Grading - 2020****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	9.6600e-003	0.3610	0.0816	9.9000e-004	0.0212	1.2900e-003	0.0225	5.8200e-003	1.2400e-003	7.0600e-003	0.0000	96.1379	96.1379	5.5900e-003	0.0000	96.2777	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.6000e-004	3.8000e-004	4.1500e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9761	0.9761	3.0000e-005	0.0000	0.9768	
<b>Total</b>	<b>0.0102</b>	<b>0.3614</b>	<b>0.0857</b>	<b>1.0000e-003</b>	<b>0.0223</b>	<b>1.3000e-003</b>	<b>0.0236</b>	<b>6.1100e-003</b>	<b>1.2500e-003</b>	<b>7.3600e-003</b>	<b>0.0000</b>	<b>97.1140</b>	<b>97.1140</b>	<b>5.6200e-003</b>	<b>0.0000</b>	<b>97.2544</b>	

**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					0.0392	0.0000	0.0392	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	5.7100e-003	0.0248	0.2475	4.7000e-004		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	40.8632	40.8632	0.0132	0.0000	41.1936	
<b>Total</b>	<b>5.7100e-003</b>	<b>0.0248</b>	<b>0.2475</b>	<b>4.7000e-004</b>	<b>0.0392</b>	<b>7.6000e-004</b>	<b>0.0399</b>	<b>0.0133</b>	<b>7.6000e-004</b>	<b>0.0140</b>	<b>0.0000</b>	<b>40.8632</b>	<b>40.8632</b>	<b>0.0132</b>	<b>0.0000</b>	<b>41.1936</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.3 Grading - 2020****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	9.6600e-003	0.3610	0.0816	9.9000e-004	0.0212	1.2900e-003	0.0225	5.8200e-003	1.2400e-003	7.0600e-003	0.0000	96.1379	96.1379	5.5900e-003	0.0000	96.2777	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.6000e-004	3.8000e-004	4.1500e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9761	0.9761	3.0000e-005	0.0000	0.9768	
Total	0.0102	0.3614	0.0857	1.0000e-003	0.0223	1.3000e-003	0.0236	6.1100e-003	1.2500e-003	7.3600e-003	0.0000	97.1140	97.1140	5.6200e-003	0.0000	97.2544	

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1521	1.3946	1.3260	2.1500e-003		0.0767	0.0767		0.0721	0.0721	0.0000	185.3098	185.3098	0.0447	0.0000	186.4275	
Total	0.1521	1.3946	1.3260	2.1500e-003		0.0767	0.0767		0.0721	0.0721	0.0000	185.3098	185.3098	0.0447	0.0000	186.4275	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.4 Building Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	7.3000e-003	0.2373	0.0634	5.7000e-004	0.0136	6.6000e-004	0.0142	3.9200e-003	6.3000e-004	4.5500e-003	0.0000	54.4376	54.4376	3.1100e-003	0.0000	54.5154	
Worker	0.0537	0.0351	0.3928	1.0800e-003	0.1140	8.0000e-004	0.1148	0.0303	7.3000e-004	0.0311	0.0000	97.5555	97.5555	2.5600e-003	0.0000	97.6195	
<b>Total</b>	<b>0.0610</b>	<b>0.2725</b>	<b>0.4562</b>	<b>1.6500e-003</b>	<b>0.1275</b>	<b>1.4600e-003</b>	<b>0.1290</b>	<b>0.0342</b>	<b>1.3600e-003</b>	<b>0.0356</b>	<b>0.0000</b>	<b>151.9930</b>	<b>151.9930</b>	<b>5.6700e-003</b>	<b>0.0000</b>	<b>152.1348</b>	

**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	0.0262	0.1788	1.3968	2.1500e-003		3.2600e-003	3.2600e-003	3.2600e-003	3.2600e-003	0.0000	185.3096	185.3096	0.0447	0.0000	186.4273		
<b>Total</b>	<b>0.0262</b>	<b>0.1788</b>	<b>1.3968</b>	<b>2.1500e-003</b>		<b>3.2600e-003</b>	<b>3.2600e-003</b>		<b>3.2600e-003</b>	<b>3.2600e-003</b>	<b>0.0000</b>	<b>185.3096</b>	<b>185.3096</b>	<b>0.0447</b>	<b>0.0000</b>	<b>186.4273</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.4 Building Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	7.3000e-003	0.2373	0.0634	5.7000e-004	0.0136	6.6000e-004	0.0142	3.9200e-003	6.3000e-004	4.5500e-003	0.0000	54.4376	54.4376	3.1100e-003	0.0000	54.5154	
Worker	0.0537	0.0351	0.3928	1.0800e-003	0.1140	8.0000e-004	0.1148	0.0303	7.3000e-004	0.0311	0.0000	97.5555	97.5555	2.5600e-003	0.0000	97.6195	
<b>Total</b>	<b>0.0610</b>	<b>0.2725</b>	<b>0.4562</b>	<b>1.6500e-003</b>	<b>0.1275</b>	<b>1.4600e-003</b>	<b>0.1290</b>	<b>0.0342</b>	<b>1.3600e-003</b>	<b>0.0356</b>	<b>0.0000</b>	<b>151.9930</b>	<b>151.9930</b>	<b>5.6700e-003</b>	<b>0.0000</b>	<b>152.1348</b>	

**3.4 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	0.1194	1.0931	1.1454	1.8900e-003		0.0566	0.0566		0.0533	0.0533	0.0000	162.2077	162.2077	0.0389	0.0000	163.1792	
<b>Total</b>	<b>0.1194</b>	<b>1.0931</b>	<b>1.1454</b>	<b>1.8900e-003</b>		<b>0.0566</b>	<b>0.0566</b>		<b>0.0533</b>	<b>0.0533</b>	<b>0.0000</b>	<b>162.2077</b>	<b>162.2077</b>	<b>0.0389</b>	<b>0.0000</b>	<b>163.1792</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.4 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	0.0000	
Vendor	5.9300e-003	0.1972	0.0512	4.9000e-004	0.0119	5.0000e-004	0.0124	3.4300e-003	4.8000e-004	3.9100e-003	0.0000	47.2142	47.2142	2.6500e-003	0.0000	47.2803	
Worker	0.0440	0.0276	0.3158	9.1000e-004	0.0997	6.8000e-004	0.1004	0.0265	6.3000e-004	0.0272	0.0000	82.3035	82.3035	2.0100e-003	0.0000	82.3539	
<b>Total</b>	<b>0.0499</b>	<b>0.2248</b>	<b>0.3670</b>	<b>1.4000e-003</b>	<b>0.1116</b>	<b>1.1800e-003</b>	<b>0.1128</b>	<b>0.0300</b>	<b>1.1100e-003</b>	<b>0.0311</b>	<b>0.0000</b>	<b>129.5177</b>	<b>129.5177</b>	<b>4.6600e-003</b>	<b>0.0000</b>	<b>129.6342</b>	

**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	0.0230	0.1564	1.2222	1.8900e-003		2.8600e-003	2.8600e-003		2.8600e-003	2.8600e-003	0.0000	162.2075	162.2075	0.0389	0.0000	163.1790	
<b>Total</b>	<b>0.0230</b>	<b>0.1564</b>	<b>1.2222</b>	<b>1.8900e-003</b>		<b>2.8600e-003</b>	<b>2.8600e-003</b>		<b>2.8600e-003</b>	<b>2.8600e-003</b>	<b>0.0000</b>	<b>162.2075</b>	<b>162.2075</b>	<b>0.0389</b>	<b>0.0000</b>	<b>163.1790</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.4 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	0.0000	
Vendor	5.9300e-003	0.1972	0.0512	4.9000e-004	0.0119	5.0000e-004	0.0124	3.4300e-003	4.8000e-004	3.9100e-003	0.0000	47.2142	47.2142	2.6500e-003	0.0000	47.2803	
Worker	0.0440	0.0276	0.3158	9.1000e-004	0.0997	6.8000e-004	0.1004	0.0265	6.3000e-004	0.0272	0.0000	82.3035	82.3035	2.0100e-003	0.0000	82.3539	
Total	0.0499	0.2248	0.3670	1.4000e-003	0.1116	1.1800e-003	0.1128	0.0300	1.1100e-003	0.0311	0.0000	129.5177	129.5177	4.6600e-003	0.0000	129.6342	

**3.5 Paving - 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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895	
Paving	6.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0176	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Paving - 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	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.9000e-004	3.1000e-004	3.4900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9091	0.9091	2.0000e-005	0.0000	0.9097	
Total	4.9000e-004	3.1000e-004	3.4900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9091	0.9091	2.0000e-005	0.0000	0.9097	

**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	2.8000e-003	0.0122	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895	
Paving	6.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	9.3500e-003	0.0122	0.1730	2.3000e-004		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.5 Paving - 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	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.9000e-004	3.1000e-004	3.4900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9091	0.9091	2.0000e-005	0.0000	0.9097	
Total	4.9000e-004	3.1000e-004	3.4900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9091	0.9091	2.0000e-005	0.0000	0.9097	

**3.6 Architectural Coating - 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					
Archit. Coating	1.6936						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	1.6957	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.6 Architectural Coating - 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	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.2600e-003	7.9000e-004	9.0700e-003	3.0000e-005	2.8600e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3637	2.3637	6.0000e-005	0.0000	2.3651	
Total	1.2600e-003	7.9000e-004	9.0700e-003	3.0000e-005	2.8600e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3637	2.3637	6.0000e-005	0.0000	2.3651	

**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	1.6936						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0000e-004	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	1.6939	1.2900e-003	0.0183	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.6 Architectural Coating - 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	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.2600e-003	7.9000e-004	9.0700e-003	3.0000e-005	2.8600e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3637	2.3637	6.0000e-005	0.0000	2.3651	
Total	1.2600e-003	7.9000e-004	9.0700e-003	3.0000e-005	2.8600e-003	2.0000e-005	2.8800e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3637	2.3637	6.0000e-005	0.0000	2.3651	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.6829	1.2617	5.3915	0.0147	1.3525	0.0154	1.3679	0.3624	0.0144	0.3769	0.0000	1,365.856 8	1,365.856 8	0.0804	0.0000	1,367.866 2	
Unmitigated	0.6829	1.2617	5.3915	0.0147	1.3525	0.0154	1.3679	0.3624	0.0144	0.3769	0.0000	1,365.856 8	1,365.856 8	0.0804	0.0000	1,367.866 2	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Apartments Mid Rise	1,447.04	1,391.18	1276.80	3,630,377	3,630,377	3,630,377	3,630,377
Other Asphalt Surfaces	0.00	0.00	0.00				
Racquet Club	0.00	0.00	0.00				
Total	1,447.04	1,391.18	1,276.80	3,630,377	3,630,377	3,630,377	3,630,377

**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
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Other Asphalt Surfaces	15.00	7.50	8.50	0.00	0.00	0.00	0	0	0
Racquet Club	10.00	5.00	6.50	11.50	69.50	19.00	52	39	9

**4.4 Fleet Mix**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553424	0.054724	0.182601	0.125932	0.026745	0.006205	0.019388	0.020907	0.001606	0.001367	0.005207	0.000984	0.000911
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Racquet Club	0.553424	0.054724	0.182601	0.125932	0.026745	0.006205	0.019388	0.020907	0.001606	0.001367	0.005207	0.000984	0.000911

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	328.7699	328.7699	0.0162	3.4400e-003	330.1977	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	328.7699	328.7699	0.0162	3.4400e-003	330.1977	
NaturalGas Mitigated	0.0152	0.1305	0.0601	8.3000e-004			0.0105	0.0105		0.0105	0.0105	0.0000	150.4111	150.4111	2.8800e-003	2.7600e-003	151.3049
NaturalGas Unmitigated	0.0152	0.1305	0.0601	8.3000e-004			0.0105	0.0105		0.0105	0.0105	0.0000	150.4111	150.4111	2.8800e-003	2.7600e-003	151.3049

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.59299e+006	0.0140	0.1195	0.0508	7.6000e-004		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	138.3721	138.3721	2.6500e-003	2.5400e-003	139.1943
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	225603	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0390	12.0390	2.3000e-004	2.2000e-004	12.1106
<b>Total</b>		<b>0.0152</b>	<b>0.1305</b>	<b>0.0601</b>	<b>8.3000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>150.4111</b>	<b>150.4111</b>	<b>2.8800e-003</b>	<b>2.7600e-003</b>	<b>151.3049</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.59299e+006	0.0140	0.1195	0.0508	7.6000e-004		9.6600e-003	9.6600e-003		9.6600e-003	9.6600e-003	0.0000	138.3721	138.3721	2.6500e-003	2.5400e-003	139.1943
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Racquet Club	225603	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0390	12.0390	2.3000e-004	2.2000e-004	12.1106
<b>Total</b>		<b>0.0152</b>	<b>0.1305</b>	<b>0.0601</b>	<b>8.3000e-004</b>		<b>0.0105</b>	<b>0.0105</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>150.4111</b>	<b>150.4111</b>	<b>2.8800e-003</b>	<b>2.7600e-003</b>	<b>151.3049</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.13222e+006	303.1629	0.0149	3.1700e-003	304.4795
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	95634	25.6070	1.2600e-003	2.7000e-004	25.7182
<b>Total</b>		<b>328.7699</b>	<b>0.0162</b>	<b>3.4400e-003</b>	<b>330.1977</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.13222e+006	303.1629	0.0149	3.1700e-003	304.4795
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	95634	25.6070	1.2600e-003	2.7000e-004	25.7182
<b>Total</b>		<b>328.7699</b>	<b>0.0162</b>	<b>3.4400e-003</b>	<b>330.1977</b>

**6.0 Area Detail**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3299	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893
Unmitigated	1.3299	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0776					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0830	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893
<b>Total</b>	<b>1.3299</b>	<b>0.0317</b>	<b>2.7463</b>	<b>1.4000e-004</b>		<b>0.0152</b>	<b>0.0152</b>		<b>0.0152</b>	<b>0.0152</b>	<b>0.0000</b>	<b>4.4812</b>	<b>4.4812</b>	<b>4.3200e-003</b>	<b>0.0000</b>	<b>4.5893</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1694					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0776					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0830	0.0317	2.7463	1.4000e-004		0.0152	0.0152		0.0152	0.0152	0.0000	4.4812	4.4812	4.3200e-003	0.0000	4.5893
<b>Total</b>	<b>1.3299</b>	<b>0.0317</b>	<b>2.7463</b>	<b>1.4000e-004</b>		<b>0.0152</b>	<b>0.0152</b>		<b>0.0152</b>	<b>0.0152</b>	<b>0.0000</b>	<b>4.4812</b>	<b>4.4812</b>	<b>4.3200e-003</b>	<b>0.0000</b>	<b>4.5893</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.3361	0.0232	0.0140	45.0822
Unmitigated	40.3361	0.0232	0.0140	45.0822

**7.2 Water by Land Use****Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.331 / 10.926	39.4932	0.0227	0.0137	44.1393
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.372602 / 0.228369	0.8430	4.9000e-004	2.9000e-004	0.9428
<b>Total</b>		<b>40.3361</b>	<b>0.0232</b>	<b>0.0140</b>	<b>45.0822</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.331 / 10.926	39.4932	0.0227	0.0137	44.1393
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Racquet Club	0.372602 / 0.228369	0.8430	4.9000e- 004	2.9000e- 004	0.9428
<b>Total</b>		<b>40.3361</b>	<b>0.0232</b>	<b>0.0140</b>	<b>45.0822</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	32.1274	1.8987	0.0000	79.5942
Unmitigated	32.1274	1.8987	0.0000	79.5942

**8.2 Waste by Land Use**Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	122.36	24.8380	1.4679	0.0000	61.5350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	35.91	7.2894	0.4308	0.0000	18.0592
<b>Total</b>		<b>32.1274</b>	<b>1.8987</b>	<b>0.0000</b>	<b>79.5942</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	122.36	24.8380	1.4679	0.0000	61.5350
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Racquet Club	35.91	7.2894	0.4308	0.0000	18.0592
<b>Total</b>		<b>32.1274</b>	<b>1.8987</b>	<b>0.0000</b>	<b>79.5942</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Annual

## 11.0 Vegetation

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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**Klotz Ranch Apartments**  
**Sacramento Metropolitan AQMD Air District, Winter**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.00	Acre	5.00	217,800.00	0
Racquet Club	6.30	1000sqft	0.14	6,300.00	0
Apartments Mid Rise	266.00	Dwelling Unit	12.70	266,000.00	710

**1.2 Other Project Characteristics**

Urbanization	Rural	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2022
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.00617

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

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

Project Characteristics - PG&E GHG emission factor based on <https://www.pgecurrents.com/2018/03/26/independent-registry-confirms-record-low-carbon-emissions-for-pge/>

Land Use - 12.7 acres based on project data. Raquet Club land use represents the 6,300 ft<sup>2</sup>, two-story clubhouse. Parking/roads estimated to be 5 acres.

Construction Phase - Construction phases based on Project Description

Trips and VMT - per project description.

Grading - Cut and fill volumes provided by client.

Vehicle Trips - Trip rates were updated based on traffic study of 1,448 trips per weekday. The racquet club land use represents a clubhouse and does not attract additional trips, so they are set to zero.

Vehicle Emission Factors - Use of EMFAC2017 Emission Factors

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4 final mitigation for onsite equipment.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	13,068.00	0.00
tblAreaCoating	Area_Parking	13068	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	30.00	15.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.56	0.55
tblFleetMix	LDA	0.56	0.00
tblFleetMix	LDA	0.56	0.55
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.18
tblFleetMix	LDT2	0.21	0.00
tblFleetMix	LDT2	0.21	0.18

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2450e-003	6.2050e-003
tblFleetMix	LHD2	5.2450e-003	0.00
tblFleetMix	LHD2	5.2450e-003	6.2050e-003
tblFleetMix	MCY	5.8840e-003	5.2070e-003
tblFleetMix	MCY	5.8840e-003	0.00
tblFleetMix	MCY	5.8840e-003	5.2070e-003
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	8.6500e-004	9.1100e-004
tblFleetMix	MH	8.6500e-004	0.00
tblFleetMix	MH	8.6500e-004	9.1100e-004
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	2.0310e-003	1.6060e-003
tblFleetMix	OBUS	2.0310e-003	0.00
tblFleetMix	OBUS	2.0310e-003	1.6060e-003
tblFleetMix	SBUS	6.1900e-004	9.8400e-004
tblFleetMix	SBUS	6.1900e-004	0.00
tblFleetMix	SBUS	6.1900e-004	9.8400e-004
tblFleetMix	UBUS	2.0540e-003	1.3670e-003
tblFleetMix	UBUS	2.0540e-003	0.00
tblFleetMix	UBUS	2.0540e-003	1.3670e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblGrading	AcresOfGrading	37.50	75.00
tblGrading	MaterialExported	0.00	20,100.00
tblLandUse	LotAcreage	7.00	12.70
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	VendorTripLength	8.50	6.50
tblTripsAndVMT	VendorTripLength	8.50	6.50
tblTripsAndVMT	VendorTripLength	8.50	6.50
tblTripsAndVMT	VendorTripLength	8.50	6.50
tblTripsAndVMT	VendorTripNumber	65.00	29.00
tblTripsAndVMT	WorkerTripLength	15.00	10.00
tblTripsAndVMT	WorkerTripLength	15.00	10.00
tblTripsAndVMT	WorkerTripLength	15.00	10.00
tblTripsAndVMT	WorkerTripLength	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	286.00	194.00
tblTripsAndVMT	WorkerTripNumber	57.00	39.00
tblVehicleEF	HHD	0.60	0.03
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.11	0.00
tblVehicleEF	HHD	2.43	6.38
tblVehicleEF	HHD	1.02	0.46
tblVehicleEF	HHD	3.28	5.1820e-003
tblVehicleEF	HHD	4,159.31	1,215.64
tblVehicleEF	HHD	1,651.06	1,538.11
tblVehicleEF	HHD	9.15	0.05
tblVehicleEF	HHD	22.32	7.16

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	HHD	3.36	3.68
tblVehicleEF	HHD	19.79	2.45
tblVehicleEF	HHD	0.04	6.7790e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	9.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	6.4850e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.6320e-003	8.7710e-003
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	8.3000e-005	2.0000e-006
tblVehicleEF	HHD	1.5300e-004	9.0000e-006
tblVehicleEF	HHD	5.4300e-003	2.8400e-004
tblVehicleEF	HHD	0.63	0.47
tblVehicleEF	HHD	7.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.11	0.07
tblVehicleEF	HHD	8.2400e-004	1.8220e-003
tblVehicleEF	HHD	0.09	2.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.4600e-004	1.0000e-006
tblVehicleEF	HHD	1.5300e-004	9.0000e-006
tblVehicleEF	HHD	5.4300e-003	2.8400e-004
tblVehicleEF	HHD	0.72	0.54
tblVehicleEF	HHD	7.2000e-005	4.0000e-006
tblVehicleEF	HHD	0.20	0.14

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	HHD	8.2400e-004	1.8220e-003
tblVehicleEF	HHD	0.10	2.0000e-006
tblVehicleEF	HHD	0.57	0.03
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.10	0.00
tblVehicleEF	HHD	1.77	6.24
tblVehicleEF	HHD	1.03	0.46
tblVehicleEF	HHD	3.02	4.7730e-003
tblVehicleEF	HHD	4,406.18	1,213.68
tblVehicleEF	HHD	1,651.06	1,538.11
tblVehicleEF	HHD	9.15	0.05
tblVehicleEF	HHD	23.04	7.00
tblVehicleEF	HHD	3.15	3.45
tblVehicleEF	HHD	19.77	2.45
tblVehicleEF	HHD	0.03	5.8390e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	9.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.03	5.5870e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.6320e-003	8.7710e-003
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	8.3000e-005	2.0000e-006
tblVehicleEF	HHD	4.0400e-004	2.5000e-005
tblVehicleEF	HHD	6.4540e-003	3.5200e-004
tblVehicleEF	HHD	0.59	0.49

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	HHD	1.9500e-004	1.2000e-005
tblVehicleEF	HHD	0.11	0.07
tblVehicleEF	HHD	8.4500e-004	1.9180e-003
tblVehicleEF	HHD	0.09	2.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.4200e-004	1.0000e-006
tblVehicleEF	HHD	4.0400e-004	2.5000e-005
tblVehicleEF	HHD	6.4540e-003	3.5200e-004
tblVehicleEF	HHD	0.68	0.57
tblVehicleEF	HHD	1.9500e-004	1.2000e-005
tblVehicleEF	HHD	0.20	0.14
tblVehicleEF	HHD	8.4500e-004	1.9180e-003
tblVehicleEF	HHD	0.10	2.0000e-006
tblVehicleEF	HHD	0.65	0.03
tblVehicleEF	HHD	0.07	0.06
tblVehicleEF	HHD	0.12	0.00
tblVehicleEF	HHD	3.34	6.59
tblVehicleEF	HHD	1.01	0.46
tblVehicleEF	HHD	3.67	5.7450e-003
tblVehicleEF	HHD	3,818.40	1,218.35
tblVehicleEF	HHD	1,651.06	1,538.11
tblVehicleEF	HHD	9.15	0.06
tblVehicleEF	HHD	21.33	7.39
tblVehicleEF	HHD	3.43	3.75
tblVehicleEF	HHD	19.81	2.45
tblVehicleEF	HHD	0.04	8.0760e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.04
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	9.0000e-005	2.0000e-006
tblVehicleEF	HHD	0.04	7.7270e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.6320e-003	8.7710e-003
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	8.3000e-005	2.0000e-006
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	5.5610e-003	3.0300e-004
tblVehicleEF	HHD	0.68	0.44
tblVehicleEF	HHD	1.6000e-005	1.0000e-006
tblVehicleEF	HHD	0.11	0.07
tblVehicleEF	HHD	8.9700e-004	1.9320e-003
tblVehicleEF	HHD	0.10	2.0000e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	1.5200e-004	1.0000e-006
tblVehicleEF	HHD	4.3000e-005	2.0000e-006
tblVehicleEF	HHD	5.5610e-003	3.0300e-004
tblVehicleEF	HHD	0.78	0.51
tblVehicleEF	HHD	1.6000e-005	1.0000e-006
tblVehicleEF	HHD	0.20	0.14
tblVehicleEF	HHD	8.9700e-004	1.9320e-003
tblVehicleEF	HHD	0.11	2.0000e-006
tblVehicleEF	LDA	4.2860e-003	2.5680e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDA	5.8650e-003	0.06
tblVehicleEF	LDA	0.61	0.69
tblVehicleEF	LDA	1.26	2.30
tblVehicleEF	LDA	252.52	260.95
tblVehicleEF	LDA	57.68	54.67
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.08	0.20
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.04	0.07
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.08	0.26
tblVehicleEF	LDA	2.5290e-003	2.5820e-003
tblVehicleEF	LDA	5.9800e-004	5.4100e-004
tblVehicleEF	LDA	0.04	0.07
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.09	0.28
tblVehicleEF	LDA	5.0150e-003	3.0340e-003
tblVehicleEF	LDA	4.7840e-003	0.05

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDA	0.78	0.89
tblVehicleEF	LDA	1.03	1.90
tblVehicleEF	LDA	280.47	289.33
tblVehicleEF	LDA	57.68	53.88
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.11	0.18
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.08	0.12
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDA	2.8110e-003	2.8620e-003
tblVehicleEF	LDA	5.9400e-004	5.3300e-004
tblVehicleEF	LDA	0.11	0.18
tblVehicleEF	LDA	0.13	0.15
tblVehicleEF	LDA	0.08	0.12
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.24
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	4.0630e-003	2.3890e-003
tblVehicleEF	LDA	7.0460e-003	0.07
tblVehicleEF	LDA	0.58	0.66

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDA	1.57	2.88
tblVehicleEF	LDA	245.02	253.39
tblVehicleEF	LDA	57.68	55.77
tblVehicleEF	LDA	0.06	0.05
tblVehicleEF	LDA	0.09	0.23
tblVehicleEF	LDA	1.7730e-003	1.5130e-003
tblVehicleEF	LDA	2.2990e-003	1.9700e-003
tblVehicleEF	LDA	1.6350e-003	1.3940e-003
tblVehicleEF	LDA	2.1140e-003	1.8110e-003
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	7.3210e-003	0.01
tblVehicleEF	LDA	0.01	9.6040e-003
tblVehicleEF	LDA	0.05	0.28
tblVehicleEF	LDA	0.10	0.31
tblVehicleEF	LDA	2.4540e-003	2.5070e-003
tblVehicleEF	LDA	6.0400e-004	5.5200e-004
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	7.3210e-003	0.01
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.05	0.28
tblVehicleEF	LDA	0.10	0.34
tblVehicleEF	LDT1	0.01	5.4680e-003
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.36	1.20
tblVehicleEF	LDT1	3.32	2.50

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT1	313.76	308.81
tblVehicleEF	LDT1	71.71	65.78
tblVehicleEF	LDT1	0.13	0.10
tblVehicleEF	LDT1	0.19	0.29
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.20	0.80
tblVehicleEF	LDT1	0.23	0.41
tblVehicleEF	LDT1	3.1540e-003	3.0560e-003
tblVehicleEF	LDT1	7.7500e-004	6.5100e-004
tblVehicleEF	LDT1	0.16	0.16
tblVehicleEF	LDT1	0.31	0.23
tblVehicleEF	LDT1	0.10	0.10
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.20	0.80
tblVehicleEF	LDT1	0.25	0.45
tblVehicleEF	LDT1	0.01	6.3980e-003
tblVehicleEF	LDT1	0.01	0.07
tblVehicleEF	LDT1	1.70	1.51
tblVehicleEF	LDT1	2.71	2.06
tblVehicleEF	LDT1	346.93	337.97

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT1	71.71	64.82
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.17	0.27
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.41	0.40
tblVehicleEF	LDT1	0.40	0.30
tblVehicleEF	LDT1	0.25	0.25
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.19	0.79
tblVehicleEF	LDT1	0.19	0.34
tblVehicleEF	LDT1	3.4910e-003	3.3440e-003
tblVehicleEF	LDT1	7.6400e-004	6.4100e-004
tblVehicleEF	LDT1	0.41	0.40
tblVehicleEF	LDT1	0.40	0.30
tblVehicleEF	LDT1	0.25	0.25
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.19	0.79
tblVehicleEF	LDT1	0.20	0.37
tblVehicleEF	LDT1	0.01	5.1180e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.31	1.14
tblVehicleEF	LDT1	4.17	3.14
tblVehicleEF	LDT1	304.87	301.05
tblVehicleEF	LDT1	71.71	67.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT1	0.15	0.11
tblVehicleEF	LDT1	0.21	0.32
tblVehicleEF	LDT1	2.6720e-003	2.0500e-003
tblVehicleEF	LDT1	3.4480e-003	2.6030e-003
tblVehicleEF	LDT1	2.4650e-003	1.8900e-003
tblVehicleEF	LDT1	3.1710e-003	2.3940e-003
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.24	0.97
tblVehicleEF	LDT1	0.28	0.49
tblVehicleEF	LDT1	3.0640e-003	2.9790e-003
tblVehicleEF	LDT1	7.9000e-004	6.6400e-004
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.32	0.23
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.04	0.03
tblVehicleEF	LDT1	0.24	0.97
tblVehicleEF	LDT1	0.30	0.54
tblVehicleEF	LDT2	6.1470e-003	3.8830e-003
tblVehicleEF	LDT2	8.5390e-003	0.08
tblVehicleEF	LDT2	0.83	0.94
tblVehicleEF	LDT2	1.80	2.95
tblVehicleEF	LDT2	354.77	334.69
tblVehicleEF	LDT2	81.19	71.98
tblVehicleEF	LDT2	0.08	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT2	0.15	0.33
tblVehicleEF	LDT2	1.7350e-003	1.4940e-003
tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.49
tblVehicleEF	LDT2	0.12	0.36
tblVehicleEF	LDT2	3.5550e-003	3.3110e-003
tblVehicleEF	LDT2	8.4200e-004	7.1200e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.49
tblVehicleEF	LDT2	0.13	0.40
tblVehicleEF	LDT2	7.1660e-003	4.5690e-003
tblVehicleEF	LDT2	6.9600e-003	0.06
tblVehicleEF	LDT2	1.06	1.20
tblVehicleEF	LDT2	1.48	2.42
tblVehicleEF	LDT2	393.11	363.56
tblVehicleEF	LDT2	81.19	70.93
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.14	0.30

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT2	1.7350e-003	1.4940e-003
tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.16	0.24
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.12	0.17
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.48
tblVehicleEF	LDT2	0.09	0.30
tblVehicleEF	LDT2	3.9410e-003	3.5970e-003
tblVehicleEF	LDT2	8.3700e-004	7.0200e-004
tblVehicleEF	LDT2	0.16	0.24
tblVehicleEF	LDT2	0.17	0.18
tblVehicleEF	LDT2	0.12	0.17
tblVehicleEF	LDT2	0.03	0.03
tblVehicleEF	LDT2	0.07	0.48
tblVehicleEF	LDT2	0.10	0.32
tblVehicleEF	LDT2	5.8250e-003	3.6190e-003
tblVehicleEF	LDT2	0.01	0.09
tblVehicleEF	LDT2	0.79	0.89
tblVehicleEF	LDT2	2.24	3.70
tblVehicleEF	LDT2	344.50	326.99
tblVehicleEF	LDT2	81.19	73.41
tblVehicleEF	LDT2	0.09	0.09
tblVehicleEF	LDT2	0.17	0.37
tblVehicleEF	LDT2	1.7350e-003	1.4940e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LDT2	2.3440e-003	1.8840e-003
tblVehicleEF	LDT2	1.5960e-003	1.3750e-003
tblVehicleEF	LDT2	2.1550e-003	1.7320e-003
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.09	0.59
tblVehicleEF	LDT2	0.14	0.43
tblVehicleEF	LDT2	3.4510e-003	3.2350e-003
tblVehicleEF	LDT2	8.5000e-004	7.2600e-004
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.09	0.59
tblVehicleEF	LDT2	0.15	0.47
tblVehicleEF	LHD1	5.3360e-003	4.9860e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.29	1.04
tblVehicleEF	LHD1	2.70	1.08
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.85
tblVehicleEF	LHD1	31.04	11.21
tblVehicleEF	LHD1	0.09	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD1	1.97	1.40
tblVehicleEF	LHD1	1.02	0.32
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004
tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	3.5820e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.4260e-003	1.1800e-003
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8890e-003	7.8580e-003
tblVehicleEF	LHD1	3.6100e-004	1.1100e-004
tblVehicleEF	LHD1	3.5820e-003	2.9780e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.4260e-003	1.1800e-003
tblVehicleEF	LHD1	0.18	0.15
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.30	0.09

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD1	5.3360e-003	5.0020e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.32	1.07
tblVehicleEF	LHD1	2.48	0.99
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.90
tblVehicleEF	LHD1	31.04	11.06
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	1.84	1.30
tblVehicleEF	LHD1	0.95	0.30
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004
tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	9.1870e-003	7.6550e-003
tblVehicleEF	LHD1	0.14	0.11
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6360e-003	3.0280e-003
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.26	0.08

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8890e-003	7.8590e-003
tblVehicleEF	LHD1	3.5700e-004	1.0900e-004
tblVehicleEF	LHD1	9.1870e-003	7.6550e-003
tblVehicleEF	LHD1	0.14	0.11
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6360e-003	3.0280e-003
tblVehicleEF	LHD1	0.19	0.15
tblVehicleEF	LHD1	0.35	0.61
tblVehicleEF	LHD1	0.29	0.09
tblVehicleEF	LHD1	5.3360e-003	4.9680e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.18
tblVehicleEF	LHD1	1.26	1.02
tblVehicleEF	LHD1	2.99	1.19
tblVehicleEF	LHD1	9.21	9.34
tblVehicleEF	LHD1	701.67	805.80
tblVehicleEF	LHD1	31.04	11.41
tblVehicleEF	LHD1	0.09	0.08
tblVehicleEF	LHD1	2.02	1.43
tblVehicleEF	LHD1	1.10	0.35
tblVehicleEF	LHD1	9.9400e-004	9.3400e-004
tblVehicleEF	LHD1	0.01	9.8680e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.8000e-004	2.6300e-004
tblVehicleEF	LHD1	9.5100e-004	8.9400e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD1	2.5200e-003	2.4670e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	9.0100e-004	2.4200e-004
tblVehicleEF	LHD1	1.0290e-003	8.4400e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.7300e-004	3.0500e-004
tblVehicleEF	LHD1	0.15	0.12
tblVehicleEF	LHD1	0.39	0.67
tblVehicleEF	LHD1	0.30	0.09
tblVehicleEF	LHD1	9.2000e-005	9.0000e-005
tblVehicleEF	LHD1	6.8880e-003	7.8580e-003
tblVehicleEF	LHD1	3.6700e-004	1.1300e-004
tblVehicleEF	LHD1	1.0290e-003	8.4400e-004
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.7300e-004	3.0500e-004
tblVehicleEF	LHD1	0.18	0.15
tblVehicleEF	LHD1	0.39	0.67
tblVehicleEF	LHD1	0.33	0.10
tblVehicleEF	LHD2	3.6020e-003	3.2890e-003
tblVehicleEF	LHD2	9.9840e-003	8.6010e-003
tblVehicleEF	LHD2	8.8820e-003	9.6210e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.73	0.81
tblVehicleEF	LHD2	1.31	0.64
tblVehicleEF	LHD2	14.25	14.51

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD2	720.74	795.82
tblVehicleEF	LHD2	24.40	7.90
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.35	1.49
tblVehicleEF	LHD2	0.53	0.20
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	1.3190e-003	1.4950e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	5.6200e-004	6.1600e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.12	0.05
tblVehicleEF	LHD2	7.0120e-003	7.6850e-003
tblVehicleEF	LHD2	2.6800e-004	7.8000e-005
tblVehicleEF	LHD2	1.3190e-003	1.4950e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	5.6200e-004	6.1600e-004
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.09	0.28

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD2	0.13	0.05
tblVehicleEF	LHD2	3.6020e-003	3.2990e-003
tblVehicleEF	LHD2	0.01	8.7180e-003
tblVehicleEF	LHD2	8.3620e-003	9.0680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.74	0.82
tblVehicleEF	LHD2	1.20	0.59
tblVehicleEF	LHD2	14.25	14.51
tblVehicleEF	LHD2	720.74	795.84
tblVehicleEF	LHD2	24.40	7.81
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.26	1.40
tblVehicleEF	LHD2	0.50	0.19
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	3.3510e-003	3.8230e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4060e-003	1.5620e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.11	0.05

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD2	7.0120e-003	7.6850e-003
tblVehicleEF	LHD2	2.6600e-004	7.7000e-005
tblVehicleEF	LHD2	3.3510e-003	3.8230e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4060e-003	1.5620e-003
tblVehicleEF	LHD2	0.14	0.16
tblVehicleEF	LHD2	0.09	0.28
tblVehicleEF	LHD2	0.12	0.05
tblVehicleEF	LHD2	3.6020e-003	3.2780e-003
tblVehicleEF	LHD2	9.7880e-003	8.4740e-003
tblVehicleEF	LHD2	9.5090e-003	0.01
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.72	0.80
tblVehicleEF	LHD2	1.44	0.70
tblVehicleEF	LHD2	14.25	14.51
tblVehicleEF	LHD2	720.74	795.80
tblVehicleEF	LHD2	24.40	8.02
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	1.38	1.53
tblVehicleEF	LHD2	0.57	0.22
tblVehicleEF	LHD2	1.2940e-003	1.4230e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	4.4000e-004	1.3200e-004
tblVehicleEF	LHD2	1.2380e-003	1.3620e-003
tblVehicleEF	LHD2	0.02	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	LHD2	4.0400e-004	1.2100e-004
tblVehicleEF	LHD2	4.0000e-004	4.4200e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5100e-004	1.6400e-004
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.10	0.31
tblVehicleEF	LHD2	0.13	0.05
tblVehicleEF	LHD2	7.0110e-003	7.6850e-003
tblVehicleEF	LHD2	2.7000e-004	7.9000e-005
tblVehicleEF	LHD2	4.0000e-004	4.4200e-004
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5100e-004	1.6400e-004
tblVehicleEF	LHD2	0.14	0.15
tblVehicleEF	LHD2	0.10	0.31
tblVehicleEF	LHD2	0.14	0.06
tblVehicleEF	MCY	0.44	0.34
tblVehicleEF	MCY	0.17	0.26
tblVehicleEF	MCY	20.29	20.27
tblVehicleEF	MCY	10.10	8.92
tblVehicleEF	MCY	168.00	210.86
tblVehicleEF	MCY	47.74	63.07
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MCY	1.7870e-003	1.8120e-003
tblVehicleEF	MCY	3.4870e-003	3.0200e-003
tblVehicleEF	MCY	1.41	1.40
tblVehicleEF	MCY	0.93	0.92
tblVehicleEF	MCY	0.67	0.67
tblVehicleEF	MCY	2.37	2.37
tblVehicleEF	MCY	0.69	2.32
tblVehicleEF	MCY	2.26	2.00
tblVehicleEF	MCY	2.0800e-003	2.0870e-003
tblVehicleEF	MCY	7.0900e-004	6.2400e-004
tblVehicleEF	MCY	1.41	1.40
tblVehicleEF	MCY	0.93	0.92
tblVehicleEF	MCY	0.67	0.67
tblVehicleEF	MCY	2.89	2.89
tblVehicleEF	MCY	0.69	2.32
tblVehicleEF	MCY	2.46	2.17
tblVehicleEF	MCY	0.43	0.34
tblVehicleEF	MCY	0.14	0.22
tblVehicleEF	MCY	20.52	20.50
tblVehicleEF	MCY	9.12	8.02
tblVehicleEF	MCY	168.00	210.96
tblVehicleEF	MCY	47.74	60.52
tblVehicleEF	MCY	0.97	0.97
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003
tblVehicleEF	MCY	1.7870e-003	1.8120e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MCY	3.4870e-003	3.0200e-003
tblVehicleEF	MCY	3.91	3.89
tblVehicleEF	MCY	1.50	1.50
tblVehicleEF	MCY	2.18	2.16
tblVehicleEF	MCY	2.30	2.30
tblVehicleEF	MCY	0.68	2.28
tblVehicleEF	MCY	1.89	1.66
tblVehicleEF	MCY	2.0810e-003	2.0880e-003
tblVehicleEF	MCY	6.8200e-004	5.9900e-004
tblVehicleEF	MCY	3.91	3.89
tblVehicleEF	MCY	1.50	1.50
tblVehicleEF	MCY	2.18	2.16
tblVehicleEF	MCY	2.81	2.81
tblVehicleEF	MCY	0.68	2.28
tblVehicleEF	MCY	2.06	1.81
tblVehicleEF	MCY	0.46	0.36
tblVehicleEF	MCY	0.21	0.32
tblVehicleEF	MCY	22.39	22.37
tblVehicleEF	MCY	12.10	10.76
tblVehicleEF	MCY	168.00	214.72
tblVehicleEF	MCY	47.74	67.64
tblVehicleEF	MCY	1.27	1.27
tblVehicleEF	MCY	0.35	0.30
tblVehicleEF	MCY	1.9070e-003	1.9340e-003
tblVehicleEF	MCY	3.6910e-003	3.1980e-003
tblVehicleEF	MCY	1.7870e-003	1.8120e-003
tblVehicleEF	MCY	3.4870e-003	3.0200e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	0.95	0.94
tblVehicleEF	MCY	0.11	0.11
tblVehicleEF	MCY	2.52	2.52
tblVehicleEF	MCY	0.80	2.71
tblVehicleEF	MCY	2.81	2.50
tblVehicleEF	MCY	2.1190e-003	2.1250e-003
tblVehicleEF	MCY	7.5900e-004	6.6900e-004
tblVehicleEF	MCY	0.27	0.27
tblVehicleEF	MCY	0.95	0.94
tblVehicleEF	MCY	0.11	0.11
tblVehicleEF	MCY	3.07	3.07
tblVehicleEF	MCY	0.80	2.71
tblVehicleEF	MCY	3.06	2.72
tblVehicleEF	MDV	0.01	5.0650e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.32	1.09
tblVehicleEF	MDV	3.39	3.48
tblVehicleEF	MDV	479.92	410.48
tblVehicleEF	MDV	108.64	88.11
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.30	0.40
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.10	0.12

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.12	0.55
tblVehicleEF	MDV	0.26	0.47
tblVehicleEF	MDV	4.8090e-003	4.0580e-003
tblVehicleEF	MDV	1.1460e-003	8.7200e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.12	0.55
tblVehicleEF	MDV	0.29	0.52
tblVehicleEF	MDV	0.01	5.9710e-003
tblVehicleEF	MDV	0.02	0.08
tblVehicleEF	MDV	1.67	1.38
tblVehicleEF	MDV	2.78	2.84
tblVehicleEF	MDV	530.44	440.57
tblVehicleEF	MDV	108.64	86.82
tblVehicleEF	MDV	0.14	0.10
tblVehicleEF	MDV	0.28	0.37
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.24	0.29
tblVehicleEF	MDV	0.25	0.21

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MDV	0.18	0.22
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.12	0.54
tblVehicleEF	MDV	0.21	0.39
tblVehicleEF	MDV	5.3190e-003	4.3560e-003
tblVehicleEF	MDV	1.1350e-003	8.5900e-004
tblVehicleEF	MDV	0.24	0.29
tblVehicleEF	MDV	0.25	0.21
tblVehicleEF	MDV	0.18	0.22
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.12	0.54
tblVehicleEF	MDV	0.23	0.43
tblVehicleEF	MDV	0.01	4.7440e-003
tblVehicleEF	MDV	0.02	0.11
tblVehicleEF	MDV	1.26	1.04
tblVehicleEF	MDV	4.24	4.37
tblVehicleEF	MDV	466.38	402.47
tblVehicleEF	MDV	108.64	89.85
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.34	0.45
tblVehicleEF	MDV	1.8500e-003	1.6190e-003
tblVehicleEF	MDV	2.5310e-003	2.0540e-003
tblVehicleEF	MDV	1.7060e-003	1.4940e-003
tblVehicleEF	MDV	2.3270e-003	1.8890e-003
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.02	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.15	0.66
tblVehicleEF	MDV	0.32	0.57
tblVehicleEF	MDV	4.6730e-003	3.9790e-003
tblVehicleEF	MDV	1.1610e-003	8.8900e-004
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.15	0.66
tblVehicleEF	MDV	0.35	0.62
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.75	1.44
tblVehicleEF	MH	6.42	2.25
tblVehicleEF	MH	1,233.39	1,603.42
tblVehicleEF	MH	60.21	19.55
tblVehicleEF	MH	1.62	1.67
tblVehicleEF	MH	0.93	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004
tblVehicleEF	MH	1.35	1.08
tblVehicleEF	MH	0.09	0.07

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MH	0.34	0.27
tblVehicleEF	MH	0.12	0.09
tblVehicleEF	MH	0.02	1.50
tblVehicleEF	MH	0.37	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.1400e-004	1.9300e-004
tblVehicleEF	MH	1.35	1.08
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.34	0.27
tblVehicleEF	MH	0.17	0.12
tblVehicleEF	MH	0.02	1.50
tblVehicleEF	MH	0.41	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.87	1.49
tblVehicleEF	MH	5.74	2.03
tblVehicleEF	MH	1,233.39	1,603.52
tblVehicleEF	MH	60.21	19.16
tblVehicleEF	MH	1.48	1.54
tblVehicleEF	MH	0.87	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004
tblVehicleEF	MH	3.50	2.79

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.89	0.72
tblVehicleEF	MH	0.13	0.09
tblVehicleEF	MH	0.02	1.49
tblVehicleEF	MH	0.34	0.10
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.0200e-004	1.9000e-004
tblVehicleEF	MH	3.50	2.79
tblVehicleEF	MH	0.11	0.09
tblVehicleEF	MH	0.89	0.72
tblVehicleEF	MH	0.18	0.12
tblVehicleEF	MH	0.02	1.49
tblVehicleEF	MH	0.38	0.11
tblVehicleEF	MH	0.04	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	2.62	1.38
tblVehicleEF	MH	7.31	2.53
tblVehicleEF	MH	1,233.39	1,603.32
tblVehicleEF	MH	60.21	20.02
tblVehicleEF	MH	1.69	1.73
tblVehicleEF	MH	1.00	0.27
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.2010e-003	2.7700e-004
tblVehicleEF	MH	3.2120e-003	3.2610e-003
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.1050e-003	2.5500e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MH	0.38	0.31
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.12	0.08
tblVehicleEF	MH	0.03	1.61
tblVehicleEF	MH	0.40	0.11
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	7.2900e-004	1.9800e-004
tblVehicleEF	MH	0.38	0.31
tblVehicleEF	MH	0.10	0.08
tblVehicleEF	MH	0.09	0.08
tblVehicleEF	MH	0.16	0.11
tblVehicleEF	MH	0.03	1.61
tblVehicleEF	MH	0.44	0.12
tblVehicleEF	MHD	0.02	4.4660e-003
tblVehicleEF	MHD	7.5850e-003	6.6210e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.41	0.56
tblVehicleEF	MHD	0.52	0.57
tblVehicleEF	MHD	6.57	1.40
tblVehicleEF	MHD	147.37	150.83
tblVehicleEF	MHD	1,210.28	1,161.69
tblVehicleEF	MHD	57.55	11.51
tblVehicleEF	MHD	0.76	1.37
tblVehicleEF	MHD	1.79	2.35
tblVehicleEF	MHD	11.25	1.28
tblVehicleEF	MHD	3.8380e-003	2.9080e-003

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	3.6720e-003	2.7830e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	1.5080e-003	8.7100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.3200e-004	3.5700e-004
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.40	0.06
tblVehicleEF	MHD	1.4180e-003	1.4290e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.9100e-004	1.1400e-004
tblVehicleEF	MHD	1.5080e-003	8.7100e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	6.3200e-004	3.5700e-004
tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.43	0.07
tblVehicleEF	MHD	0.02	4.2120e-003
tblVehicleEF	MHD	7.7620e-003	6.7130e-003
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.29	0.47
tblVehicleEF	MHD	0.53	0.58

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MHD	6.05	1.29
tblVehicleEF	MHD	156.25	153.88
tblVehicleEF	MHD	1,210.28	1,161.71
tblVehicleEF	MHD	57.55	11.32
tblVehicleEF	MHD	0.78	1.39
tblVehicleEF	MHD	1.67	2.20
tblVehicleEF	MHD	11.19	1.27
tblVehicleEF	MHD	3.2360e-003	2.4570e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	3.0960e-003	2.3510e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	3.9020e-003	2.2650e-003
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	1.6400e-003	9.3800e-004
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.37	0.06
tblVehicleEF	MHD	1.5010e-003	1.4580e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8200e-004	1.1200e-004
tblVehicleEF	MHD	3.9020e-003	2.2650e-003
tblVehicleEF	MHD	0.07	0.04
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	1.6400e-003	9.3800e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.16
tblVehicleEF	MHD	0.41	0.07
tblVehicleEF	MHD	0.02	4.7180e-003
tblVehicleEF	MHD	7.3890e-003	6.5180e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.54	0.66
tblVehicleEF	MHD	0.51	0.56
tblVehicleEF	MHD	7.31	1.55
tblVehicleEF	MHD	135.45	146.78
tblVehicleEF	MHD	1,210.28	1,161.68
tblVehicleEF	MHD	57.55	11.77
tblVehicleEF	MHD	0.72	1.35
tblVehicleEF	MHD	1.83	2.40
tblVehicleEF	MHD	11.33	1.29
tblVehicleEF	MHD	4.6700e-003	3.5320e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.7800e-004	1.3400e-004
tblVehicleEF	MHD	4.4680e-003	3.3790e-003
tblVehicleEF	MHD	0.01	0.04
tblVehicleEF	MHD	7.1500e-004	1.2300e-004
tblVehicleEF	MHD	4.3200e-004	2.4300e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.5900e-004	8.8000e-005
tblVehicleEF	MHD	0.07	0.10
tblVehicleEF	MHD	0.03	0.18

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	MHD	0.43	0.07
tblVehicleEF	MHD	1.3050e-003	1.3900e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	7.0300e-004	1.1600e-004
tblVehicleEF	MHD	4.3200e-004	2.4300e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	MHD	1.5900e-004	8.8000e-005
tblVehicleEF	MHD	0.09	0.12
tblVehicleEF	MHD	0.03	0.18
tblVehicleEF	MHD	0.47	0.08
tblVehicleEF	OBUS	0.01	8.0330e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.59
tblVehicleEF	OBUS	0.88	1.14
tblVehicleEF	OBUS	6.77	2.49
tblVehicleEF	OBUS	128.59	95.65
tblVehicleEF	OBUS	1,355.95	1,492.53
tblVehicleEF	OBUS	68.41	18.89
tblVehicleEF	OBUS	0.61	0.48
tblVehicleEF	OBUS	1.94	2.02
tblVehicleEF	OBUS	2.89	0.79
tblVehicleEF	OBUS	1.3800e-004	9.1200e-004
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.3200e-004	8.7300e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	2.2060e-003	2.5060e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	6.9700e-004	7.7500e-004
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.12
tblVehicleEF	OBUS	1.2390e-003	9.1000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.0300e-004	1.8700e-004
tblVehicleEF	OBUS	2.2060e-003	2.5060e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	6.9700e-004	7.7500e-004
tblVehicleEF	OBUS	0.11	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.46	0.13
tblVehicleEF	OBUS	0.01	8.0990e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.27	0.57
tblVehicleEF	OBUS	0.90	1.18
tblVehicleEF	OBUS	6.09	2.25
tblVehicleEF	OBUS	135.23	95.59
tblVehicleEF	OBUS	1,355.95	1,492.59

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	OBUS	68.41	18.47
tblVehicleEF	OBUS	0.63	0.47
tblVehicleEF	OBUS	1.81	1.87
tblVehicleEF	OBUS	2.82	0.77
tblVehicleEF	OBUS	1.1600e-004	7.7400e-004
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.1100e-004	7.4100e-004
tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	5.6160e-003	6.4460e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	1.7390e-003	1.9550e-003
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.39	0.11
tblVehicleEF	OBUS	1.3020e-003	9.0900e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.9100e-004	1.8300e-004
tblVehicleEF	OBUS	5.6160e-003	6.4460e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	1.7390e-003	1.9550e-003
tblVehicleEF	OBUS	0.11	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.12

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	OBUS	0.01	7.9510e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.31	0.61
tblVehicleEF	OBUS	0.86	1.11
tblVehicleEF	OBUS	7.61	2.80
tblVehicleEF	OBUS	119.42	95.73
tblVehicleEF	OBUS	1,355.95	1,492.47
tblVehicleEF	OBUS	68.41	19.41
tblVehicleEF	OBUS	0.58	0.49
tblVehicleEF	OBUS	1.99	2.08
tblVehicleEF	OBUS	2.99	0.81
tblVehicleEF	OBUS	1.6800e-004	1.1030e-003
tblVehicleEF	OBUS	8.1910e-003	0.03
tblVehicleEF	OBUS	7.9000e-004	1.8600e-004
tblVehicleEF	OBUS	1.6000e-004	1.0550e-003
tblVehicleEF	OBUS	7.8180e-003	0.02
tblVehicleEF	OBUS	7.2700e-004	1.7100e-004
tblVehicleEF	OBUS	7.4300e-004	8.1200e-004
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.04	0.05
tblVehicleEF	OBUS	2.0300e-004	2.1700e-004
tblVehicleEF	OBUS	0.09	0.11
tblVehicleEF	OBUS	0.06	0.31
tblVehicleEF	OBUS	0.45	0.13
tblVehicleEF	OBUS	1.1510e-003	9.1000e-004
tblVehicleEF	OBUS	0.01	0.01

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	OBUS	8.1700e-004	1.9200e-004
tblVehicleEF	OBUS	7.4300e-004	8.1200e-004
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	2.0300e-004	2.1700e-004
tblVehicleEF	OBUS	0.11	0.13
tblVehicleEF	OBUS	0.06	0.31
tblVehicleEF	OBUS	0.49	0.14
tblVehicleEF	SBUS	0.84	0.02
tblVehicleEF	SBUS	0.01	6.3810e-003
tblVehicleEF	SBUS	0.07	2.1290e-003
tblVehicleEF	SBUS	6.73	1.20
tblVehicleEF	SBUS	0.65	0.43
tblVehicleEF	SBUS	6.39	0.33
tblVehicleEF	SBUS	1,201.53	336.95
tblVehicleEF	SBUS	1,096.07	1,113.09
tblVehicleEF	SBUS	44.67	1.81
tblVehicleEF	SBUS	10.71	4.00
tblVehicleEF	SBUS	4.39	6.66
tblVehicleEF	SBUS	13.82	0.61
tblVehicleEF	SBUS	0.01	4.9410e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	0.01	4.7270e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	3.5150e-003	4.4200e-004
tblVehicleEF	SBUS	0.03	3.0040e-003
tblVehicleEF	SBUS	0.80	0.12
tblVehicleEF	SBUS	1.1040e-003	1.1000e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.34	0.01
tblVehicleEF	SBUS	0.01	3.1940e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.5700e-004	1.8000e-005
tblVehicleEF	SBUS	3.5150e-003	4.4200e-004
tblVehicleEF	SBUS	0.03	3.0040e-003
tblVehicleEF	SBUS	1.15	0.17
tblVehicleEF	SBUS	1.1040e-003	1.1000e-004
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.37	0.01
tblVehicleEF	SBUS	0.84	0.02
tblVehicleEF	SBUS	0.01	6.4430e-003
tblVehicleEF	SBUS	0.05	1.6980e-003
tblVehicleEF	SBUS	6.59	1.15
tblVehicleEF	SBUS	0.67	0.43
tblVehicleEF	SBUS	4.25	0.22
tblVehicleEF	SBUS	1,259.83	349.09
tblVehicleEF	SBUS	1,096.07	1,113.10
tblVehicleEF	SBUS	44.67	1.62

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	SBUS	11.05	4.11
tblVehicleEF	SBUS	4.10	6.22
tblVehicleEF	SBUS	13.78	0.61
tblVehicleEF	SBUS	9.2190e-003	4.1720e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	8.8200e-003	3.9920e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	8.8850e-003	1.1690e-003
tblVehicleEF	SBUS	0.03	3.6410e-003
tblVehicleEF	SBUS	0.80	0.12
tblVehicleEF	SBUS	2.7360e-003	3.0900e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	0.27	9.6090e-003
tblVehicleEF	SBUS	0.01	3.3090e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.2100e-004	1.6000e-005
tblVehicleEF	SBUS	8.8850e-003	1.1690e-003
tblVehicleEF	SBUS	0.03	3.6410e-003
tblVehicleEF	SBUS	1.15	0.17
tblVehicleEF	SBUS	2.7360e-003	3.0900e-004
tblVehicleEF	SBUS	0.13	0.13
tblVehicleEF	SBUS	0.01	0.02

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	SBUS	0.29	0.01
tblVehicleEF	SBUS	0.84	0.02
tblVehicleEF	SBUS	0.01	6.3170e-003
tblVehicleEF	SBUS	0.08	2.5620e-003
tblVehicleEF	SBUS	6.91	1.26
tblVehicleEF	SBUS	0.64	0.42
tblVehicleEF	SBUS	8.86	0.46
tblVehicleEF	SBUS	1,121.03	320.19
tblVehicleEF	SBUS	1,096.07	1,113.08
tblVehicleEF	SBUS	44.67	2.02
tblVehicleEF	SBUS	10.24	3.85
tblVehicleEF	SBUS	4.49	6.79
tblVehicleEF	SBUS	13.86	0.62
tblVehicleEF	SBUS	0.01	6.0030e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	6.0300e-004	2.5000e-005
tblVehicleEF	SBUS	0.01	5.7430e-003
tblVehicleEF	SBUS	2.6920e-003	2.8510e-003
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	5.5500e-004	2.3000e-005
tblVehicleEF	SBUS	1.2060e-003	1.2300e-004
tblVehicleEF	SBUS	0.03	2.9600e-003
tblVehicleEF	SBUS	0.80	0.12
tblVehicleEF	SBUS	3.3100e-004	3.0000e-005
tblVehicleEF	SBUS	0.10	0.11
tblVehicleEF	SBUS	0.02	0.03

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	SBUS	0.40	0.01
tblVehicleEF	SBUS	0.01	3.0360e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	5.9800e-004	2.0000e-005
tblVehicleEF	SBUS	1.2060e-003	1.2300e-004
tblVehicleEF	SBUS	0.03	2.9600e-003
tblVehicleEF	SBUS	1.16	0.17
tblVehicleEF	SBUS	3.3100e-004	3.0000e-005
tblVehicleEF	SBUS	0.12	0.13
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	0.44	0.02
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.08	0.04
tblVehicleEF	UBUS	8.75	36.91
tblVehicleEF	UBUS	12.13	2.78
tblVehicleEF	UBUS	1,890.52	2,058.02
tblVehicleEF	UBUS	137.34	30.05
tblVehicleEF	UBUS	6.32	0.43
tblVehicleEF	UBUS	13.54	0.26
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04
tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	UBUS	7.1780e-003	1.3920e-003
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.8480e-003	6.0800e-004
tblVehicleEF	UBUS	0.52	0.07
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.08	0.15
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.5970e-003	2.9700e-004
tblVehicleEF	UBUS	7.1780e-003	1.3920e-003
tblVehicleEF	UBUS	0.10	0.01
tblVehicleEF	UBUS	2.8480e-003	6.0800e-004
tblVehicleEF	UBUS	2.65	4.84
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.19	0.17
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.07	0.03
tblVehicleEF	UBUS	8.82	36.91
tblVehicleEF	UBUS	9.63	2.22
tblVehicleEF	UBUS	1,890.52	2,058.03
tblVehicleEF	UBUS	137.34	29.10
tblVehicleEF	UBUS	5.87	0.42
tblVehicleEF	UBUS	13.40	0.24
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004
tblVehicleEF	UBUS	0.02	3.6060e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	7.2950e-003	1.6350e-003
tblVehicleEF	UBUS	0.53	0.07
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	0.95	0.13
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.5530e-003	2.8800e-004
tblVehicleEF	UBUS	0.02	3.6060e-003
tblVehicleEF	UBUS	0.13	0.02
tblVehicleEF	UBUS	7.2950e-003	1.6350e-003
tblVehicleEF	UBUS	2.66	4.84
tblVehicleEF	UBUS	0.02	0.08
tblVehicleEF	UBUS	1.04	0.15
tblVehicleEF	UBUS	2.06	4.73
tblVehicleEF	UBUS	0.09	0.04
tblVehicleEF	UBUS	8.69	36.90
tblVehicleEF	UBUS	15.34	3.49
tblVehicleEF	UBUS	1,890.52	2,058.02
tblVehicleEF	UBUS	137.34	31.25
tblVehicleEF	UBUS	6.48	0.44
tblVehicleEF	UBUS	13.69	0.28
tblVehicleEF	UBUS	0.52	0.08
tblVehicleEF	UBUS	0.01	0.03

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleEF	UBUS	0.06	2.9520e-003
tblVehicleEF	UBUS	1.1160e-003	2.3400e-004
tblVehicleEF	UBUS	0.22	0.04
tblVehicleEF	UBUS	3.0000e-003	7.1020e-003
tblVehicleEF	UBUS	0.06	2.8060e-003
tblVehicleEF	UBUS	1.0260e-003	2.1600e-004
tblVehicleEF	UBUS	2.3740e-003	4.5000e-004
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	9.4300e-004	1.8200e-004
tblVehicleEF	UBUS	0.52	0.07
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	1.24	0.18
tblVehicleEF	UBUS	0.01	5.7160e-003
tblVehicleEF	UBUS	1.6530e-003	3.0900e-004
tblVehicleEF	UBUS	2.3740e-003	4.5000e-004
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	9.4300e-004	1.8200e-004
tblVehicleEF	UBUS	2.64	4.84
tblVehicleEF	UBUS	0.03	0.10
tblVehicleEF	UBUS	1.36	0.19
tblVehicleTrips	CC_TL	7.50	5.00
tblVehicleTrips	CNW_TL	8.50	6.50
tblVehicleTrips	CW_TL	15.00	10.00
tblVehicleTrips	HO_TL	8.50	6.50
tblVehicleTrips	HS_TL	7.50	5.00
tblVehicleTrips	HW_TL	15.00	10.00
tblVehicleTrips	ST_TR	6.39	5.23

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	SU_TR	5.86	4.80
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	14.03	0.00

## 2.0 Emissions Summary

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## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**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					
2020	5.8426	98.6365	43.8723	0.1941	18.2032	2.3505	20.4016	9.9670	2.1689	11.9895	0.0000	20,148.41 09	20,148.41 09	2.7899	0.0000	20,218.15 79
2021	2.7119	20.8844	22.3880	0.0470	1.6503	0.9771	2.6273	0.4417	0.9186	1.3603	0.0000	4,598.083 5	4,598.083 5	0.6957	0.0000	4,615.476 0
2022	169.7021	18.8674	21.6983	0.0465	1.6502	0.8262	2.4764	0.4417	0.7772	1.2189	0.0000	4,545.729 6	4,545.729 6	0.7164	0.0000	4,562.898 8
Maximum	169.7021	98.6365	43.8723	0.1941	18.2032	2.3505	20.4016	9.9670	2.1689	11.9895	0.0000	20,148.41 09	20,148.41 09	2.7899	0.0000	20,218.15 79

**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					
2020	2.1541	51.7391	44.9132	0.1941	8.2875	0.2781	8.5657	4.5051	0.2705	4.5681	0.0000	20,148.41 09	20,148.41 09	2.7899	0.0000	20,218.15 79
2021	1.1388	5.6870	23.2730	0.0470	1.6503	0.0592	1.7095	0.4417	0.0581	0.4998	0.0000	4,598.083 5	4,598.083 5	0.6957	0.0000	4,615.476 0
2022	169.5272	5.4865	22.7951	0.0465	1.6502	0.0580	1.7082	0.4417	0.0569	0.4985	0.0000	4,545.729 6	4,545.729 6	0.7164	0.0000	4,562.898 8
Maximum	169.5272	51.7391	44.9132	0.1941	8.2875	0.2781	8.5657	4.5051	0.2705	4.5681	0.0000	20,148.41 09	20,148.41 09	2.7899	0.0000	20,218.15 79

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.05	54.54	-3.44	0.00	46.11	90.48	53.02	50.34	90.03	61.79	0.00	0.00	0.00	0.00	0.00	0.00

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	7.4960	0.2534	21.9701	1.1600e-003		0.1214	0.1214		0.1214	0.1214	0.0000	39.5174	39.5174	0.0381	0.0000	40.4706	
Energy	0.0833	0.7153	0.3295	4.5400e-003		0.0575	0.0575		0.0575	0.0575	908.4924	908.4924	0.0174	0.0167	913.8911		
Mobile	3.8958	7.4606	31.6844	0.0810	7.8690	0.0865	7.9555	2.1025	0.0814	2.1838	8,317.544 1	8,317.544 1	0.5311		8,330.820 7		
<b>Total</b>	<b>11.4751</b>	<b>8.4293</b>	<b>53.9840</b>	<b>0.0867</b>	<b>7.8690</b>	<b>0.2654</b>	<b>8.1344</b>	<b>2.1025</b>	<b>0.2603</b>	<b>2.3628</b>	<b>0.0000</b>	<b>9,265.553 9</b>	<b>9,265.553 9</b>	<b>0.5866</b>	<b>0.0167</b>	<b>9,285.182 4</b>	

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	7.4960	0.2534	21.9701	1.1600e-003		0.1214	0.1214		0.1214	0.1214	0.0000	39.5174	39.5174	0.0381	0.0000	40.4706	
Energy	0.0833	0.7153	0.3295	4.5400e-003		0.0575	0.0575		0.0575	0.0575	908.4924	908.4924	0.0174	0.0167	913.8911		
Mobile	3.8958	7.4606	31.6844	0.0810	7.8690	0.0865	7.9555	2.1025	0.0814	2.1838	8,317.544 1	8,317.544 1	0.5311		8,330.820 7		
<b>Total</b>	<b>11.4751</b>	<b>8.4293</b>	<b>53.9840</b>	<b>0.0867</b>	<b>7.8690</b>	<b>0.2654</b>	<b>8.1344</b>	<b>2.1025</b>	<b>0.2603</b>	<b>2.3628</b>	<b>0.0000</b>	<b>9,265.553 9</b>	<b>9,265.553 9</b>	<b>0.5866</b>	<b>0.0167</b>	<b>9,285.182 4</b>	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/26/2020	11/6/2020	5	10	
2	Grading	Grading	11/7/2020	11/27/2020	5	15	
3	Building Construction	Building Construction	5/24/2021	7/15/2022	5	300	
4	Paving	Paving	7/25/2022	8/19/2022	5	20	
5	Architectural Coating	Architectural Coating	8/29/2022	9/23/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 5

Residential Indoor: 538,650; Residential Outdoor: 179,550; Non-Residential Indoor: 9,450; Non-Residential Outdoor: 3,150; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	2,513.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	194.00	29.00	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	39.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	3,685.101 6	3,685.101 6	1.1918			3,714.897 5
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>	<b>3,685.101 6</b>	<b>3,685.101 6</b>	<b>1.1918</b>			<b>3,714.897 5</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Site Preparation - 2020****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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0714	0.0509	0.5032	1.2600e-003	0.1369	9.5000e-004	0.1379	0.0363	8.8000e-004	0.0372	125.4399	125.4399	3.6100e-003	125.5301		
<b>Total</b>	<b>0.0714</b>	<b>0.0509</b>	<b>0.5032</b>	<b>1.2600e-003</b>	<b>0.1369</b>	<b>9.5000e-004</b>	<b>0.1379</b>	<b>0.0363</b>	<b>8.8000e-004</b>	<b>0.0372</b>		<b>125.4399</b>	<b>125.4399</b>	<b>3.6100e-003</b>		<b>125.5301</b>

**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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		0.0621	0.0621		0.0621	0.0621	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>0.4656</b>	<b>2.0175</b>	<b>20.8690</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.0621</b>	<b>8.1919</b>	<b>4.4688</b>	<b>0.0621</b>	<b>4.5309</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Site Preparation - 2020****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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0714	0.0509	0.5032	1.2600e-003	0.1369	9.5000e-004	0.1379	0.0363	8.8000e-004	0.0372	125.4399	125.4399	3.6100e-003	125.5301		
Total	0.0714	0.0509	0.5032	1.2600e-003	0.1369	9.5000e-004	0.1379	0.0363	8.8000e-004	0.0372		125.4399	125.4399	3.6100e-003		125.5301

**3.3 Grading - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					11.6017	0.0000	11.6017	3.9247	0.0000	3.9247		0.0000				0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	6,005.8653	6,005.8653	1.9424			6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	11.6017	2.1739	13.7756	3.9247	2.0000	5.9247		6,005.8653	6,005.8653	1.9424		6,054.4257

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Grading - 2020****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	1.3132	48.3825	11.3549	0.1307	2.9146	0.1755	3.0901	0.7977	0.1679	0.9656	14,003.16 79	14,003.16 79	0.8435			14,024.25 43
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0794	0.0565	0.5591	1.4000e-003	0.1521	1.0600e-003	0.1532	0.0404	9.7000e-004	0.0413	139.3777	139.3777	4.0100e-003			139.4779
Total	1.3925	48.4390	11.9140	0.1321	3.0667	0.1766	3.2433	0.8380	0.1689	1.0069	14,142.54 56	14,142.54 56	0.8475			14,163.73 22

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.2208	0.0000	5.2208	1.7661	0.0000	1.7661			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.1015	0.1015		0.1015	0.1015	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7
Total	0.7616	3.3000	32.9991	0.0620	5.2208	0.1015	5.3223	1.7661	0.1015	1.8677	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Grading - 2020****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	1.3132	48.3825	11.3549	0.1307	2.9146	0.1755	3.0901	0.7977	0.1679	0.9656	14,003.16 79	14,003.16 79	0.8435			14,024.25 43
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0794	0.0565	0.5591	1.4000e-003	0.1521	1.0600e-003	0.1532	0.0404	9.7000e-004	0.0413	139.3777	139.3777	4.0100e-003			139.4779
Total	1.3925	48.4390	11.9140	0.1321	3.0667	0.1766	3.2433	0.8380	0.1689	1.0069	14,142.54 56	14,142.54 56	0.8475			14,163.73 22

**3.4 Building Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	2,553.363 9	2,553.363 9	0.6160			2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	2,553.363 9	2,553.363 9	0.6160			2,568.764 3

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Building Construction - 2021****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	0.0000	0.0000	
Vendor	0.0949	2.9607	0.8626	6.9700e-003	0.1745	8.4900e-003	0.1830	0.0502	8.1200e-003	0.0583	738.7810	738.7810	0.0449			739.9030	
Worker	0.7160	0.4916	4.9502	0.0131	1.4758	9.9600e-003	1.4857	0.3915	9.1800e-003	0.4006	1,305.938 6	1,305.938 6	0.0348			1,306.808 7	
Total	<b>0.8110</b>	<b>3.4523</b>	<b>5.8128</b>	<b>0.0201</b>	<b>1.6503</b>	<b>0.0185</b>	<b>1.6687</b>	<b>0.4417</b>	<b>0.0173</b>	<b>0.4590</b>	<b>2,044.719 6</b>	<b>2,044.719 6</b>	<b>0.0797</b>			<b>2,046.711 7</b>	

**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	0.3278	2.2347	17.4603	0.0269			0.0408	0.0408		0.0408	0.0408	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>			<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,553.363 9</b>	<b>2,553.363 9</b>	<b>0.6160</b>		<b>2,568.764 3</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Building Construction - 2021****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	0.0000	0.0000
Vendor	0.0949	2.9607	0.8626	6.9700e-003	0.1745	8.4900e-003	0.1830	0.0502	8.1200e-003	0.0583	738.7810	738.7810	0.0449			739.9030
Worker	0.7160	0.4916	4.9502	0.0131	1.4758	9.9600e-003	1.4857	0.3915	9.1800e-003	0.4006	1,305.938 6	1,305.938 6	0.0348			1,306.808 7
Total	0.8110	3.4523	5.8128	0.0201	1.6503	0.0185	1.6687	0.4417	0.0173	0.4590	2,044.719 6	2,044.719 6	0.0797			2,046.711 7

**3.4 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	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.333 6	2,554.333 6	0.6120			2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	2,554.333 6	2,554.333 6	0.6120			2,569.632 2

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 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	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	0.0000	0.0000
Vendor	0.0881	2.8098	0.7956	6.9100e-003	0.1745	7.4600e-003	0.1819	0.0502	7.1300e-003	0.0573	732.2166	732.2166	0.0436			733.3068
Worker	0.6696	0.4419	4.5393	0.0126	1.4758	9.7000e-003	1.4855	0.3915	8.9400e-003	0.4004	1,259.1794	1,259.1794	0.0312			1,259.9598
<b>Total</b>	<b>0.7577</b>	<b>3.2518</b>	<b>5.3349</b>	<b>0.0196</b>	<b>1.6502</b>	<b>0.0172</b>	<b>1.6674</b>	<b>0.4417</b>	<b>0.0161</b>	<b>0.4577</b>	<b>1,991.3961</b>	<b>1,991.3961</b>	<b>0.0748</b>			<b>1,993.2666</b>

**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	0.3278	2.2347	17.4603	0.0269		0.0408	0.0408		0.0408	0.0408	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>0.3278</b>	<b>2.2347</b>	<b>17.4603</b>	<b>0.0269</b>		<b>0.0408</b>	<b>0.0408</b>		<b>0.0408</b>	<b>0.0408</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 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	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	0.0000	0.0000
Vendor	0.0881	2.8098	0.7956	6.9100e-003	0.1745	7.4600e-003	0.1819	0.0502	7.1300e-003	0.0573	732.2166	732.2166	0.0436			733.3068
Worker	0.6696	0.4419	4.5393	0.0126	1.4758	9.7000e-003	1.4855	0.3915	8.9400e-003	0.4004	1,259.1794	1,259.1794	0.0312			1,259.9598
Total	<b>0.7577</b>	<b>3.2518</b>	<b>5.3349</b>	<b>0.0196</b>	<b>1.6502</b>	<b>0.0172</b>	<b>1.6674</b>	<b>0.4417</b>	<b>0.0161</b>	<b>0.4577</b>	<b>1,991.3961</b>	<b>1,991.3961</b>	<b>0.0748</b>			<b>1,993.2666</b>

**3.5 Paving - 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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	2,207.6603	2,207.6603	0.7140			2,225.5104
Paving	0.6550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	<b>1.7578</b>	<b>11.1249</b>	<b>14.5805</b>	<b>0.0228</b>		<b>0.5679</b>	<b>0.5679</b>		<b>0.5225</b>	<b>0.5225</b>	<b>2,207.6603</b>	<b>2,207.6603</b>	<b>0.7140</b>			<b>2,225.5104</b>

Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

### **3.5 Paving - 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	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	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310	97.3592	97.3592	2.4100e-003			97.4196	
Total	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310	97.3592	97.3592	2.4100e-003			97.4196	

## **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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.660	2,207.660	0.7140		2,225.510	
Paving	0.6550					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	
Total	0.9355	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.660	2,207.660	0.7140		2,225.510	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Paving - 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	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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310	97.3592	97.3592	2.4100e-003			97.4196
Total	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196

**3.6 Architectural Coating - 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					
Archit. Coating	169.3629						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	169.5674	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Architectural Coating - 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	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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1346	0.0888	0.9125	2.5400e-003	0.2967	1.9500e-003	0.2986	0.0787	1.8000e-003	0.0805	253.1340	253.1340	6.2700e-003	253.2909		
<b>Total</b>	<b>0.1346</b>	<b>0.0888</b>	<b>0.9125</b>	<b>2.5400e-003</b>	<b>0.2967</b>	<b>1.9500e-003</b>	<b>0.2986</b>	<b>0.0787</b>	<b>1.8000e-003</b>	<b>0.0805</b>		<b>253.1340</b>	<b>253.1340</b>	<b>6.2700e-003</b>		<b>253.2909</b>

**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	169.3629						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>169.3926</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Architectural Coating - 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	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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1346	0.0888	0.9125	2.5400e-003	0.2967	1.9500e-003	0.2986	0.0787	1.8000e-003	0.0805	253.1340	253.1340	6.2700e-003			253.2909
Total	0.1346	0.0888	0.9125	2.5400e-003	0.2967	1.9500e-003	0.2986	0.0787	1.8000e-003	0.0805		253.1340	253.1340	6.2700e-003		253.2909

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	3.8958	7.4606	31.6844	0.0810	7.8690	0.0865	7.9555	2.1025	0.0814	2.1838	8,317.544 1	8,317.544 1	0.5311			8,330.820 7	
Unmitigated	3.8958	7.4606	31.6844	0.0810	7.8690	0.0865	7.9555	2.1025	0.0814	2.1838	8,317.544 1	8,317.544 1	0.5311			8,330.820 7	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,447.04	1,391.18	1276.80	3,630,377	3,630,377
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Total	1,447.04	1,391.18	1,276.80	3,630,377	3,630,377

**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	
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3	
Other Asphalt Surfaces	15.00	7.50	8.50	0.00	0.00	0.00	0	0	0	
Racquet Club	10.00	5.00	6.50	11.50	69.50	19.00	52	39	9	

**4.4 Fleet Mix**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553424	0.054724	0.182601	0.125932	0.026745	0.006205	0.019388	0.020907	0.001606	0.001367	0.005207	0.000984	0.000911
Other Asphalt Surfaces	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Racquet Club	0.553424	0.054724	0.182601	0.125932	0.026745	0.006205	0.019388	0.020907	0.001606	0.001367	0.005207	0.000984	0.000911

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0833	0.7153	0.3295	4.5400e-003		0.0575	0.0575		0.0575	0.0575	908.4924	908.4924	0.0174	0.0167	913.8911	
NaturalGas Unmitigated	0.0833	0.7153	0.3295	4.5400e-003		0.0575	0.0575		0.0575	0.0575	908.4924	908.4924	0.0174	0.0167	913.8911	

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	7104.09	0.0766	0.6547	0.2786	4.1800e-003		0.0529	0.0529		0.0529	0.0529	835.7759	835.7759	0.0160	0.0153	840.7425	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Racquet Club	618.09	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	72.7165	72.7165	1.3900e-003	1.3300e-003	73.1486	
<b>Total</b>		<b>0.0833</b>	<b>0.7153</b>	<b>0.3295</b>	<b>4.5400e-003</b>		<b>0.0575</b>	<b>0.0575</b>		<b>0.0575</b>	<b>0.0575</b>	<b>908.4924</b>	<b>908.4924</b>	<b>0.0174</b>	<b>0.0167</b>	<b>913.8911</b>	

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	7.10409	0.0766	0.6547	0.2786	4.1800e-003		0.0529	0.0529		0.0529	0.0529	835.7759	835.7759	0.0160	0.0153	840.7425	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Racquet Club	0.61809	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003	72.7165	72.7165	1.3900e-003	1.3300e-003	73.1486	
<b>Total</b>		<b>0.0833</b>	<b>0.7153</b>	<b>0.3295</b>	<b>4.5400e-003</b>		<b>0.0575</b>	<b>0.0575</b>		<b>0.0575</b>	<b>0.0575</b>	<b>908.4924</b>	<b>908.4924</b>	<b>0.0174</b>	<b>0.0167</b>	<b>913.8911</b>	

**6.0 Area Detail**

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**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	7.4960	0.2534	21.9701	1.1600e-003		0.1214	0.1214		0.1214	0.1214	0.0000	39.5174	39.5174	0.0381	0.0000	40.4706
Unmitigated	7.4960	0.2534	21.9701	1.1600e-003		0.1214	0.1214		0.1214	0.1214	0.0000	39.5174	39.5174	0.0381	0.0000	40.4706

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.9280						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Consumer Products	5.9044						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Landscaping	0.6637	0.2534	21.9701	1.1600e-003			0.1214	0.1214		0.1214	0.1214		39.5174	39.5174	0.0381		40.4706
<b>Total</b>	<b>7.4960</b>	<b>0.2534</b>	<b>21.9701</b>	<b>1.1600e-003</b>			<b>0.1214</b>	<b>0.1214</b>		<b>0.1214</b>	<b>0.1214</b>		<b>39.5174</b>	<b>39.5174</b>	<b>0.0381</b>	<b>0.0000</b>	<b>40.4706</b>

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.9280						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Consumer Products	5.9044						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Landscaping	0.6637	0.2534	21.9701	1.1600e-003			0.1214	0.1214		0.1214	0.1214		39.5174	39.5174	0.0381		40.4706
<b>Total</b>	<b>7.4960</b>	<b>0.2534</b>	<b>21.9701</b>	<b>1.1600e-003</b>			<b>0.1214</b>	<b>0.1214</b>		<b>0.1214</b>	<b>0.1214</b>	<b>0.0000</b>	<b>39.5174</b>	<b>39.5174</b>	<b>0.0381</b>	<b>0.0000</b>	<b>40.4706</b>

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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**Unmitigated**

Construction Year	NO <sub>x</sub> (ppd)	PM <sub>10</sub> (ppd)	PM <sub>2.5</sub> (ppd)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
2020	111.60	20.43	12.00	0.18	0.09
2021	18.18	2.81	1.43	0.23	0.12
2022	16.27	2.66	1.29	0.18	0.09
SMAQMD Thresholds	85	0	0	0	0
Maximum Emissions	111.60	20.43	12.00	0.23	0.12
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

**Mitigated**

Construction Year	NO <sub>x</sub> (ppd)	PM <sub>10</sub> (ppd)	PM <sub>2.5</sub> (ppd)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
2020	64.70	10.19	4.58	0.10	0.04
2021	2.98	1.90	0.57	0.16	0.05
2022	2.89	1.89	0.57	0.13	0.04
SMAQMD Thresholds	85	0	0	0	0
Maximum Emissions	64.70	10.19	4.58	0.16	0.05
Significant (Yes or No)?	No	No	No	No	No

**Construction Emissions - Unmitigated**

Phase	Source	NOx	PM10 (lbs/day)			PM2.5 (lbs/day)			PM10 (Itons/year)			PM2.5 (tons/year)		
			Exhaust	Dust	Total	Exhaust	Dust	Total	Exhaust	Dust	Total	Exhaust	Dust	Total
<b>Peak Construction Emissions - 2020 (pounds/day)</b>														
Site Preparation	Equipment	42.40	2.20	18.07	20.27	2.02	9.93	11.95	0.01	0.09	0.10	0.01	0.05	0.06
	Vehicles	0.06	0.02	0.14	0.16	0.01	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Total		42.46	2.22	18.21	20.43	2.03	9.97	12.00	0.01	0.09	0.10	0.01	0.05	0.06

	Equipment	50.20	2.17	11.60	13.77	2.00	3.92	5.92	0.02	0.13	0.15	0.02	0.05	0.07
		61.40	1.80	3.07	4.86	1.28	0.84	2.12	0.01	0.02	0.04	0.01	0.01	0.02
Total		111.60	3.97	14.67	18.64	3.28	4.76	8.04	0.03	0.15	0.18	0.02	0.06	0.09

	Equipment	17.43	0.96	0.00	0.96	0.90	0.00	0.90	0.08	0.00	0.08	0.07	0.00	0.07
		0.75	0.21	1.65	1.86	0.09	0.44	0.53	0.03	0.13	0.16	0.01	0.03	0.05
Total		18.18	1.16	1.65	2.81	0.99	0.44	1.43	0.11	0.13	0.23	0.08	0.03	0.12

<b>Peak Construction Emissions - 2022 (pounds/day)</b>														
Building Construction	Equipment	15.62	0.81	0.00	0.81	0.76	0.00	0.76	0.06	0.00	0.06	0.05	0.00	0.05
	Vehicles	0.65	0.20	1.65	1.85	0.09	0.44	0.53	0.01	0.11	0.13	0.01	0.03	0.04
Total		16.27	1.01	1.65	2.66	0.85	0.44	1.29	0.07	0.11	0.18	0.06	0.03	0.09

	Equipment	11.12	0.57	0.00	0.57	0.52	0.00	0.52	0.01	0.00	0.01	0.01	0.00	0.01
		0.04	0.02	0.11	0.13	0.01	0.03	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Total		11.17	0.58	0.11	0.70	0.53	0.03	0.56	0.01	0.00	0.01	0.00	0.00	0.01

	Equipment	1.41	0.08	0.00	0.08	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
		0.11	0.04	0.30	0.34	0.02	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Total		1.52	0.12	0.30	0.42	0.10	0.08	0.18	0.00	0.00	0.00	0.00	0.00	0.00

<b>Construction Emissions - mitigated</b>														
Phase	Source	NOx	Exhaust	Dust	Total									
<b>Peak Construction Emissions - 2020 (pounds/day)</b>														
Site Preparation	Equipment	2.02	0.06	8.13	8.19	0.06	4.47	4.53	0.00	0.04	0.04	0.00	0.02	0.02
	Vehicles	0.06	0.02	0.14	0.16	0.01	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Total		2.08	0.08	8.27	8.35	0.								

#### Construction Vehicle Trip Emissions for 2020 (tons/year)

Phase	tons/year				metric tons/year			
	ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Site Preparation	0.00	0.00	0.000	0.00	0.60	0.00	0.00	0.61
Grading	0.03	0.46	0.013	0.01	100.95	0.00	0.02	105.68

Notes: Global Warming Potential for CH4 = 25; GWP for N2O = 298.

#### Construction Vehicle Trip Emissions for 2020 (pounds/day)

Phase	ROG	NOx	PM10	PM2.5
Site Preparation	0.11	0.06	0.02	0.01
Grading	4.30	61.40	1.80	1.28

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Air District

Region: SACRAMENTO METROPOLITAN AQMD

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2011 Categories

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

Region	Calendar Year	Vehicle Categ	Model Year	Speed	Fuel	Population	VMT	Trips	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_HOTSCROG	ROG_RUNLCROG	ROG_RESTL	ROG_DIURN	NOx_RUNEX	NOx_IDLEX	NOx_STREX	C02_RUNEX	C02_IDLEX	C02_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	PM10_RUNE	PM10_IDLEX	PM10_STRE	PM10_PMTW	PM10_PMBW	PM2.5_RUNI	PM2.5_IDLE	PM2.5_PMT	PM2.5_PMB	N2O_RUNEX	N2O_IDLEX	N2O_STREX			
SACRAMENTO METROPOLIT	2020	LDT1	Aggregated	Aggregated	GAS	62565.85	2093110	283205.1	0.033291	0	0.509023	0.270958	0.939295	0.506158	0.831969	0.129797	0	0.337071	326.5274	0	69.74572	0.007442	0	0.096401	0.002244	0	0.002999	0.008	0.03675	0.002063	0	0.002758	0.002	0.01575	0.009697	0	0.033256		
SACRAMENTO METROPOLIT	2020	T7 single cc	Aggregated	Aggregated	DSL	296.9415	20942.79	1342.461	0.527049	1.571257	0	0	0	0	0	0	0	7.554607	23.26478	3.313673	1892.046	3866.101	0	0.02448	0.072981	0	0.141891	0.039488	0	0.036	0.06174	0.135753	0.03778	0	0.009	0.02646	0.297403	0.607697	0

#### 2020 Construction Vehicle Emissions

##### Running Emissions

Running Emission Factors (grams/mile)	Vehicle Type	ROG	Nox	PM10	PM10TW	PM10BW	PM10Tot	PM2.5	PM2.5TW	PM2.5BW	PM2.5Tot	CO2	CH4	N2O
Worker	LDT1	0.03	0.13	0.00	0.01	0.04	0.05	0.00	0.00	0.02	0.02	326.53	0.01	0.01
Haul	T7 sc	0.53	7.55	0.14	0.04	0.06	0.24	0.14	0.01	0.03	0.17	1892.05	0.02	0.30

Workers	Trips/day	Trip Length	Days	tons/year				metric tons/year			
				ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Site Preparation	18	10	10	0.00	0.00	0.00	0.00	0.59	0.00	0.00	
Grading	20	10	15	0.00	0.00	0.00	0.00	0.98	0.00	0.00	

Workers	Trips/day	Trip Length	pounds/day				metric tons/year				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Site Preparation	18	10	0.01	0.05	0.02	0.01					
Grading	20	10	0.01	0.06	0.02	0.01					

Haul Trucks	Total Trips	Trip Length	tons/year				metric tons/year				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Grading	2513	20	0.03	0.42	0.01	0.01	95.09	0.00	0.01		

Haul Trucks	Total Trips	Days	pounds/day				metric tons/day				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Grading	2513	15	0.00	0.00	0.00	0.00	3.89	55.81	1.77	1.26	

Workers	Trips/day	Days	tons/year				metric tons/year				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Site Preparation	18	10	0.00	0.00	0.00	0.00	0.01	0.00	0.00		
Grading	20	15	0.00	0.00	0.00	0.00	0.02	0.00	0.00		

Workers	Trips/day	Days	pounds/day				metric tons/day			
ROG	NOx	PM10	PM2.5	CO2	CH4	N2O				
</

#### Construction Vehicle Trip Emissions for 2021 (tons/year)

Phase	tons/year				metric tons/year			
	ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Building Construction	0.11	0.10	0.03	0.01	188.07	0.01	0.01	190.04

Notes: Global Warming Potential for CH4 = 25; GWP for N2O = 298.

#### Construction Vehicle Trip Emissions for 2021 (pounds/day)

Phase	ROG	NOx	PM10	PM2.5
Building Construction	1.07	0.75	0.21	0.09

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Air District

Region: SACRAMENTO METROPOLITAN AQMD

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTV, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar Year	Vehicle	Category	Model Year	Speed	Fuel	Population	VMT	Trips	ROG_RUNE	ROG_IDLEX	ROG_STREX	ROG_RUNL	ROG_RESTL	ROG_DIURN	NOx_RUNEX	NOx_IDLEX	NOx_STREX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	PM10_RUNE	PM10_IDLEX	PM10_STRE	PM10_PMTA	PM10_PMB	PM2_5_RUN	PM2_5_IDLE	PM2_5_STR	PM2_5_PMT	PM2_5_PMB	N2O_RUNEX	N2O_IDLEX	N2O_STREX	
SACRAMENTO METROPOLITAN	2021	LDT1	Aggregated	Aggregated	GAS		63439.28	2114017.8	287695.62	0.02836	0	0.459525	0.2522123	0.8703402	0.4759252	0.7696374	0.1114682	0	0.3118066	318.71266	0	68.068714	0.0063965	0	0.0881777	0.0020842	0	0.0028061	0.008	0.03675	0.0019164	0	0.0025803	0.002	0.01575	0.0086118	0	0.0319072
SACRAMENTO METROPOLITAN	2021	T7 single cab	Aggregated	Aggregated	DSL		309.89959	21790.03	1401.044	0.4260365	1.578025	0	0	0	0	0	6.4922476	22.672825	3.5166048	1859.7827	3917.7919	0	0.0197883	0.0732952	0	0.1152589	0.0323544	0	0.036	0.06174	0.1102729	0.0309548	0	0.009	0.02646	0.2923319	0.6158223	0

#### 2022 Construction Vehicle Emissions

##### Running Emissions

Running Emission Factors (grams/mile)	Vehicle Type	ROG	Nox	PM10	PM10TW	PM10BW	PM10Tot	PM2.5	PM2.5TW	PM2.5BW	PM2.5Tot	CO2	CH4	N2O
Worker	LDT1	0.03	0.11	0.00	0.01	0.04	0.05	0.00	0.00	0.02	0.02	318.71	0.01	0.01
Haul	T7 sc	0.43	6.49	0.12	0.04	0.06	0.21	0.11	0.01	0.03	0.15	1859.78	0.02	0.29

Workers	Trips/day	Trip Length	Days	tons/year				metric tons/year			
				ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	194	10	300	0.02	0.07	0.03	0.01	185.49	0.00	0.01	

Workers	Trips/day	Trip Length	pounds/day				metric tons/year				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Building Construction	194	10	0.12	0.48	0.20	0.08					

Haul Trucks	Trips	Trip Length	tons/year				metric tons/year				
			ROG	NOx	PM10	PM2.5	CO2	CH4	N2O		
Building Construction	29	6.5	0.00	0.00	0.00	0.00	0.35	0.00	0.00		

Haul Trucks	Trips	Days	Trips/day	Trip Length	pounds/day				metric tons/day			
					ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	29	160	0	50	0.01	0.13	0.00	0.00				

Start-Up Emission	Start-Up Emission Factors (gram/trip)	Vehicle Type	ROG ST	ROG HOT	ROG Loss	ROG Tot.	NOx	PM10	PM2.5	CO2	CH4	N2O
worker	LDT1	0.46	0.25	0.87	1.58	0.31	0.00	0.00	68.07	0.09	0.09	0.03
Haul	T7 sc	0.00	0.00	0.00	0.00	3.52	0.00	0.00	0.00	0.00	0.00	0.00

Workers	Trips/day	Days	tons/year				metric tons/year				
			ROG	NOx	PM10	PM2.5</					

#### Construction Vehicle Trip Emissions for 2022 (tons/year)

Phase	tons/year				metric tons/year			
	ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	CO2e
Building Construction	0.07	0.06	0.01	0.01	86.69	0.00	0.00299	87.68
Paving	0.0008	0.0004	0.0002	0.0001	0.95	0.00	0.00003	0.96
Architectural Coating	0.0020	0.0011	0.0004	0.0002	2.48	0.00	0.00008	2.50

Notes: Global Warming Potential for CH4 = 25; GWP for N2O = 298.

#### Construction Vehicle Trip Emissions for 2022 (pounds/day)

Phase	ROG	NOx	PM10	PM2.5
Building Construction	0.98	0.65	0.20	0.09
Paving	0.08	0.04	0.02	0.01
Architectural Coating	0.20	0.11	0.04	0.02

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Air District

Region: SACRAMENTO METROPOLITAN AQMD

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

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

Region	Calendar Category	Model Year	Speed	Fuel	Population	VMT	Trips	ROG	RUNEX	ROG_IDLEX	ROG_STREX	ROG_RUNLS	ROG_RESTL	ROG_DIURN	Nox_RUNEX	Nox_NOx	IDLEX	Nox_STREX	CO2_RUNEX	CO2_CO2	IDLEX	CO2_STREX	CH4_RUNEX	CH4_CH4	IDLEX	CH4_STREX	PM10_RUNE	PM10_PM10	PM10_PMBW	PM2.5_RUNIPM2.5	PM2.5_IDLE	PM2.5_STREPM2.5	PM2.5_PMTV	PM2.5_PMB	N2O_RUNEX	N2O_N2O	IDLEX	CO2_STREX
SACRAMENTO METROPOLITAN	2022	LDT1	Aggregated	Aggregated	GAS	64366.141	2129386.5	292380.94	0.0241836	0	0.4147061	0.234728	0.809658	0.4468336	0.7115684	0.0960365	0	0.2887163	310.86835	0	0.055086	0.0019394	0	0.0026272	0.008	0.03675	0.0017833	0	0.0024157	0.002	0.01575	0.0076902	0	0.0306076				
SACRAMENTO METROPOLITAN	2022	T7 single cab	Aggregated	Aggregated	DSL	324.17374	22645.649	1465.5769	0.1784707	1.5842155	0	0	0	0	4.7102469	21.412373	3.9868911	1793.7626	4085.2459	0	0.0082895	0.0735827	0	0.0442251	0.0131744	0	0.036	0.06174	0.0423119	0.0126045	0	0.009	0.02646	0.2819545	0.6421438	0		

#### 2022 Construction Vehicle Emissions

##### Running Emissions

Running Emission Factors (grams/mile)	Vehicle Type	ROG	NOx	PM10	PM10TW	PM10BW	PM10Tot	PM2.5	PM2.5TW	PM2.5BW	PM2.5Tot	CO2	CH4	N2O
Workers	LDT1	0.02	0.10	0.00	0.01	0.04	0.05	0.00	0.00	0.02	0.02	310.87	0.01	0.01
Haul	T7 sc	0.18	4.71	0.04	0.04	0.06	0.14	0.04	0.01	0.03	0.08	1,793.76	0.01	0.28

Workers	Trips/day	Trip Length	Days	tons/year				metric tons/year			
				ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	194	10	140	0.01	0.03	0.01	0.01	84.43	0.00	0.00	
Paving	15	10	20	0.00	0.00	0.00	0.00	0.93	0.00	0.00	
Architectural Coating	39	10	20	0.00	0.00	0.00	0.00	2.42	0.00	0.00	

Workers	Trips/day	Trip Length	Days	pounds/day				metric tons/year			
				ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	194	10	0.10	0.41	0.20	0.08					
Paving	15	10	0.01	0.03	0.02	0.01					
Architectural Coating	39	10	0.02	0.08	0.04	0.02					

Haul Trucks	Trips	Trip Length	Days	tons/day				metric tons/year			
				ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	29	6.5	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	

Haul Trucks	Trips	Days	Trips/day	Trip Length	pounds/day				metric tons/day			
					ROG	NOx	PM10	PM2.5	CO2	CH4	N2O	
Building Construction	29	140	0	50	0.00	0.11	0.00	0.00				

Workers</
-----------

### Greenhouse Gas Construction Emissions

Phase	Source	CO2e
<b>2020 (metric tons/year)</b>		
Site Preparation	Equipment	16.9
	Vehicles	0.6
Grading	Equipment	41.2
	Vehicles	105.7
Total (metric tons/year)		164.3
<b>2021 (metric tons/year)</b>		
Building Construction	Equipment	186.4
	Vehicles	190.0
Total (metric tons/year)		376.5

<b>2022 (metric tons/year)</b>		
Building Construction	Equipment	163.2
	Vehicles	87.7
Paving	Equipment	20.2
	Vehicles	1.0
Architectural Coating	Equipment	2.6
	Vehicles	2.5
Total (metric tons/year)		277.1
<b>Grand Total (metric tons)</b>		<b>817.9</b>
<b>Amortized Total (40 years)</b>		<b>20.4</b>

### Greenhouse Gas Operational Emissions 2022

Source	CO2e
Area	4.6
Energy	481.5
Mobile	1367.9
Waste	79.6
Water	45.1
Total (metric tons/year)	1978.6

### Greenhouse Gas Construction+ Operational Emissions

Source	CO2e
Amortized Construction Emissions	20.4
Total Operational Emissions	1978.6
Total (metric tons/year)	1999.1

Source	CO <sub>2</sub> e (MT/year)
Operational Emissions	1978.6
Amortized Construction Emissions	20.4
<b>Total Annual GHG Emissions (Operation + Construction)</b>	<b>1999.1</b>
Project Efficiency Metric (MT/Service Population)	2.7
Efficiency Significance Threshold	1.6
<b>Exceeds Efficiency Threshold?</b>	<b>Yes</b>

Service Population	
Residents	742
Employees	7
<b>Total</b>	<b>749</b>

## HRA Klotz Ranch Apartments Construction

### CONSTRUCTION SCHEDULE

Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District,

Sensitive Receptors	Distance		AERSCREEN OUT [ug/m <sup>3</sup> ]/[ g/s]	
	(ft)	(m)	max	annual
Residence to West (MEIR)	656	200	225.9	22.6
Day Care Receptor <sup>1</sup>	1250	381	80.1	8.0

<sup>1</sup>Her Daycare WeeCare center located approx. 1,250 feet (381 meters) east of the project site.

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Site Preparation	Site Preparation	10/26/2020	11/6/2020	5	10
2	Grading	Grading	11/7/2020	11/27/2020	5	15
3	Building Construction	Building Construction	5/24/2021	7/15/2022	5	300
4	Paving	Paving	7/25/2022	8/19/2022	5	20
5	Architectural Coating	Architectural Coating	8/29/2022	9/23/2022	5	20

	DPM Exhaust (tons) <sup>2</sup>	DPM Exhaust (tons) <sup>2</sup>	Start Date <sup>3</sup>	End Date <sup>3</sup>	Duration
	Unmitigated	Mitigated			Days
Construction	0.1671	0.0076	10/26/2020	9/23/2022	698

<sup>2</sup>CalEEMod PM<sub>10</sub> exhaust, construction years 2020, 2021, and 2022

<sup>3</sup>See construction schedule screenshot from CalEEMod

	DPM Exhaust (g/s)	DPM Exhaust (g/s)
	Unmitigated	Mitigated
Construction	0.0025	0.0001

$$\text{Cancer Risk} = \text{Dose inhalation} \times \text{Inhalation CPF} \times \text{ASF} \times \text{ED/AT} \times \text{FAH}$$

(Equation 8.2.4 A)

Where:

Cancer Risk = residential inhalation cancer risk

$$\text{Dose inhalation (mg/kg-day)} = C_{\text{AIR}} \times DBR \times A \times EF \times 10^{-6}$$

(Equation 5.4.1.1)

Inhalation CPF = inhalation cancer potency factor ([mg/kg/day]<sup>-1</sup>)

ASF = age sensitivity factor for a specified age group (unitless)

ED = exposure duration for a specified age group (years)

AT = averaging time period over which exposure is averaged in days (years)

FAH = fraction of time at home (unitless)

Where:

C<sub>AIR</sub> = concentration of compound in air in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

DBR = daily breathing rate in liter per kilogram of body weight per day (L/kg-body weight/day)

A = inhalation absorption factor (1 for DPM, unitless)

EF = exposure frequency in days per year (unitless, days/365 days)

$10^{-6}$  = micrograms to milligrams conversion, liters to cubic meters conversion

$$\text{Hazard Quotient} = C_{\text{air}} / \text{REL}$$

(Section 8.3.1)

Where:

Hazard Quotient = chronic non-cancer hazard

C<sub>AIR</sub> = concentration of compound in air in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

REL = Chronic non-cancer Reference Exposure Level for substance ( $\mu\text{g}/\text{m}^3$ )

### Dose Inhalation Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated	Mitigated			
			C <sub>AIR</sub> ( $\mu\text{g}/\text{m}^3$ )	DBR (L/kg-day)	A (unitless)	EF (days/year)	
Off-Site Child Resident	Construction	3rd Trimester	5.68E-02	2.58E-03	361	1	0.96
		Age 0<2	5.68E-02	2.58E-03	1090	1	0.96
Daycare Center	Construction	Age 0<2	2.01E-02	9.16E-04	1200	1	0.68

Daily breathing rate is based on the OEHHA 95th percentile (Table 5.7).

### Dose Inhalation Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated	Mitigated
			Dose inhalation (mg/kg-day)	
Off-Site Child Resident	Construction	3rd Trimester	1.97E-05	8.94E-07
		Age 0<2	5.94E-05	2.70E-06
Daycare Center	Construction	Age 0<2	1.66E-05	7.53E-07

### Risk Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	CPF (mg/kg-day <sup>-1</sup> )	ASF (unitless)	ED (years)	AT (years)	FAH (unitless)	MAF (unitless)	Unmitigated	Mitigated
Off-Site Child Resident	Construction	3rd Trimester	1.1	10	0.25	70.00	1	0.85	1	
		Age 0<2	1.1	10	1.66	70.00	1	0.85	1	
Daycare Center	Construction	Age 0<2	1.1	10	1.91	70.00	0.33	0.33	4.2	

Inhalation cancer potency factor from Table 7.1

Fraction of time at home is set to 1 for residential since the nearest school unmitigated cancer risk is >1 per million, per OEHHA Table 8.4.

### Risk Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated	Mitigated	Unmitigated	Mitigated
			Cancer Risk		Hazard Index	
Off-Site Child Resident	Construction	3rd Trimester	7.72E-07	2.99E-08	0.01	0.001
		Age 0<2	1.55E-05	6.00E-07		
Daycare Center	Construction	Age 0<2	6.89E-06	3.14E-07	0.0040	0.0002
<b>Total Cancer Risk (per million), Resident</b>			16.29	0.63		
<b>Total Cancer Risk (per million), Daycare</b>			6.89	0.31		

SOURCE: Office of Environmental Health Hazard Assessment, 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments . February.

## HRA Klotz Ranch Apartments Construction Haul and Vendor Trucks

### MEIR

Distance from Area Source to Residence to N of Pocket Rd <sup>1</sup>	Distance		AERSCREEN OUT [ug/m <sup>3</sup> ]/[ g/s]	
	(ft)	(m)	max	annual
Area source 1	131	40	2740.4	274.0
Area source 2	148	45	2256.7	225.7
Area source 3	197	60	1404.4	140.4
Area source 4	259	79	892.3	89.2
Area source 5	328	100	612.9	61.3
	Total Contribution to Residence		7906.8	790.7

	DPM Exhaust (tons) <sup>1</sup>	Grading and Bldg Construction Start Date <sup>2</sup>	Grading and Bldg Construction End Date <sup>2</sup>	Duration Days
	Unmitigated			
Construction	1.85E-05	11/7/2020	7/15/2022	616

<sup>1</sup>CalEEMod PM<sub>10</sub> exhaust, grading and building construction haul trip length of 20 and 6.5 miles, respectively.

CalEEMod emissions were scaled to 25 meters to represent emissions per area source length. CalEEMod emissions from grading and building construction are presented in screenshots in this tab.

<sup>2</sup>See construction schedule screenshot from CalEEMod

	DPM Exhaust (g/s)
Unmitigated	
Construction	3.16E-07

$$\text{Cancer Risk} = \text{Dose inhalation} \times \text{Inhalation CPF} \times \text{ED} \times \text{AT} \times \text{FAH}$$

Where:

Cancer Risk = residential inhalation cancer risk

$$\text{Dose inhalation (mg/kg-day)} = C_{\text{AIR}} \times DBR \times A \times EF \times 10^6$$

(Equation 8.2.4 A)

(Equation 5.4.1.1)

Inhalation CPF = inhalation cancer potency factor ([mg/kg/day]<sup>-1</sup>)

ASF = age sensitivity factor for a specified age group (unitless)

ED = exposure duration for a specified age group (years)

AT = averaging time period over which exposure is averaged in days (years)

FAH = fraction of time at home (unitless)

Where:

$C_{\text{AIR}}$  = concentration of compound in air in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

DBR = daily breathing rate in liter per kilogram of body weight per day (L/kg-body weight/day)

A = inhalation absorption factor (1 for DPM, unitless)

EF = exposure frequency in days per year (unitless, days/365 days)

$10^{-6}$  = micrograms to milligrams conversion, liters to cubic meters conversion

$$\text{Hazard Quotient} = C_{\text{air}} / \text{REL}$$

(Section 8.3.1)

Where:

Hazard Quotient = chronic non-cancer hazard

$C_{\text{AIR}}$  = concentration of compound in air in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

REL = Chronic non-cancer Reference Exposure Level for substance ( $\mu\text{g}/\text{m}^3$ )

### Dose Inhalation Inputs

			Unmitigated		
Receptor Type	Exposure Scenario	Receptor Group Age	$C_{\text{AIR}}$ ( $\mu\text{g}/\text{m}^3$ )	DBR (L/kg-day)	A (unitless)
Off-Site Child Resident	Construction	3rd Trimester	2.50E-04	361	1
		Age 0<2	2.50E-04	1090	1

Daily breathing rate is based on the OEHHA 95th percentile (Table 5.7).

### Dose Inhalation Outputs

			Unmitigated		
Receptor Type	Exposure Scenario	Receptor Group Age	Dose inhalation (mg/kg-day)		
Off-Site Child Resident	Construction	3rd Trimester	8.64E-08		
		Age 0<2	2.61E-07		

### Risk Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	CPF (mg/kg-day <sup>-1</sup> )	ASF (unitless)	ED (years)	AT (years)	FAH (unitless)	MAF (unitless)
Off-Site Child Resident	Construction	3rd Trimester	1.1	10	0.25	70.00	0.85	1

Inhalation cancer potency factor from Table 7.1

Fraction of time at home is set to 1 for residential since the nearest school unmitigated cancer risk is >1 per million, per OEHHA Table 8.4.

### Risk Outputs

			Unmitigated	Unmitigated
Receptor Type	Exposure Scenario	Receptor Group Age	Cancer Risk	Hazard Risk
Off-Site Child Resident	Construction	3rd Trimester	2.89E-09	
		Age 0<2	5.02E-08	5.0E-05

Total Cancer Risk (per million)

0.05

### Construction Phases from CalEEMod

Klotz Ranch Apartments - Sacramento Metropolitan AQMD Air District, A

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Site Preparation	Site Preparation	10/26/2020	11/6/2020	5	101
2	Grading	Grading	11/7/2020	11/27/2020	5	151
3	Building Construction	Building Construction	5/24/2021	7/15/2022	5	300
4	Paving	Paving	7/25/2022	8/19/2022	5	20
5	Architectural Coating	Architectural Coating	8/29/2022	9/23/2022	5	20

### 3.3 Grading - 2020

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
tons/yr										
Hauling	9.6600e-003	0.3610	0.0816	9.9000e-004	0.0212	1.2900e-003	0.0225	5.8200e-003	1.2400e-003	7.0600e-003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.8000e-004	4.1500e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004
Total	0.0102	0.3614	0.0857	1.0000e-003	0.0223	1.3000e-003	0.0236	6.1100e-003	1.2500e-003	7.3600e-003

### 3.4 Building Construction - 2021

#### Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
tons/yr										



AERSCREEN 16216 / AERMOD 19191

04/14/20  
14:15:49

TITLE: HAUL TRUCK AREA SOURCE

\*\*\*\*\* AREA PARAMETERS \*\*\*\*\*

SOURCE EMISSION RATE:	1.0000 g/s	7.937 lb/hr
AREA EMISSION RATE:	0.444E-02 g/(s-m <sup>2</sup> )	0.353E-01 lb/(hr-m <sup>2</sup> )
AREA HEIGHT:	2.55 meters	8.37 feet
AREA SOURCE LONG SIDE:	25.00 meters	82.02 feet
AREA SOURCE SHORT SIDE:	9.00 meters	29.53 feet
INITIAL VERTICAL DIMENSION:	2.37 meters	7.78 feet
RURAL OR URBAN:	URBAN	
POPULATION:	501901	
FLAGPOLE RECEPTOR HEIGHT:	1.50 meters	4.92 feet
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

\*\*\*\*\* BUILDING DOWNWASH PARAMETERS \*\*\*\*\*

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

\*\*\*\*\* FLOW SECTOR ANALYSIS \*\*\*\*\*  
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m <sup>3</sup> )	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
--------------	----------------------	-----------------------------------	-----------------	-------------	--------------------

1*	1.000	0.1949E+05	0	1.0	AUT
----	-------	------------	---	-----	-----

\* = worst case diagonal

\*\*\*\*\* MAKEMET METEOROLOGY PARAMETERS \*\*\*\*\*

MIN/MAX TEMPERATURE: 271.0 / 318.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban

DOMINANT CLIMATE TYPE: Average Moisture

DOMINANT SEASON: Autumn

ALBEDO: 0.18

BOWEN RATIO: 2.00

ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U\*) ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

10 01 02 2 12

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
1.88	0.104	0.300	0.020	479.	77.	-50.4	1.000	2.00	0.18	0.50

HT REF TA HT

10.0 271.0 2.0

\*\*\*\*\* AERSCREEN AUTOMATED DISTANCES \*\*\*\*\*

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m <sup>3</sup> )	DIST (m)	MAXIMUM 1-HR CONC (ug/m <sup>3</sup> )
-------------	--	-------------	--

1.00	0.1949E+05	2525.00	6.880
25.00	6364.	2550.00	6.788
50.00	1718.	2575.00	6.698
75.00	933.7	2600.00	6.610
100.00	612.9	2625.00	6.524
125.00	444.4	2650.00	6.440
150.00	342.6	2675.00	6.357
175.00	275.4	2700.00	6.277
200.00	228.1	2725.00	6.198
225.00	193.4	2750.00	6.121
250.00	166.9	2775.00	6.046
275.00	146.1	2800.00	5.972
300.00	129.4	2825.00	5.900
325.00	115.8	2850.00	5.829
350.00	104.5	2875.00	5.759
375.00	94.92	2900.00	5.692
400.00	86.79	2925.00	5.625
425.00	79.80	2950.00	5.560
450.00	73.72	2975.00	5.496
475.00	68.41	3000.00	5.433
500.00	63.73	3025.00	5.372
525.00	59.57	3050.00	5.312
550.00	55.86	3074.99	5.253
575.00	52.53	3100.00	5.195
600.00	49.54	3125.00	5.138
625.00	46.82	3150.00	5.082
649.99	44.36	3174.99	5.028
675.00	42.11	3199.99	4.974
699.99	40.05	3225.00	4.921
725.00	38.16	3250.00	4.869
749.99	36.42	3275.00	4.819
775.00	34.82	3300.00	4.769
800.00	33.33	3325.00	4.720
825.00	31.94	3350.00	4.672
850.00	30.66	3375.00	4.624
875.00	29.46	3400.00	4.578
900.00	28.34	3425.00	4.532
925.00	27.29	3450.00	4.487
950.00	26.31	3475.00	4.443
975.00	25.39	3500.00	4.400
1000.00	24.52	3525.00	4.357
1025.00	23.70	3550.00	4.315
1050.00	22.93	3575.00	4.274
1075.00	22.20	3600.00	4.233
1100.00	21.51	3625.00	4.193
1125.00	20.85	3650.00	4.154
1150.00	20.23	3675.00	4.115
1175.00	19.64	3700.00	4.077
1200.00	19.08	3725.00	4.040

1225.00	18.55	3750.00	4.003
1250.00	18.04	3775.00	3.967
1275.00	17.56	3800.00	3.931
1300.00	17.10	3825.00	3.896
1325.00	16.66	3850.00	3.862
1350.00	16.23	3875.00	3.828
1375.00	15.83	3900.00	3.794
1400.00	15.44	3925.00	3.761
1425.00	15.07	3950.00	3.728
1450.00	14.72	3975.00	3.696
1475.00	14.38	4000.00	3.665
1500.00	14.05	4025.00	3.634
1525.00	13.73	4050.00	3.603
1550.00	13.43	4075.00	3.573
1575.00	13.14	4100.00	3.543
1600.00	12.86	4125.00	3.514
1625.00	12.59	4150.00	3.485
1650.00	12.33	4175.00	3.456
1675.00	12.08	4200.00	3.428
1700.00	11.83	4225.00	3.400
1725.00	11.60	4250.00	3.373
1750.00	11.37	4275.00	3.346
1775.00	11.15	4300.00	3.319
1800.00	10.94	4325.00	3.293
1824.99	10.74	4350.00	3.267
1850.00	10.54	4375.00	3.242
1875.00	10.34	4400.00	3.217
1900.00	10.16	4425.00	3.192
1924.99	9.978	4449.99	3.167
1950.00	9.803	4475.00	3.143
1975.00	9.634	4500.00	3.119
2000.00	9.469	4525.00	3.096
2025.00	9.309	4550.00	3.072
2050.00	9.154	4575.00	3.049
2075.00	9.003	4600.00	3.032
2100.00	8.857	4625.00	3.020
2125.00	8.714	4650.00	3.009
2150.00	8.575	4675.00	2.997
2175.00	8.441	4700.00	2.986
2200.00	8.310	4725.00	2.975
2224.99	8.182	4750.00	2.964
2250.00	8.058	4775.00	2.953
2275.00	7.936	4800.00	2.942
2300.00	7.819	4825.00	2.931
2325.00	7.704	4850.00	2.921
2350.00	7.591	4875.00	2.910
2375.00	7.482	4900.00	2.900
2400.00	7.376	4925.00	2.889
2425.00	7.272	4950.00	2.879
2450.00	7.170	4975.00	2.869

2475.00	7.071	5000.00	2.859
2500.00	6.975		

\*\*\*\*\* AERSCREEN MAXIMUM IMPACT SUMMARY \*\*\*\*\*

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4) Report number EPA-454/R-92-019  
[http://www.epa.gov/scram001/guidance\\_permit.htm](http://www.epa.gov/scram001/guidance_permit.htm)  
 under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m <sup>3</sup> )	SCALED 3-HOUR CONC (ug/m <sup>3</sup> )	SCALED 8-HOUR CONC (ug/m <sup>3</sup> )	SCALED 24-HOUR CONC (ug/m <sup>3</sup> )	SCALED ANNUAL CONC (ug/m <sup>3</sup> )
FLAT TERRAIN	0.2356E+05	0.2356E+05	0.2356E+05	0.2356E+05	N/A

DISTANCE FROM SOURCE                  13.00 meters

IMPACT AT THE  
 AMBIENT BOUNDARY    0.1949E+05    0.1949E+05    0.1949E+05    0.1949E+05    N/A

DISTANCE FROM SOURCE                  1.00 meters

## **Urban Heat Island Effect Analysis**

At the request of Sacramento Metropolitan Air Quality Management District (SMAQMD), this discussion summarizes an analysis conducted of the project's features that would contribute to increases in the urban heat island effect.

**Introduction.** Impervious surfaces, such as those created with traditional urban paving materials proposed to be applied to the project site, have less surface moisture available for evapotranspiration than natural ground cover. This characteristic contributes to higher surface and air temperatures, known as the urban heat island effect. The urban heat island effect describes the higher day and night temperatures experienced in urban and suburban areas in comparison to their surrounding rural areas. This temperature gap results from solar heat trapped and absorbed by the built environment, including roads, pavements, buildings, and roofs, as well as waste heat released as a byproduct of human activity, such as combustion engines and air conditioners.<sup>1</sup> As a result, air temperatures in the project's parking lots, other paved areas, and rooftops may contribute to increased surface and above surface temperatures. Higher ambient temperatures increase formation of ozone, a respiratory system irritant, and during extreme heat and extended heat waves, these higher temperatures can lead to heat stress, heat stroke, and even heat mortality, especially for the elderly, the young, and those with pre-existing health conditions. The urban heat island effect also contributes to increased greenhouse gas (GHG) emissions to compensate for increased heat intensity by increasing use of electricity for air conditioning.<sup>2</sup> Indirect GHG emissions are generated by the fossil fuels consumed to support increased air conditioning demand. The feasibility for the project to implement measures such as a tree canopy, cool roofs, and cool pavements to reduce the urban heat island effect has been analyzed, and is summarized below.

**Tree Canopy.** There are multiple benefits shade trees can provide, including helping to cool cities by reducing temperatures.<sup>3</sup> Planting of trees is feasible for the project and is recommended by SMAQMD, because of the multiple health co-benefits. As shown in Project Description Figure 2-8, *Preliminary Landscape Plan*, hundreds of trees are proposed to be planted as part of the project. While new, immature recently planted trees would have a limited influence on the urban heat island effect, once mature they would help cool the project site.

**Cool Roofs.** A cool roof is one that has been designed to reflect more sunlight and absorb less heat than a standard roof. Cool roofs can be made of a highly reflective type of paint, a sheet covering, or highly reflective tiles or shingles. Standard or dark roofs can reach temperatures of 150 degrees Fahrenheit (°F) or more in the summer sun. A cool roof under the same conditions could be 50 °F cooler and save

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<sup>1</sup> Capital Region Climate Readiness Collaborative (CRCRC), 2020. Summary Report, Capital Region Urban Heat Island Mitigation Project.

<sup>2</sup> Sacramento Metropolitan Air Quality Management District, 2020. Letter RE: Notice of Preparation of an Environmental Impact Report for the Klotz Ranch Apartments Project (P19-070) (SAC201902268), April 15, 2020.

<sup>3</sup> U.S. Environmental Protection Agency. 2008. Reducing Urban Heat Islands: Compendium of Strategies. Draft. Available at: <https://www.epa.gov/heat-islands/heatisland-compendium>. Accessed May 1, 2020.

energy and money by requiring the use of less air conditioning.<sup>4</sup> Installation of cool roofs for the project are feasible and recommended for the apartment building roofs and for the covered carports.

It is noted that there are competing considerations for rooftops associated with the project, including the installation of rooftop solar photovoltaic (PV) panels, which is a GHG emissions reduction strategy associated with Mitigation Measure 4.6-1b. While rooftop solar PV panels can affect near-surface temperatures, they do not increase air temperature at the street level.<sup>5</sup>

**Cool Pavements.** Solar reflective "cool" pavements maintain lower temperatures in the sun than traditional pavements. Pavement reflectance can be enhanced by using reflective aggregate, a reflective or clear binder, or a reflective surface coating.<sup>6</sup> The project would include covered carports, which would reduce the potential for solar radiation to heat the proposed pavement areas and provide shade for parked vehicles. Solar shading can achieve multiple benefits, including reducing the urban heat island effect from parking lot pavements, protecting electric vehicle batteries from higher temperatures while reducing evaporation of volatile organic compounds from the fuel tanks of conventional vehicles. Additionally, carports can keep car interiors cool, saving vehicle energy by lowering air-conditioning needs.<sup>7</sup> Other paved areas of the project site, including the access roads and guest parking areas, would be exposed to solar radiation, and could potentially contribute to the urban heat island effect. It would be feasible, and is recommended, that a portion of the onsite access roads and/or guest parking areas be equipped with cool pavement.

**Conclusion.** The ability for the project to implement measures such as a tree canopy, cool roofs, and cool pavements to reduce the urban heat island effect has been analyzed, and has been determined to be feasible. Tree canopy enhancement, cool roof installation, and cool pavement and carport inclusion in project design are all demonstrated to reduce the impact of the urban heat island effect and would be utilized to the greatest extent possible and is included within both the project design and the mitigation approach for the project.

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<sup>4</sup> U.S. Department of Energy (USDOE), 2020. Cool Roofs. Webpage (<https://www.energy.gov/energysaver/design/energy-efficient-home-design/cool-roofs>) accessed May 1, 2020.

<sup>5</sup> Capital Region Climate Readiness Collaborative (CRCRC), 2020. Summary Report, Capital Region Urban Heat Island Mitigation Project.

<sup>6</sup> Lawrence Berkeley National Laboratory, Heat Island Group, 2020. Cool Pavements. Webpage (<https://heatisland.lbl.gov/coolscience/cool-pavements>) accessed May 1, 2020.

<sup>7</sup> Capital Region Climate Readiness Collaborative (CRCRC), 2020. Summary Report, Capital Region Urban Heat Island Mitigation Project.



# **Appendix D**

## **Noise Calculations**





### AM Peak Hour - Baseline and Baseline Plus Project

Roadway Segment	Traffic Noise Level, dBA, Ldn <sup>1</sup>			
	Baseline	Baseline plus Project	Incremental Increase	Significant Increase at Sensitive Land Uses <sup>2</sup>
<b>Pocket Road</b>				
East of Greenhaven Drive	68.8	68.8	0.0	No
East of I-5 Northbound Ramp	69.8	69.9	0.1	No
East of Klotz Circle/Alma Vista Way	67.9	68.1	0.1	No
<b>Greenhaven Drive</b>				
North of Pocket Road	66.6	66.6	0.0	No
South of Pocket Road	56.0	56.0	0.0	No
<b>I-5 Northbound Onramp</b>				
North of Pocket Road	65.3	65.4	0.1	No

### AM Peak Hour -Cumulative and Project Plus Baseline

Roadway Segment	Traffic Noise Level, dBA, Ldn <sup>1</sup>			
	Cumulative	Cumulative plus Project	Incremental Increase	Significant Increase at Sensitive Land Uses <sup>2</sup>
<b>Pocket Road</b>				
East of Greenhaven Drive	69.2	69.0	-0.2	No
East of I-5 Northbound Ramp	70.5	69.9	-0.6	No
East of Klotz Circle/Alma Vista Way	69.1	68.2	-0.9	No
<b>Greenhaven Drive</b>				
North of Pocket Road	67.1	67.0	-0.1	No
South of Pocket Road	57.1	56.8	-0.4	No
<b>I-5 Northbound Onramp</b>				
North of Pocket Road	65.9	65.4	-0.5	No

### PM Peak Hour - Baseline and Baseline Plus Project

Roadway Segment	Traffic Noise Level, dBA, Ldn <sup>1</sup>			
	Baseline	Baseline plus Project	Incremental Increase	Significant Increase at Sensitive Land Uses <sup>2</sup>
<b>Pocket Road</b>				
East of Greenhaven Drive	68.4	68.4	0.0	No
East of I-5 Northbound Ramp	69.5	69.6	0.1	No
East of Klotz Circle/Alma Vista Way	68.7	68.8	0.1	No
<b>Greenhaven Drive</b>				
North of Pocket Road	66.6	66.6	0.0	No
South of Pocket Road	57.6	57.6	0.0	No
<b>I-5 Northbound Onramp</b>				
North of Pocket Road	62.8	63.0	0.2	No

### PM Peak Hour -Cumulative and Project Plus Baseline

Roadway Segment	Traffic Noise Level, dBA, Ldn <sup>1</sup>			
	Cumulative	Cumulative plus Project	Incremental Increase	Significant Increase at Sensitive Land Uses <sup>2</sup>
<b>Pocket Road</b>				
East of Greenhaven Drive	68.9	68.8	-0.1	No
East of I-5 Northbound Ramp	70.2	69.7	-0.5	No
East of Klotz Circle/Alma Vista Way	69.5	68.9	-0.6	No
<b>Greenhaven Drive</b>				
North of Pocket Road	67.2	67.1	-0.1	No
South of Pocket Road	58.3	58.1	-0.2	No
<b>I-5 Northbound Onramp</b>				
North of Pocket Road	64.1	63.5	-0.7	No

Roadway Noise Analysis

**Existing AM Peak Hour**

ROAD SEGMENT AM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters)	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
from:		roadway center)	Center (m.)	(dBA)	(m.)	(ft)
Pocket Road	east of Greenhaven Drive	2,507	71.8	30	68.8	72.3
Greenhaven Drive	north of Pocket Road	1,421	68.1	21	66.6	30.6
Greenhaven Drive	south of Pocket Road	241	57.4	21	56.0	2.6
Pocket Road	East of I-5 north boound ramp	2,409	71.7	23	69.8	69.5
I-5 northbound ramp	north of Pocket Road	633	70.9	55	65.3	58.5
Pocket Road	east of Klotz Circle/Alma Vista Way	1,565	69.8	23	67.9	45.1

Assumptions: AM peak hour traffic data from National Data & Surveying Services

Speed limits obtained from: <https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/060118-SpeedZoneMapCitywide.pdf?la=en>.

**Existing + Project AM Peak Hour**

ROAD SEGMENT AM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
from:		roadway center)	Center (m.)	(dBA)	(m.)	(ft)
Pocket Road	east of Greenhaven Drive	2,513	71.8	30	68.8	72.5
Greenhaven Drive	north of Pocket Road	1,424	68.1	21	66.6	30.6
Greenhaven Drive	south of Pocket Road	242	57.5	21	56.0	2.6
Pocket Road	East of I-5 north boound ramp	2,449	71.7	23	69.9	70.6
I-5 northbound ramp	north of Pocket Road	653	71.0	55	65.4	60.4
Pocket Road	east of Klotz Circle/Alma Vista Way	1,616	69.9	23	68.1	46.6

Assumptions: AM peak hour traffic data from National Data & Surveying Services

**Cumulative AM Peak Hour**

ROAD SEGMENT AM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
from:		roadway center)	Center (m.)	(dBA)	(m.)	(ft)
Pocket Road	east of Greenhaven Drive	2,735	72.2	30	69.2	78.9
Greenhaven Drive	north of Pocket Road	1,592	68.6	21	67.1	34.2
Greenhaven Drive	south of Pocket Road	315	58.6	21	57.1	3.4
Pocket Road	East of I-5 north boound ramp	2,839	72.4	23	70.5	81.9
I-5 northbound ramp	north of Pocket Road	727	71.5	55	65.9	67.2
Pocket Road	east of Klotz Circle/Alma Vista Way	2,049	71.0	23	69.1	59.1

Assumptions: AM peak hour traffic data from National Data & Surveying Services

**Cumulative + Project AM Peak Hour**

ROAD SEGMENT AM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
from:		roadway center)	Center (m.)	(dBA)	(m.)	(ft)
Pocket Road	east of Greenhaven Drive	2,635	72.0	30	69.0	76.0
Greenhaven Drive	north of Pocket Road	1,554	68.5	21	67.0	33.4
Greenhaven Drive	south of Pocket Road	290	58.2	21	56.8	3.2
Pocket Road	East of I-5 north boound ramp	2,449	71.7	23	69.9	70.6
I-5 northbound ramp	north of Pocket Road	654	71.1	55	65.4	60.5
Pocket Road	east of Klotz Circle/Alma Vista Way	1,678	70.1	23	68.2	48.4

Assumptions: AM peak hour traffic data from National Data & Surveying Services

**Existing PM Peak Hour**

ROAD SEGMENT PM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						

Roadway Noise Analysis

Pocket Road	from: east of Greenhaven Drive		roadway center)	Center (m.)	(dBA)	(m.)	(ft)
Greenhaven Drive	north of Pocket Road	2,288	71.4	30	68.4	66.0	216.5
Greenhaven Drive	south of Pocket Road	1,408	68.1	21	66.6	30.3	99.4
Pocket Road	East of I-5 northbound ramp	351	59.1	21	57.6	3.8	12.6
I-5 northbound ramp	north of Pocket Road	2,233	71.3	23	69.5	64.4	211.3
Pocket Road	east of Klotz Circle/Alma Vista Way	359	68.4	55	62.8	33.2	108.9
		1,850	70.5	23	68.7	53.4	175.1

Assumptions: AM peak hour traffic data from National Data & Surveying Services

### Existing + Project PM Peak Hour

ROAD SEGMENT PM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from roadway center)	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
Pocket Road	from: east of Greenhaven Drive	2,294	71.4	30	68.4	66.2
Greenhaven Drive	north of Pocket Road	1,411	68.1	21	66.6	30.4
Greenhaven Drive	south of Pocket Road	352	59.1	21	57.6	3.8
Pocket Road	East of I-5 northbound ramp	2,282	71.4	23	69.6	65.8
I-5 northbound ramp	north of Pocket Road	372	68.6	55	63.0	34.4
Pocket Road	east of Klotz Circle/Alma Vista Way	1,911	70.7	23	68.8	55.1

Assumptions: AM peak hour traffic data from National Data & Surveying Services

### Cumulative PM Peak Hour

ROAD SEGMENT PM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from roadway center)	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
Pocket Road	from: east of Greenhaven Drive	2,570	71.9	30	68.9	74.1
Greenhaven Drive	north of Pocket Road	1,612	68.6	21	67.2	34.7
Greenhaven Drive	south of Pocket Road	411	59.8	21	58.3	4.5
Pocket Road	East of I-5 northbound ramp	2,634	72.0	23	70.2	76.0
I-5 northbound ramp	north of Pocket Road	489	69.8	55	64.1	45.2
Pocket Road	east of Klotz Circle/Alma Vista Way	2,269	71.4	23	69.5	65.4

Assumptions: AM peak hour traffic data from National Data & Surveying Services

### Cumulative + Project PM Peak Hour

ROAD SEGMENT PM PEAK	TOTAL # VEHICLES	CALCULATED NOISE LEVEL (15 meters from roadway center)	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
Calveno Peak						
Pocket Road	from: east of Greenhaven Drive	2,489	71.8	30	68.8	71.8
Greenhaven Drive	north of Pocket Road	1,581	68.6	21	67.1	34.0
Greenhaven Drive	south of Pocket Road	390	59.5	21	58.1	4.3
Pocket Road	East of I-5 northbound ramp	2,331	71.5	23	69.7	67.2
I-5 northbound ramp	north of Pocket Road	419	69.1	55	63.5	38.7
Pocket Road	east of Klotz Circle/Alma Vista Way	1,975	70.8	23	68.9	57.0

Assumptions: AM peak hour traffic data from National Data & Surveying Services