CITY OF DAVIS DEPARTMENT OF COMMUNITY DEVELOPMENT AND SUSTAINABILITY



Paul's Place Multi-Functional Homeless Facility

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

February 2020



1501 Sports Drive, Suite A, • Sacramento • CA • 95834 Office 916.372.6100 • Fax 916.419.610



DEPARTMENT OF COMMUNITY DEVELOPMENT AND SUSTAINABILITY 23 Russell Boulevard, Suite 2 – Davis, California 95616 PH: 530/757-5610– TDD: 530/757-5666

Davis

Environmental Checklist and Initial Study

Project Title: Paul's Place (PA#17-98)

Project Number: Planning Application #17-98 for Rezone and

Preliminary PD#2-18, Final Planned Development #5-18, Design Review #28-17, Demolition #10-17,

and Mitigated Negative Declaration #2-18

Lead Agency Name and Address: City of Davis

Department of Community Development and

Sustainability

23 Russell Boulevard, Suite 2 Davis, California 95616

Contact Person and Phone Number: Eric Lee, Project Planner

City of Davis Department of Community

Development and Sustainability

(530) 757-5610 elee@cityofdavis.org

Project Sponsor's Name and Address: Maria Ogrydziak, AIA

241 B Street Davis, CA 95616

Existing General Plan Designation: Residential – Medium High Density

Existing Zoning: Residential Garden Apartment (R-3-M)

Project Location and Setting:

The project site consists of an 11,356 square foot (sf) parcel located at 1111 H Street, Davis, California (see Exhibit 1 and Exhibit 2). The site is identified by Assessor's Parcel Number (APN) 070-144-03. Currently, the site is developed with a 2,800-sf, single-story structure and related site improvements. The existing facility is a former residential structure and has been owned and operated by Davis Community Meals and Housing (DCMH) since 1994 as a homeless facility. The facility provides shelter for up to 12 persons, with 10 transitional housing beds and two emergency shelter beds. The facility also serves as a resource center. A total of 18 trees are scattered around the perimeter of the building.

The project site is located in a multi-family residential zone containing a mix of single-family and duplex residences and two- and three-story apartment buildings. On the east, the site faces the California Northern rail line, which runs north-south to the Downtown Davis train depot and connects to the California Northern rail tracks east of the Davis Amtrak station. The properties lining the other side of the railroad tracks are the same multi-family zoning district, and are developed with apartment complexes. One block over to the west is F Street, which is a City minor arterial street, where a preschool and Montessori school are located. Table 1 below provides a summary of the existing use, zoning designation, and General Plan land use designation of the project site and the surrounding areas.

Regional Vicinity Map Knights Landing Zamora County Road 13 Highway 113 Pleasant Grove Blvd रेव्यस १४ Roseville Base Line Rd Pfe Rd County Road 19 Antelope W Elverta Rd 5 Elverta North Morth Highlands OR-E-14 Madison Woodland Rio Linda County Road 22 McClellan 0 McClellan Airfield Foothill Madison Ave Farms Winding Way Fair Oaks Carmichael County Road 27 Marconi Ave **Project Location** 50 County Road 29 Rancho Cordova Sacramento West Sacramento Mather La Riviera Rosemont CR-E6 County Road 31 Mather Airport Russell Blvd Broadway Potah Creek Rd Fruitridge Rd Winters Elder Creek Rd Tremont Rd Sievers Rd Florin 2 Mack Rd

Exhibit 1

Exhibit 2
Regional Location Map



Table 1 Surrounding Uses						
	Existing Use	Zoning	General Plan Land Use Designation			
Project Site 1111 H Street	Homeless Facility (DCMH)		Residential – Medium High Density			
North 1125 H Street	Academy Lane Apartments					
East N/A	Railroad Tracks	R-3 (Residential Garden Apartment)				
South 1101 H/809 11 th Street	Duplex	Garden Apartment)				
West 805 11 th Street	Park Terrace Apartments					

Policy, Plan, and Zoning Consistency:

The project site is currently zoned R-3-M, and the 'M' identifies specific development standards within the R-3 zoning district. That maximum height of buildings within R-3-M is three stories and 38 feet. The proposed project would be four stories and 41.8 feet in height; therefore, the proposed project would require a rezone to change the site's zoning designation from R-3 and establish a Preliminary Planned Development, consisting of site-specific development standards for the proposed project and allowable uses. The proposed project would be consistent with the site's current General Plan land use designation of Residential – Medium High Density, which allows residential and institutional uses.

Project Site Background:

Currently, approximately five staff members work at the existing on-site facility during the day, composed of working staff and volunteers who provide day services. One volunteer or staff employee may provide overnight staffing. Day services and programs include showers, bathroom, laundry facility, clothing, personal hygiene products, food, a place to hang out, cooling center in the summer, health care services, mental health and substance abuse counseling, employment and public benefits assistance, housing assistance, rental assistance, and other services. On a typical day, the facility serves approximately 40 to 50 persons. The Transitional Housing Program provides services for life skills, counseling, and employment or housing assistance. The facility's residents and day users generally do not own personal vehicles, relying instead on bicycles as a primary form of transportation.

Chronic homelessness is an ongoing problem throughout Yolo County. The City of Davis experienced a 20 percent increase in the number of homeless individuals from 2017 to 2019. Studies throughout California have found that providing housing for the homeless reduces municipal costs associated with health care, law enforcement, other services by approximately 50 percent. Therefore, by providing resources and housing for vulnerable individuals, Paul's Place would protects public health and safety, as well as save on City expenses.

Paul's Place Davis. *Paul's Place at 1111 H Street: Project Overview.* Available at: https://paulsplacedavis.org/project-overview/. Accessed February 12, 2020.

² Sutter Health. *Getting to Zero*. January 2019.

Description of Project:

The Paul's Place Project (proposed project) would demolish the existing homeless services facility located on the project site and construct a new multi-functional homeless facility (see Exhibit 3 and Exhibit 4) The proposed facility would include institutional non-profit and residential uses in a new 16,928-sf, four-story facility.

The third and fourth floors would each include nine single-occupant permanent supportive units. Two of the 18 units would be ADA accessible.

The second floor of the proposed project would be used for temporary housing and staff facilities, and would include:

- 10 transitional housing, single-occupant bedrooms (100 sf);
- Shared kitchen;
- Living room;
- Laundry room;
- Three bathrooms (1 ADA) and two half-baths;
- Two staff offices;
- Staff bedroom; and
- Staff half-bath.

The first floor would include support services and emergency shelter beds. The following features would be included:

- Two emergency bedrooms with two beds each;
- Four staff offices;
- Family/dining room;
- Resource center;
- Kitchen;
- Laundry room; and
- Three bathrooms (1 ADA) and two half-baths.

The proposed project would include four vehicle parking spaces, 28 bicycle parking spaces, storage, outdoor activity areas, and related site improvements. The project components are described in further detail below.

Proposed Building Features and Amenities

The following sections provide a more detailed overview of the features and amenities that would be provided within the proposed multi-functional facility.

Permanent Supportive Housing Micro-Dwellings

Located on the third and fourth floors, the 18-permanent supportive housing micro-dwellings represent the most innovative component of the facility. Each adaptable micro-dwelling will feature a 300-sf furnished living space, and the two ADA units are 340 sf each. Every unit is fully equipped with a bed, desk, kitchen, bathroom, and living/dining room. This efficient use of space is particularly relevant in Davis where housing availability is very limited. Utilizing Housing First principles and a low barrier program model, DCMH staff would offer each resident on-site supportive services, which includes intensive case management.

Exhibit 3 Site Plan

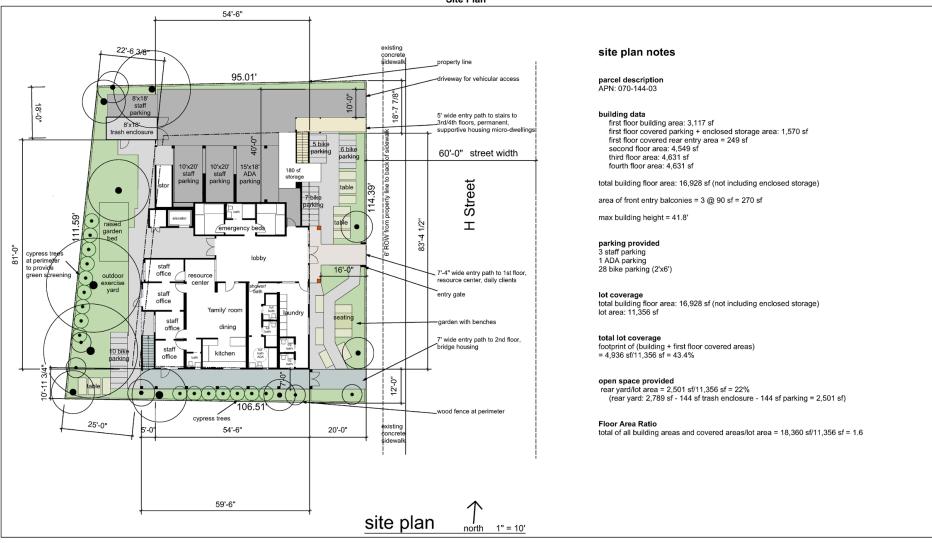


Exhibit 4
Project Elevation



Additionally, DCMH staff is well equipped to operate a permanent supportive housing program, as the organization already manages a 52-unit project called Cesar Chavez. DCMH staff is also set to manage another 90-unit permanent supportive housing project called Creekside when the project opens in 2020.

Transitional Housing Bedrooms

Located on the second floor, the proposed 10 transitional housing bedrooms compared to the previous three bedrooms currently available is designed to improve service provision. Unlike the current setup, which requires up to four individuals to share one bedroom, the proposed bedrooms are single occupancy units. The benefits of single occupancy compared to cohabitation include a less restrictive intake process, more effective case management, and a faster transition to permanent housing.

Emergency Shelter Beds and Resource Center

Located on the first floor, the four emergency shelter beds would expand the existing capacity by two beds. To be filled by persons identified by the City's Police Department, the four beds would play an integral role in keeping vulnerable individuals safe. Police currently have limited options, if any, for those who do not need hospitalization or to be in police custody. Also located on the first floor, the proposed resource center expands the existing center by offering more showers and restrooms (six full bathrooms as compared to the current one public bathroom) as well as a larger laundry facility, updated kitchen, and community room.

Accessibility

The proposed facility would be fully compliant with the Americans with Disabilities Act (ADA). The proposed ADA-accessible features include entrance ramps, elevator access, four full ADA bathrooms, one ADA transitional housing bedroom on the second floor, one ADA permanent supportive housing micro-dwelling on the third floor, one ADA permanent supporting housing micro-dwelling on the fourth floor, and an accessible parking space.

General Operations

Proposed operations would be similar to the existing operations and uses at the site. The proposed transitional bedrooms and emergency shelter beds would be used in the same way as the existing facility, but with additional beds to support more residents. The project would add housing for 18 supportive housing micro-units. During the day, the facility is expected to have two to six staff employees and one to two volunteers at any given time. A total of 40 to 50 users of the resource center are expected over the course of an average day.

Parking and Circulation

Vehicular assess to the project site would continue to be provided by a single driveway at the H Street frontage, near the northeastern portion of the site. The driveway would extend along the northern site boundary, connecting to a parking area with a total of four vehicle parking spaces, including one ADA space. In addition, the project would include 28 bicycle parking spaces split between the northeastern and southwestern portions of the site. The project would not include any substantial modifications to the surrounding street system.

Alternative Transportation

Currently, Unitrans provides bus service within the project vicinity. The nearest stop, located at F Street and 12th Street to the west of the project site, is served by Route E. Continuous sidewalks are provided between the project site and the bus stop. Thus, convenient access to public transit would be available to future workers and care recipients at the proposed project. While dedicated bike lanes are not provided on H Street in the project area, the roadway experiences relatively low vehicle speeds and, thus, is considered relatively bikeable. Class II bike lanes are provided on F Street to the west of the project site.

Landscaping

Consistent with City standards, the proposed project would include landscaping throughout the project site, including planting Cyprus trees along the western and southern borders of the site. It should be noted that 18 trees currently exist on-site. If any trees require removal due to conflict with the site plan, the applicant would abide by the City's Tree Protection Ordinance and either replace the trees or be subject to in-lieu fees.

Utilities and Service Systems

Domestic and irrigation water for the proposed project would be provided by way of new connections to existing City infrastructure located within H Street. On-site water systems would continue to be privately owned and maintained. Wastewater service to the site would be provided by way of a new connection to the City's existing four-inch sewer stub located at the inside edge of the western site boundary. Water supply and wastewater treatment services would be provided by the City of Davis.

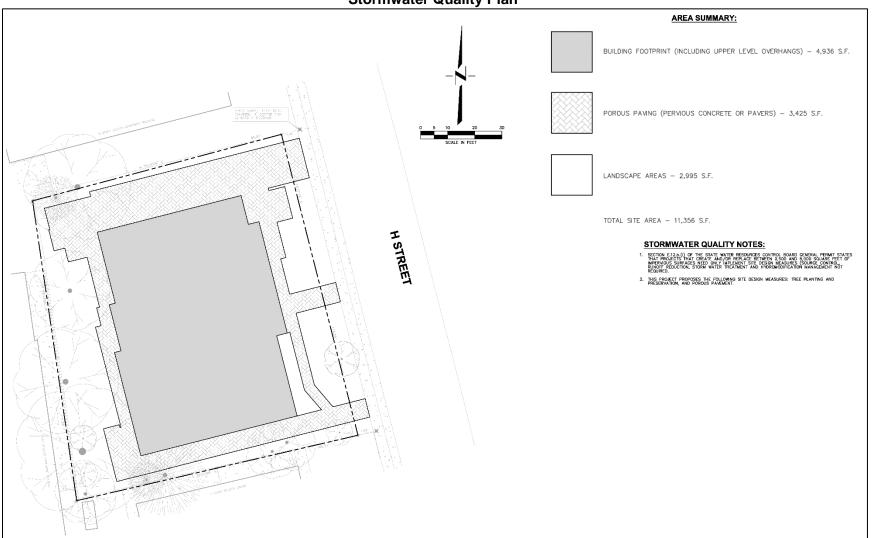
The proposed project would incorporate the use of 3,425 sf of permeable/porous pavement, as well as 2,995 sf of landscaped areas, which would allow stormwater runoff to infiltrate underlying soils (see Exhibit 5). Due to the small project site and the incorporation of permeable surfaces, stormwater treatment and detention would not be required.

Sustainability

The proposed project would incorporate sustainability strategies and features consistent with the City of Davis' Climate Action and Adaptation Plan (CAAP). Currently, the project design includes the following sustainability strategies:

- Cool roofs that are photovoltaic panel ready;
- Dual pane low-e glazing;
- On-site water detention as part of a comprehensive Low Impact Development (LID) approach;
- Low-flow toilets;
- Showers and changing rooms in Building A for cyclists; and
- Meet or exceed Tier 1 CalGreen building standards adopted by the City of Davis.

Exhibit 5
Stormwater Quality Plan



Requested Entitlements:

The following section presents the discretionary and ministerial actions that would be required to implement the proposed project.

City of Davis Discretionary and Ministerial Approvals

Implementation of the proposed project would require the following entitlements from the City:

- 1. Rezone to change the site's zoning designation from R-3-M to PD 2-18;
- 2. Final Planned Development;
- 3. Design Review; and
- 4. <u>Demolition Permit</u> for demolition of the existing on-site structure

The project will also require a tree modification or removal permit for any trimming, modification or removal of trees protected under Chapter 37 of the City of Davis' Municipal Code and a Bioclearance/Grading Permit in accordance with City of Davis Ordinance 2091.

Other Agency Permits and Approvals

Significance

1. Yolo-Solano Air Quality Management District – Approval of air quality permits for construction-related activities and emissions.

Environmental Factors Potentially Affected: The environmental factors checked below would be potentially affected by this proposed project, involving at least one impact that is a "Potentially Significant Impact" or as indicated by the checklist on the following pages.

	Aesthetics Biological Resources Greenhouse Gas		Agriculture and Forestry Cultural Resources Hazards and Hazardous		Air Quality Geology and Soils Hydrology and Water Quality
	Emissions		Materials		, and a supplier of the suppli
П	Land Use and Planning	П	Mineral Resources	\boxtimes	Noise
	Population and Housing		Public Services		Recreation
$\overline{\boxtimes}$	Transportation and	$\overline{\boxtimes}$	Tribal Cultural Resources		Utilities and Service Systems
	Traffic				·
	Mandatory Findings of				

Determination:				
On the	basis of this Initial Study:			
	I find that the Proposed Project COULD NOT have a significent environment, and a NEGATIVE DECLARATION shall be proposed.			
*	I find that although the Proposed Project could have a sign environment, there shall not be a significant effect in this caproject have been made by or agreed to by the applicant. A DECLARATION shall be prepared.	ase because revisions in the		
	I find that the Proposed Project MAY have a significant effe an ENVIRONMENTAL IMPACT REPORT is required.	ect on the environment, and		
	I find that the proposed project MAY have a "potentially sig significant unless mitigated" on the environment, but at least adequately analyzed in an earlier document pursuant to ap 2) has been addressed by mitigation measures based on the described on attached sheets. An ENVIRONMENTAL IMPAIT it must analyze only the effects that remain to be addressed.	st one effect 1) has been plicable legal standards, and ne earlier analysis as ACT REPORT is required, but		
	I find that although the proposed project could have a signi environment, because all potentially significant effects (a) hadequately in an earlier Environmental Impact Report (EIR standards, and (b) have been avoided or mitigated pursuar revisions or mitigation measures that are imposed upon the further is required.	nave been analyzed) pursuant to applicable nt to that earlier EIR, including		
8	in he	2 26 20		
Signati	ure	Date		
	e, Project Planner	City of Davis		

Evaluation of Environmental Impacts:

Ι. <i>W</i> α	AESTHETICS. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?				*
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				*
C.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations			*	
d.	governing scenic quality? Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			*	

- a,b. A scenic vista is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing, including any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within the City of Davis for viewing and sightseeing. Similarly, the City of Davis, according to the City's General Plan EIR, has determined that the Planning Area of the General Plan does not contain officially designated scenic corridors, vistas, or viewing areas.³ Given that established scenic vistas are not located on or adjacent to the project site, the potential does not exist for the project to result in adverse impacts to a scenic vista or scenic resources within a State scenic highway. Therefore, the project would be considered to have *no impact*.
- c. The proposed project would be located on a currently developed site in an urbanized area of the City. Adjacent parcels are developed with one and two-story structures, including duplexes and multi-family apartments. Nearby multi-family residential developments include the Park Terrace Apartments to the west and the Academy Lane Apartments to the north. To the east of the project site are the California Northern railroad tracks. The proposed project would replace the existing 2,800-sf, single-story facility with a new 16,928-sf, four story facility. The aforementioned off-site apartment buildings are two-story facilities, with estimated building heights of approximately 20 feet. The new building would be approximately 41.8 feet tall. Following approval of the proposed rezone to PD, the proposed building height would be allowable under zoning designation.

The proposed project would be required to comply with all applicable City of Davis General Plan policies related to community design and visual character, including the following:

-

City of Davis. Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School [pg. 5-2]. January 2000.

- Goal UD 2 Maintain an aesthetically pleasing environment and manage a sustainable community forest to optimize environmental, aesthetic, social, and economic benefits.
- Policy UD 2.2 Maintain and increase the amount of greenery, especially street trees, in Davis, both for aesthetic reasons and to provide shade, cooling, habitat, air quality benefits, and visual continuity.
- Policy UD 2.3 Require an architectural "fit" with Davis' existing scale for new development projects.

As seen in Exhibit 6 below, the project would be consistent with Goal UD 2 in that the design is aesthetically pleasing and encourages an aesthetic and social environment.



Exhibit 6
Project Rendering

Consistent with Policy UD 2.2, some on-site trees would be preserved and the site would be enhanced with additional greenery, which would help preserve the natural features of the site, add visual interest, and provide a buffer between properties.

The proposed project would be consistent with other existing multi-family residential developments in the area, and would thereby comply with Policy UD 2.3. The surrounding neighborhood lacks a unified architectural or design theme and instead contains an eclectic mix of residential structures and multi-family buildings, which were developed over the years. The new building would have a contemporary design with exterior stucco, shingle roofing, gable roof features, and various exterior earth tone colors. Outdoor balconies and gathering areas would be provided on the eastern side of the building, facing the street, thereby creating an inviting and engaging environment. The mass and scale of the building is broken up by the building articulation and features, including balconies, eaves, building pop-outs, and changes in the horizontal and vertical elements. Although the proposed project would be taller than nearby adjacent buildings,

the project would provide a transition through setbacks and perimeter trees between the duplex to the south and the apartment complex to the north. The proposed building would exceed the height of other nearby one- and two-story buildings and would result in a change to the visual character of the area, but would not substantially degrade the visual character or quality of the site or its surroundings.

Furthermore, prior to construction of the proposed structure, the project would be subject to Design Review by the City, as required by Section 40.31 of the City's Municipal Code. The City's Design Review would rely on existing City standards to analyze the proposed structure's architectural and landscape character in isolation and in consideration of the surrounding developments. The intent of the Design Review, as stated in Section 40.31.050(a) of the City's Municipal Code, is to ensure suitable use of project sites, which allows for individual initiative and architectural character.

Based on the above, the project would not conflict with applicable zoning and other regulations that govern scenic quality and would be considered consistent with General Plan goals and policies and Municipal Code standards designed to protect visual resources. Therefore, project impacts relative to the visual quality and character of the site are considered *less than significant*.

d. The existing development on the project site currently contains sources of light and glare associated with indoor and outdoor lighting, glare from windows or mirrors, and other sources typical of residences. In addition, the surrounding area is also developed and includes similar sources of light and glare. Nonetheless, the proposed project would increase the building height and intensity of use, which would result in an increase in the amount of light or glare generated compared to the existing building. The project would include interior residential lighting, balcony lighting, and various other outdoor lighting elements.

However, the proposed project would be required to comply with the City's Outdoor Lighting Control policies and the goals and policies of the General Plan. Compliance with the Outdoor Lighting Control Ordinance (Section 8.17 of the City's Municipal Code) would ensure that all exterior lighting associated with the project would be properly shielded and directed downward in order to eliminate light spillage onto adjacent properties, and reduce impacts to "dark skies" to the maximum extent feasible. Consistency with the City's Outdoor Lighting Control policies would be ensured during the site plan and architectural review process.

The proposed project has limited potential to result in a significant increase in daytime glare. Daytime glare is most likely to result from reflective building materials. The project includes stucco plaster on the building facades, which is not reflective, and metal railings for balconies would be minimal. Windows may cause glare from certain angles; however, existing and proposed trees along the south and west perimeters of the site would help to reduce potential glare. The project would not include large expanses of glass with the potential to result in substantial glare at the existing residences to the north, west, or south of the site, and the east-facing windows reflect towards the railroad tracks, which would not be considered a sensitive area.

Overall, due to the project design and required consistency with the City's Municipal Code, the proposed project would not be expected to generate substantial light or glare

that would adversely affect day or nighttime views in the area. Therefore, implementation of the project would result in a *less-than-significant* impact to light and glare.

II.	AGRICULTURE AND FOREST RESOURCES. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				*
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				*
C.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				*
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				*
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				*

- a,e. The project site is currently developed and located in an urbanized area. Per the Department of Conservation's California Important Farmland Finder, the entire project site is identified as "Urban and Built-up Land." As such, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. Furthermore, the project site has been previously developed, and was planned for development with residential uses per the City's General Plan. Therefore, the proposed project would not convert Farmland to non-agricultural uses nor involve changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use, and *no impact* would occur.
- b. The project site is not under any Williamson Act contract and the area is not designated or zoned for agricultural uses. Because buildout of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, **no impact** would occur.
- c,d. The project area is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). The site is currently zoned R-3-M, which does not permit timber harvesting. Therefore, the proposed project would have *no impact* with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

-

⁴ California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed February 3, 2020.

	AIR QUALITY. build the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?			*	
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			*	
c.	Expose sensitive receptors to substantial pollutant concentrations?			*	
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			*	

a-c. The City of Davis is located within the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter (PM_{2.5}) and the State particulate matter 10 microns in diameter (PM₁₀) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the PM_{2.5} Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. Adopted YSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS

for which the area is currently designated nonattainment, consistent with applicable air quality plans. Thus, by exceeding the YSAQMD's mass emission thresholds for operational or construction emissions of ROG, NO_X, or PM₁₀, a project would be considered to conflict with or obstruct implementation of the YSAQMD's air quality planning efforts. The YSAQMD mass emission thresholds for operational and construction emissions are shown in Table 2 below.

Table 2 YSAQMD Thresholds of Significance					
Pollutant Construction Thresholds Operational Thresholds					
ROG	10 tons/yr	10 tons/yr			
NO _X	10 tons/yr	10 tons/yr			
PM ₁₀ 80 lbs/day 80 lbs/day					
Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.					

The YSAQMD has also established operational screening criteria to assess whether a proposed project is of a scale sufficient to exceed the above operational thresholds of significance. Projects that fall considerably under the screening criteria sizes may be safely assumed to not exceed the operational thresholds and not require further analysis. The screening size for a high-rise residential building, like the proposed project, is 445 dwelling units. Considering the proposed project would house a maximum of 32 residents, it can be assumed that the proposed project will fall far below the YSAQMD's operational thresholds of significance.

To assess the proposed project's potential impacts related to construction and operational emissions of the pollutants presented in Table 2 above, the proposed project's operational emissions were estimated using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. Where project-specific information is available, such information should be applied in the model. Based on information provided by the project applicant, the proposed project's modeling assumed the following:

- Construction would begin in February of 2020;
- Construction would occur over an approximately one-year period;
- 2,800 sf of building material would be demolished;
- The project would comply with the 2019 CBSC as well as the CALGreen Tier 1 Standards; and
- Based on the expected number of employees on-site, the trip generation rate was set to 1 trip/dwelling/day.

It should be noted that construction of the proposed project will commence at a later date than what has been assumed for modeling purposes. Subsequently, the anticipated first year of operation of the proposed project may also be later than what has been assumed in the modeling. However, due to a number of factors, including increasingly stringent building code standards, vehicle emission control standards, cleaner burning engines and fuels, and increased sourcing of grid-supplied electricity from renewable sources.

Yolo-Solano Air Quality Management District. Handbook for Assessing and Mitigating Air Quality Impacts [pg 10]. July 11, 2007.

among others, emissions are anticipated to continue to decline over time. Thus, the emissions presented in this IS/MND would be considered conservative.

The proposed project's estimated emissions associated with construction and operations are presented and discussed in further detail below. A discussion of the proposed project's contribution to cumulative air quality conditions is provided below as well. All CalEEMod results are included in the appendix to this Initial Study.

Construction Emissions

The proposed project's estimated construction-related emissions are presented in Table 3. As shown in the table, the proposed project's construction emissions of ROG, NO_X , and PM_{10} would be below the applicable YSAQMD thresholds of significance.

Table 3 Maximum Project Construction-Related Emissions						
ROG (tons/yr) NO _X (tons/yr) PM ₁₀ (lbs/day)						
Project Emissions	0.2783	2.1721	7.6191			
YSAQMD Significance Threshold	10	10	80.0			
Exceeds Threshold?	NO	NO	NO			
Source: CalEEMod 2020 (see Appendix).						

Therefore, the proposed project's construction-related emissions would not result in a significant contribution to the region's nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

All projects within the YSAQMD, including the proposed project, are required to comply with all YSAQMD rules and regulations for construction, including Rule 2.1 (Control of Emissions), Rule 2.28 (Cutback and Emulsified Asphalts), Rule 2.5 (Nuisance), Rule 2.14 (Architectural Coatings), and Rule 2.11 (Particulate Matter Concentration). The rules and regulations are not readily applicable in CalEEMod and are, therefore, not included in the project-specific modeling. Because compliance with the rules and regulations would likely result in some additional reduction in emissions, construction emissions from the project would likely be slightly reduced from what is presented in Table 3 due to compliance with the rules and regulations. In addition, the City would require, as a condition of approval, that the proposed project comply with the following temporary actions during construction to minimize temporary air quality impacts (dust):

- a. An effective dust control program should be implemented whenever earth-moving activities occur on the project site. In addition, all dirt loads exiting a construction site within the project area should be well watered and/or covered after loading.
- b. Apply water or dust palliatives on exposed earth surfaces as necessary to control dust emissions. Construction contracts shall include dust control treatment in late morning and at the end of the day, of all earth surfaces during clearing, grading, earth moving, and other site preparation activities. Non-potable water shall be used, where feasible. Existing wells shall be used for all construction purposes where feasible. Excessive watering shall be avoided to minimize tracking of mud from the project onto streets.
- c. Grading operations on the site shall be suspended during periods of high winds (i.e., winds greater than 15 miles per hour).

- d. Outdoor storage of fine particulate matter on construction sites shall be prohibited.
- e. Contractors shall cover any stockpiles of soil, sand and similar materials.
- f. Construction-related trucks shall be covered and installed with liners and on the project site shall be swept at the end of the day.
- g. Revegetation or stabilization of exposed earth surfaces shall be required in all inactive areas in the project.
- h. Vehicle speeds shall not exceed 15 miles per hour on unpaved surfaces.

Furthermore, in order to minimize the release of ozone precursors associated with construction, the following standard requirements developed by the YSAQMD would be implemented during construction and included as notes on all construction documents as a condition of approval:

- a. Construction equipment and engines shall be properly maintained.
- b. Vehicle idling, including diesel equipment, shall be kept below 5 minutes.
- c. Construction activities shall utilize new technologies to control ozone precursor emissions, as they become available and feasible.
- d. To the extent possible, construction equipment shall be equipped with catalysts and filtration (diesel particulate filters). Where an option exists between two similar pieces of equipment, the newer and/or more controlled piece of equipment shall be used.
- e. During smog season (May through October), the construction period shall be lengthened so as to minimize the number of vehicles and equipment operating at the same time.

Compliance with the aforementioned rules and regulations related to construction would help to minimize criteria pollutant emissions generated during construction activities.

Operational Emissions

The proposed project's estimated operational-related emissions are presented in Table 4. In order to accurately represent the net increase in emissions resulting from the proposed project, the existing building's operation emissions were also estimated and then subtracted from those from the proposed project. As shown in the table, the net increase in operational emissions of ROG, NO_X , and PM_{10} would be below the applicable YSAQMD thresholds of significance. Therefore, the proposed project's operational-related emissions would not result in a significant contribution to the region's nonattainment status of ozone or PM and would not violate an air quality standard or contribute substantially to an existing or projected air quality violation.

Table 4							
Maximum Unmitigated Net New Operational Emissions							
ROG (tons/yr) NO _X (tons/yr) PM ₁₀ (lbs/day)							
Proposed Project	3.0688	0.1404	12.7753				
Existing Building	2.2568	0.1057	9.5817				
Net New Emissions	0.8120	0.0347	3.1936				
YSAQMD Significance Threshold	10	10	80.0				
Exceeds Threshold?	NO	NO	NO				
Source: CalEEMod 2020 (see Appendix	Source: CalEEMod 2020 (see Appendix).						

Cumulative Emissions

The proposed project site is within an area currently designated as nonattainment for Ozone, PM₁₀, and PM_{2.5}. By nature, air pollution is largely a cumulative impact. Thus, the proposed project, in combination with other proposed and pending projects in the region would significantly contribute to air quality effects within the SVAB, resulting in an overall significant cumulative impact. However, any single project is not sufficient enough in size to, alone, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's incremental impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, YSAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds that project's emissions would be cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. As discussed above, implementation of the proposed project would result in construction-related and operational emissions below YSAQMD's thresholds of significance. Therefore, based on the project's consistency with YSAQMD's thresholds of significance, the proposed project would not be anticipated to result in an incrementally significant contribution to a cumulatively significant impact.

Conclusion

As stated previously, the applicable regional air quality plans include the 2013 Ozone Attainment Plan, the PM_{2.5} Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. According to YSAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Based on the above, the proposed project's criteria pollutant emissions would be below applicable YSAQMD thresholds. As such, the project would not be considered to conflict with or obstruct implementation of regional air quality plans. Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered *less than significant*.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the apartment complexes located north and west of the site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions, toxic air contaminant (TAC) emissions, and criteria pollutants, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood.

The YSAQMD recommends the use of screening thresholds to assess a project's potential to create an impact through the creation of CO hotspots. A violation of the CO standard could occur if either of the following criteria is true of any street or intersection affected by the mitigated project:⁶

- The project would reduce peak-hour level of service (LOS) on one or more streets or at one or more intersections to an unacceptable LOS (typically LOS E or F); or
- The project would increase a traffic delay by 10 or more seconds on one or more streets or at one or more intersections in the project vicinity where a peak hour LOS of F currently exists.

If either or both of the above criteria are met by the mitigated project, YSAQMD recommends performing a full CO Protocol Analysis.

As discussed in Section XVII, Transportation, of this IS/MND, the project is not expected to generate a significant increase in peak hour trips. Most residents are not anticipated to own cars, and the majority of vehicle trips would be from employee commutes. The expected generation of approximately 32 daily trips would not result in the exceedance of the screening criteria presented above. Thus, a full CO Protocol Analysis is not required. In addition, intersections where air mixing is inhibited do not exist in proximity to the project site. As such, the proposed project would result in a less-than-significant impact related to localized CO emissions concentrations and would not expose sensitive receptors to substantial concentrations of localized CO.

Toxic Air Contaminants

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. The nearest sensitive receptors to the project site

-

Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts* [p. 21]. July 11, 2007.

are the apartment complexes adjacent to the project site on the north and west boundaries.

The proposed project does not include any operations that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, as discussed above, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project would likely be limited to approximately one year. All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM.

During construction, only portions of the proposed project site would be disturbed at a time. Operation of construction equipment would occur intermittently throughout the course of a day over the overall construction period. In addition, per the City's Noise Ordinance, construction activities would be limited to the hours of 7:00 AM and 7:00 PM Monday through Friday, and 8:00 AM through 8:00 PM Saturday and Sunday. Because construction equipment on-site would not operate for any long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to concentrations of pollutants for a substantially extended period of time would be low.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO or TACs from construction or operation. Therefore, the proposed project would result in a *less-than-significant* impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d. According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, composting facilities, food processing facilities, refineries, dairies, and asphalt or rendering plants. The project site is not located in the vicinity of any such uses. Residential land uses, such as the proposed project, are not typically associated with the creation of substantial objectionable odors. As a result, the proposed project operations would not create any objectionable odors that would affect a substantial number of people.

Yolo-Solano Air Quality Management District. Handbook for Assessing and Mitigating Air Quality Impacts [pg. 14]. July 11, 2007.

Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per Chapter 24 of the City's Municipal Code, and would likely only occur over portions of the improvement area at a time. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions as well as any associated odors related to operation of construction equipment. Considering the short-term nature of construction activities, as well as the regulated and intermittent nature of the operation of construction equipment, construction of the proposed project would not be expected to create objectionable odors affecting a substantial number of people.

The YSAQMD regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made during construction or operation of the project, the YSAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors that would affect a substantial number of people, and a *less-than-significant* impact related to objectionable odors would result.

	BIOLOGICAL RESOURCES. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			*	
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				*
C.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				*
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?			*	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			*	
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?			*	

a. Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal and California Endangered Species Acts. Both acts afford protection to listed and proposed species. Although the California Department of Fish and Wildlife (CDFW) Species of Special Concern generally do not have special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under the MBTA, destroying active nests, eggs, and young is illegal. In addition, plant species on California Native Plant Society (CNPS) Lists 1 and 2 are considered special-status plant species and are protected under CEQA.

The project site is currently developed with an existing homeless shelter. In addition, the project site is surrounded on all sides by other existing development. Due to the highly disturbed nature of the project site and surrounding area, the potential for any special-status plant or wildlife species to be present on the site is low.

While the project site does not provide significant value as wildlife foraging habitat and there are no historic records of sensitive raptor nests within 0.25-mile of the site, the mature trees located along the site's perimeter could potentially support nesting Swainson's hawk, white-tailed kite, other raptors and other migratory birds protected under the federal MBTA. Site construction activities, including possible tree removal,

during the active nesting season (February 1 to August 31), have the potential to cause the failure or abandonment of active nests of migratory birds and could result in an impact. However, the standard City requirement for a bioclearance/grading permit in accordance with City of Davis Ordinance 2091 includes a preconstruction biological survey with appropriate steps if a sensitive species is found. Per Ordinance 2091, the required biological survey shall be conducted and prepared by an accredited biologist, be conducted within one month of, and be included with, the grading permit application, include the location of any nest sites or burrows for any special-status wildlife species, and include a report with proposed measures to reduce any impacts on such wildlife as a result of the proposed project. Compliance with Ordinance 2091 would ensure that no adverse effect to protected species occurs as a result of the project.

Therefore, development of the proposed project would have a *less-than-significant* impact with respect to having an adverse effect, either directly or through habitat modifications, on a species identified as a special-status species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWS).

- b,c. The project site is currently developed and does not contain any wetlands, riparian habitat, or other aquatic features or sensitive natural communities. As a result, development of the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. In addition, the project would not have a substantial adverse effect on a federally protected wetland, as defined by Section 404 of the Clean Water Act. Therefore, *no impact* would occur and further analysis is not required.
- d. The proposed project site is bordered by existing residential developments to the north, south, and west, and California Northern rail line tracks to the east. Such features present a substantial barrier to wildlife movement. Thus, the potential for use of the site as a wildlife corridor or native wildlife nursery site is severely limited. The site does not contain any existing waterways that would provide habitat for native resident or migratory fish. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and a *less-than-significant* impact would occur.
- e. Article 37.03.060 of the City's Municipal Code requires approval of a valid tree removal request and/or tree modification permit prior to cutting down, pruning substantially, encroaching into the protection zone of, or topping or relocating any landmark tree or tree of significance. Furthermore, Article 37.05 contains protection procedures to be implemented during grading, construction, or other site-related work. Such procedures, include, but are not limited to, inclusion of tree protection measures on approved development plans and specifications, and inclusion of tree care practices, such as the cutting of roots, pruning, etc., in approved tree modification permits, tree preservation plans, or project conditions.

Currently, there are 18 existing trees on-site, and some could be removed due to conflicts with the proposed site plan. In compliance with Article 37, a tree removal permit and/or tree modification permit would be required prior to removal or disturbance of any on-site trees that are deemed to qualify as trees of significance. Considering that tree

removal activity would likely occur as part of the proposed project, the project applicant would be required to obtain a tree removal permit and provide for (1) on-site replacement, (2) off-site replacement, and/or (3) payment of in-lieu fees. Because the proposed project is required to comply with City's tree policy, the proposed project would result in a *less-than-significant* impact with respect to conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f. The proposed project is located within the boundaries of the Yolo Habitat Conservation Plan/Natural Conservation Community Plan (HCP/NCCP). Per the HCP/NCCP, the land cover type on the project site is "Developed". Developed areas are dominated by pavement and building structures. Vegetation in developed areas generally consists of vegetated corridors (e.g., vegetation maintained adjacent to highways) and patches of mostly ornamental vegetation, such as tree groves, street strips, shade trees, lawns, and shrubs that are typically supported by irrigation. Urban lands cover 45,700 acres, or seven percent, of the Yolo HCP/NCCP Area. The area includes urban vegetation and all areas with structures, graded lots, road and highway medians, anthropogenic drainage canal vegetation, rail rights-of-way, and sewage treatment ponds that do not provide habitat. Based on the Developed HCP/NCCP land cover type on the project site, the site does not contain high-quality habitat for covered species and the proposed project would not be subject to payment of habitat mitigation fees.

The project may be subject to avoidance and minimization measures (AMM) set forth in the HCP/NCCP (e.g., AMM 16 related to Swainson's hawk and white-tailed kite survey), though this is based on whether the project overlaps with any resource protection buffers for sensitive natural communities or covered species habitat. Covered species habitat is marginal at the site (potential nest trees for Swainson's hawk and white-tailed kite); thus, compliance with AMMs may not be necessary. The City of Davis would require the applicant to obtain Yolo Habitat Conservancy's concurrence on this prior to issuance of a grading permit by the City. Therefore, a *less-than-significant* impact would occur related to conflict with an adopted habitat conservation plan.

Yolo Habitat Conservancy and U.S. Fish and Wildlife Service. Yolo Habitat Conservation Plan/Natural Community Conservation Plan Draft Environmental Impact Report [pg 5-5]. May 2017.

V.	CULTURAL RESOURCES. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			*	
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?		*		
C.	Disturb any human remains, including those interred outside of dedicated cemeteries.		*		

a. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics.

The City of Davis has a list of Designated Historic Resources, defined as a building or object with historical value to the citizens of Davis as designated by the City Council pursuant to Article 40.23 of the Municipal Code. The existing on-site building is not included on the list of Designated Historic Resources.

The building that currently exists on the project site is over 50 years old, and as such, could qualify as a historic resource. A Historic Resources Survey was conducted for the Bowers Acres subdivision, which is the L-shaped neighborhood north of historic Downtown Davis that includes the project site. Per the survey, the building on the project site was constructed in 1948, and is described as, "vernacular, lacks integrity." The neighborhood is not considered to contain any structures eligible for listing as a historic district or on the City of Davis' list of historical resources, and the report concluded that the neighborhood is not a likely source of information about history or prehistory. Because the on-site building does not meet the eligibility criteria, the building is not considered a historic resource.

Therefore, the proposed project would not cause an adverse change in the significance of a historical resource, and a *less-than-significant* impact would occur.

b,c. The City's General Plan EIR included an evaluation of previously recorded archaeological and paleontological resources on file with the California Historic Resources Information System (CHRIS) for specific areas of the City which were planned for potential development as part of buildout of the General Plan. The General Plan EIR identified previously recorded resources in the area to the north of the project site. It should be noted that the project site is already developed and, thus, construction is not expected to encounter previously unknown subsurface resources. Although not expected, due to the prehistoric and historic activity in the project area, the potential to uncover previously unrecorded resources during ground disturbing activities does exist. Therefore, in the event that previously unknown resources are unearthed on the project

⁹ City of Davis. City of Davis Designated Historical Resources: The Davis Register. March 23, 2010.

State of California Department of Parks and Recreation. District Record – Bowers Acres. October 3, 2014.

site, the project could result in a **potentially significant** impact related to causing a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5, or disturbing human remains, including those interred outside of formal cemeteries.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

V-1 If any subsurface historic remains, prehistoric or historic artifacts, other indications of archaeological resources, or cultural and/or tribal cultural resources are found during grading and construction activities, all work within 100 feet of the find shall cease, the City of Davis Department of Community Development and Sustainability shall be notified, and the applicant shall retain an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, to evaluate the find(s). If tribal resources are

the appropriate Native American tribe.

The archaeologist shall define the physical extent and the nature of any built features or artifact-bearing deposits. The investigation shall proceed immediately into a formal evaluation to determine the eligibility of the feature(s) for inclusion in the California Register of Historical Resources. The formal evaluation shall include, at a minimum, additional exposure of the feature(s), photo-documentation and recordation, and analysis of the artifact assemblage(s). If the evaluation determines that the feature(s) and artifact(s) do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists (e.g., an intact feature is identified with a large and varied artifact assemblage), further mitigation would be necessary, which might include avoidance of further disturbance to the resource(s) through project redesign. If avoidance is determined to be infeasible, additional data recovery excavations shall be conducted for the resource(s), to collect enough information to exhaust the data potential of those resources.

found during grading and construction activities, the applicant shall notify

Pursuant to CEQA Guidelines Section 15126.4(b)(3)(C), a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Data recovery efforts can range from rapid photographic documentation to extensive excavation depending upon the physical nature of the resource. The degree of effort shall be determined at the discretion of a qualified archaeologist and should be sufficient to recover data considered important to the area's history and/or prehistory.

Significance determinations for tribal cultural resources shall be measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852[a]), and the definition of tribal

cultural resources set forth in Public Resources Code Section 21074 and 5020.1 (k). The evaluation of the tribal cultural resource(s) shall include culturally appropriate temporary and permanent treatment, which may include avoidance of tribal cultural resources, in-place preservation, and/or re-burial on project property so the resource(s) are not subject to further disturbance in perpetuity. Any re-burial shall occur at a location predetermined between the landowner and the appropriate Native American tribe. The landowner shall relinquish ownership of all sacred items, burial goods, and all archaeological artifacts that are found on the project area to the tribe for proper treatment and disposition. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.

The language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision improvement drawings approved by the City for the development of the proposed project site.

V-2

If human remains are discovered during project construction, further disturbance shall not occur within 100 feet of the vicinity of the find(s) until the Yolo County Coroner has made the necessary findings as to origin. (California Health and Safety Code Section 7050.5) Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Yolo County Coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) and the appropriate Native American tribe must be contacted within 24 hours. The NAHC and tribe must then identify the "most likely descendant(s)" (MLD). The landowner shall engage in consultations with the MLD. The MLD shall make recommendations concerning the treatment of the remains within 48 hours, as provided in Public Resources Code 5097.98.

	ENERGY. uld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			*	
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			*	

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations of the proposed project are provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC) that became effective on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board; and
- For some high-rise residential developments, like the proposed project, mandatory on-site solar energy systems. Certain residential developments, including those developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards, which went into effect on January 1, 2020, build upon energy efficiency measures set forth in the 2016 Building Energy Efficiency Standards and are anticipated to result in an additional reduction in energy

consumption from the 2016 standards. For residential buildings, compliance with the 2019 Building Energy Efficiency Standards would use approximately seven percent less energy due to energy efficiency measures compared to residential buildings built under the 2016 Standards. When rooftop solar energy generation is factored in, structures built under the 2019 Standards would use 53 percent less energy than structures under the 2016 Standards.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to meet additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid.

All construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB has recently prepared the *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan),¹¹ which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

California Air Resources Board. The 2017 Climate Change Scoping Plan Update. January 20, 2017.

Operational Energy Use

Historically, electricity and natural gas supplies to the City of Davis have been supplied by PG&E. However, on October 25, 2016, the Davis City Council adopted Resolution Number 16-153, Series 2016, which approved the Joint Exercise of Powers Agreement with Yolo County to form the Valley Clean Energy Alliance, now referred to as Valley Clean Energy (VCE). The resolution adopted by the City, along with similar resolutions adopted by the City of Woodland and Yolo County, led to the formation of the VCE Joint Powers Authority. Beginning in June 2018, the VCE started serving the electricity needs of the cities of Woodland and Davis, as well as unincorporated areas of Yolo County. Customers within the participating areas have the opportunity to continue receiving service from PG&E or to receive energy from VCE. VCE plans to provide energy with a higher renewable content and lower associated GHG emissions than PG&E. While VCE supplies the energy for customers enrolled in the VCE program, VCE electricity is transmitted through PG&E owned and operated distribution and power lines. PG&E will continue to provide natural gas supplies to the City.

Following implementation of the proposed project, PG&E or VCE would provide electricity to the project site. Energy use associated with operation of the proposed project would be typical of multi-family residential uses, requiring electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment.

The proposed residential project would be subject to all relevant provisions of the most recent update of the CBSC, including the 2019 Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, the City of Davis requires compliance with the more stringent Tier 1 Standards of the CALGreen Code. Furthermore, based on the State's Renewable Portfolio Standard (RPS), electricity supplied through PG&E would be generated from increasingly more renewable sources over time. Thus, a portion of the energy consumed during project operations would originate from renewable sources.

The proposed project would also result in transportation energy use associated with vehicle trips generated by the future residents, visitors to the facilities, and site employees. The proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. Most residents would walk, bike, or use public transit for transportation, and are not expected to own single passenger vehicles. Pedestrian infrastructure exists in the project vicinity, and the surrounding streets are safe for cyclists. Therefore, the residents' access to alternative transportation would reduce total VMT and, consequently, fuel consumption associated with the proposed development. The majority of VMT associated with the proposed project would result from employee commutes. Considering there would be a maximum of eight employees commuting to the site, employee VMT would not be considered a significant source of energy consumption.

Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a *less-than-significant* impact would occur.

	GEOLOGY AND SOILS. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			*	
	ii. Strong seismic ground shaking?			*	
	iii. Seismic-related ground failure, including liquefaction?			*	
	iv. Landslides?			*	
b.	Result in substantial soil erosion or the loss of topsoil?			*	
C.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			*	
d.	Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			*	
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				*
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		*		

ai,aii. According to the California Geological Survey Alquist-Priolo Earthquake Fault Zone Maps, the proposed project site is not located within the vicinity of an Alquist-Priolo Earthquake Fault Zone. The City is surrounded by several faults in the San Andreas Fault system to the west, the Eastern Sierra fault system to the east, and a series of faults at the eastern base of the foothills west of the City. Faults, however, do not run directly through the City's planning area, although numerous earthquakes have been felt in the City. Therefore, the proposed infill development would not be at risk for fault rupture impacts or strong seismic ground shaking.

In addition, the project would be designed to comply with all applicable State and local regulations, including the CBSC. The CBSC provides minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBSC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and

City of Davis February 2020

California Department of Conservation. *CGS Information Warehouse: Regulatory Maps.* Available at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed February 2020.

rock on-site, and the strength of ground shaking with specified probability of occurring at a site. Structures built according to the seismic design provisions of the CBSC should be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage but with some nonstructural damage; and 3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that the proposed structure would be survivable, allowing occupants to safely evacuate in the event of a major earthquake.

Based on the above, the proposed project would not expose people and structures to potential substantial adverse effects involving rupture of a known earthquake fault or strong seismic ground-shaking and a *less-than-significant* impact would occur.

aiii,aiv,

c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed in detail below.

Liquefaction

Liquefaction is a phenomenon in which granular material is transformed from a solid state to a liquefied state as a consequence of increased pore-water pressure and reduced effective stress. Increased pore-water pressure is induced by the tendency of granular materials to densify when subjected to cyclic shear stresses associated with earthquakes. Per the California Geologic Survey, the project site is not located within a designated seismic hazard zone for liquefaction.¹³

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The topography of the project site is flat, and the site is not located on or near any slopes. Furthermore, per the California Geologic Survey, the site is not located within a designated seismic hazard zone for landslides.¹⁴

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As discussed above, the project site does not contain any slopes, nor is the site located near any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low.

California Geologic Survey. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 4, 2020.

¹⁴ Ibid.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Given that the proposed project would comply with the CBSC, the potential for subsidence to pose a risk to the proposed development is relatively low.

Conclusion

Based on the above, the proposed project would not be subject to substantial risks related to liquefaction, landslides, lateral spreading, and subsidence/settlement. Compliance with standard construction regulations included in the CBSC would ensure that the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, subsidence, or settlement, and would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site subsidence, liquefaction, or collapse. Thus, a *less-than-significant* impact would occur.

b. The project site is currently developed with an existing homeless shelter. The project site is primarily characterized by impervious surfaces, and construction of the proposed project would involve ground disturbance on a relatively small area. The proposed project would include demolition of the existing building and redevelopment of the site with the new building. During early stages of construction, and prior to overlaying the ground surface with the new structure and other impervious surfaces, the potential exists for wind erosion to occur, which could affect the project area and potentially inadvertently transport eroded soils to downstream drainage facilities.

The City's General Plan identifies policies that provide explicit actions for reducing construction-related water quality impacts, including the erosion of topsoil. ¹⁵ The General Plan policies require the continued application and enforcement of National Pollutant Discharge Elimination System (NPDES) regulations for sites over one acre. Chapter 30.03.010 of City of Davis Municipal Code adopts by reference the standards of the State of California's NPDES General Permit for Stormwater Discharges Associated with Construction Activity (NPDES General Permit No. CAS000002). Given that the proposed project site is under one acre, the project would not be subject to NPDES regulations. Considering the temporary nature of potentially exposed topsoil, and the relatively small surface area of the project, impacts related to soil erosion or the loss of topsoil would be *less than significant*.

d. Expansive soils increase in volume when they absorb water and have the potential to crack or otherwise compromise the integrity of building foundations. Per the City's General Plan, soils within the City have predominantly moderate to high shrink-swell potential. As such, the project site could potentially contain expansive soils. However, the General Plan states that buildout of the City's planning area, including the proposed project site, would have a less-than-significant impact given compliance with applicable General Plan policies, compliance with the CBSC, and implementation of standard

-

City of Davis. Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School [pg. 51-2 to 51-8]. January 2000.

development practices. Therefore, the proposed project would have a *less-than-significant* impact related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.

- e. The existing building is connected to the City's sewer system, and the proposed redeveloped building would connect to the system via the same access point. The proposed project would not require the use of a septic tank or other alternative waste water disposal method. Therefore, *no impact* would occur related to having soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems.
- f. As discussed previously, the project site is already developed and ground disturbance associated with construction would be limited. Consequently, geologic or paleontological resources are not expected to occur. Nonetheless, previously unknown geological or paleontological resources could potentially exist within the project site, and any ground-disturbing activity associated with implementation of the proposed project could have the potential to disturb or destroy such resources. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, and a potentially significant impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VII-1. If any vertebrate bones or teeth are found by the construction crew, the City of Davis Department of Community Development and Sustainability shall be notified and the contractor shall cease all work within 100 feet of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, inspects the discovery. If deemed significant with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., the University of California Museum of Paleontology), where it shall be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision improvement drawings approved for the proposed project site, where excavation work would be required.

	II. GREENHOUSE GAS EMISSIONS. ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		*		
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?		*		

a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macroscale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

A number of regulations currently exist related to GHG emissions, predominantly Assembly Bill (AB) 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. The City of Davis adopted the *Davis Climate Action and Adaptation Plan* (CAAP), which is designed to place the community on a path to achieve GHG emissions reductions targets that were adopted by the City Council in 2008. In addition to emissions reduction targets, the City Council adopted carbon allowances to be applied to new residential developments within the City.

On March 5, 2019, the Davis City Council adopted a resolution declaring a climate emergency, which proposed a regional mobilization effort to reduce the effects of climate change. As part of the regional mobilization effort, the resolution accelerated the City's previously stated CAAP goal of achieving carbon neutrality by the year 2050 to a new carbon neutrality target date of 2040.

Implementation of the proposed project would contribute to the cumulative increase in GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and, to a lesser extent, other GHG pollutants, such as CH_4 and N_2O . Sources of GHG emissions include area sources, utilities (electricity and propane), water usage, wastewater generation, and the generation of solid waste.

The YSAQMD's Handbook for Assessing and Mitigating Air Quality Impacts handbook includes screening methodology and recommended thresholds of significance, including

mass emission thresholds for construction-related and operational criteria pollutants. However, the YSAQMD has not yet established or adopted methodology or thresholds for the assessment of impacts related to GHG emissions. In the absence of District-adopted methodology or thresholds for assessing GHG emissions, the YSAQMD is currently recommending GHG analysis consistent with the Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted thresholds of significance.

While SMAQMD recognizes that emissions from a single project cannot be determined to substantially impact overall GHG emissions levels in the atmosphere, an emissions threshold is useful to trigger further project review and assess mitigation. Projects exceeding SMAQMD's thresholds would constitute the vast majority of GHG emissions, and exceedance of the thresholds would allow for further project review contributing to the emissions reductions goals of AB 32, SB 32, the Scoping Plan, and relevant Executive Orders. SMAQMD has established a threshold for both construction and operational GHG emissions of 1,100 MTCO₂e/yr. However, SMAQMD notes that local City- or County-specific Climate Action Plans or GHG Reduction Plans should be used when applicable.

As noted previously, the City of Davis has adopted a CAAP and recent carbon neutrality goals. The City's CAAP and carbon neutrality goals are primarily focused on long-term operational goals. Consequently, the City has not adopted thresholds or analysis methodologies for GHG emissions from construction activity. Based on SMAQMD's recommendations that emissions be assessed based on local standards where possible, and that SMAQMD's thresholds may be used where local standards do not exist, SMAQMD's thresholds of significance for construction-related emissions will be used.

With regard to long-term operational emissions, the City's CAAP and the recent declaration of a climate emergency will form the basis of the approach to analysis for the project. The City's CAAP established a downward trajectory for GHG emissions in the City, with the eventual emissions target of net carbon neutrality by the year 2050. The City's original goal of net carbon neutrality by the year 2050 was accelerated to the year 2040 by the March 5, 2019 resolution declaring a climate emergency. Achievement of carbon neutrality by the year 2040 would place the City on an emissions reductions trajectory that surpasses the minimum reduction targets previously established by the City, which were based on AB 32, as well as the City's previously adopted desired reductions levels, thus surpassing the emissions reductions goals of the City's CAAP.

Despite the acceleration of the desired date for carbon neutrality, the resolution declaring a climate emergency did not include any updates regarding the anticipated means of achieving carbon neutrality. Consequently, while the City's climate emergency resolution accelerated the City's net carbon neutrality target year from 2050 to 2040, the City's CAAP continues to provide the planning level approach to meeting the City's emissions goals. As stated in Table 1 of the City's CAAP, carbon neutrality by 2050 is a "desired" goal and was anticipated to be achieved by a "combination of actions at the local, regional, national, and international levels and carbon offsets."

Based on the City's understanding of Table 1 of the CAAP, and the City Council's recent actions, the desired goal of carbon neutrality is anticipated to be met through a

Yolo-Solano Air Quality Management District. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.

combination of efforts by developers, the City, regional organizations, the State government, the federal government, and international institutions. Thus, emissions from existing development within the City that were operable at the time the City conducted its GHG inventory in 2008 for the CAAP, can be addressed through actions previously planned by the City's CAAP (i.e., actions taken by the City to encourage citywide reductions of VMT, increased generation of renewable energy within the City, and increased use of alternative vehicle fuels, as well as actions taken by regional organizations, the State government, the federal government, and international institutions). In order to maintain the emissions reductions trajectory anticipated by the CAAP and mandated by the City's climate emergency declaration, redevelopment projects would be required to demonstrate that operations on redeveloped sites would not exceed existing emissions levels associated with the same site. Should redevelopment projects result in increased on-site emissions relative to existing levels, the redevelopment project would be responsible for reducing post-project emissions to a level equal to the existing level of emissions. By ensuring that emissions from redevelopment projects remain at or below existing levels, redevelopment projects would provide a proportionate share of emissions reductions and would not inhibit attainment of citywide net carbon neutrality by the year 2040, nor would the project conflict with the City's CAAP.

Therefore, the proposed project would be considered to conflict with the City's GHG reduction targets, if the project would result in net positive operational GHG emissions by the year 2040.

Construction-Related GHG Emissions

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, construction-related GHG emissions have been estimated for implementation of the project and such emissions have been compared to the identified threshold of significance, as presented in Table 5.

Table 5 Unmitigated Construction-Related GHG Emissions (MTCO₂ <i>e</i> /yr)				
Construction Year Project Emissions				
2020	276.47			
2021	23.83			
Total	300.29			
Applicable Threshold of Significance 1,100				
Source: CalEEMod 2020 (see Appendix).				

Construction-related emissions were modeled using CalEEMod under the assumptions described in Section III, Air Quality, of this Initial Study. As shown in the table, the proposed project's maximum annual construction GHG emissions of 276.47 MTCO₂e/yr would be below the SMAQMD 1,100 MTCO₂e/yr threshold. In addition, even if total construction emissions from both years of construction are considered, the project's total construction-related GHG emissions would be 300.29 MTCO₂e/yr, which remains well below the 1,100 MTCO₂e/yr threshold.

Because the maximum annual and total construction GHG emissions for the project would be below the identified threshold of significance, the proposed project would not be considered to generate construction-related GHG emissions that would have a significant impact on the environment.

Operational GHG Emissions

Operational emissions of both the existing structure as well as the proposed project were modeled using CalEEMod under the assumptions described in Section III, Air Quality, of this Initial Study. In order to provide a direct comparison of emissions resulting from the existing structure to the proposed project, operational emissions of both the existing structure and the proposed project were modeled for the anticipated first year of operations of the proposed project, which was assumed to be 2022. It should be noted that although emissions were modeled in the year 2022, emissions from both the proposed project and the existing development would be less in the year 2040 as a greater proportion of electricity supplied to the site would be sourced from renewable energies due to Statewide requirements of the Renewable Portfolio Standards.

The existing structure was developed in 1948, prior to the advent of modern building codes. Modern building codes, such as the CBSC, require stringent energy, water, and resource efficiency measures. Consequently, the CalEEMod modeling was adjusted to reflect that the proposed structure would operate with a comparatively greater level of efficiency than the existing structure. Thus, the modeling for the proposed project was adjusted to account for increased building design efficiency, while the existing structure was calculated with historic energy use data. Although the existing structure was developed in 1948 and converted to the current use in the 1990s, the earliest date for which CalEEMod includes energy usage is 2005. Therefore, the energy use assumptions applied to CalEEMod for the existing structure reflect energy usage for a structure built to the CBSC that existed in 2005, in practice, the existing structure is likely less efficient than the assumptions made within CalEEMod.

Nevertheless, as discussed above, operational GHG emissions will be held to the standards presented in the Davis CAAP, which has a goal to reach net carbon neutrality by the year 2050. The net carbon emissions resulting from implementation of the proposed project have been quantified and are presented in Table 6.

Table 6 Unmitigated Operational GHG Emissions (MTCO₂ <i>e</i> /yr)					
Emission Source	Proposed Project Emissions	Existing Emissions	Net Emissions		
Area	0.40	0.30	+0.10		
Energy	16.54	21.87	-3.92		
Mobile	41.24	30.93	+10.31		
Solid Waste	10.28	11.01	-0.73		
Water	3.95	3.60	+0.35		
Total Annual GHG Emissions	72.40	67.71	6.11		
Source: CalEEMod 2020 (Source: CalEEMod 2020 (see Appendix).				

As shown in Table 6, the unmitigated net emissions resulting from project implementation would be 6.11 MTCO₂e/yr, and, thus, the project would not achieve the

City's goal of carbon neutrality. Although the potential impacts of the project are judged against the City's goal of net carbon neutrality by the year 2050, it is important to note that the nearby SMAQMD uses an emissions threshold of 1,100 MTCO₂e/yr. Compared to such a threshold, the proposed project's total or net emissions are well below the level that would be considered significant. Nevertheless, the generation of positive net emissions indicates that the proposed project could result in a conflict with the City's CAAP and resolution declaring a climate emergency. Consequently, the proposed project would result in a potentially significant impact.

Conclusion

Because implementation of the proposed project would result in construction-related GHG emissions below the applicable threshold of significance of 1,100 MTCO₂e/yr, the project would not be considered to generate GHG emissions, directly or indirectly, that would have a significant impact on the environment during project construction. However, as discussed above, the project's operational emissions would exceed the City's goal of net carbon neutrality by the year 2050, and the proposed project could result in a *potentially significant* impact related to the long-term operational emissions of GHGs.

Mitigation Measure(s)

According to the 2009 CA Residential Appliance Saturation Study, 86 percent of household natural gas usage is from water and space heating. To the 16.54 MTCO₂e/yr from expected energy consumption in the proposed project, 13.31 MTCO₂e/yr can be attributed to natural gas. By replacing natural gas water and space heating with electric devices, emissions would be reduced by 11.45 MTCO₂e/yr. Table 7 presents the mitigated operational GHG emissions when electric water and space heating is used.

Table 7 Mitigated Operational GHG Emissions (MTCO₂ <i>e</i> /yr)				
Emission Source	Proposed Project Emissions	Existing Emissions	Net Emissions	
Area	0.40	0.30	+0.10	
Energy	5.09	21.87	-16.78	
Mobile	41.24	30.93	+10.31	
Solid Waste	10.28	11.01	-0.73	
Water	3.95	3.60	+0.35	
Total Annual GHG Emissions	72.40	67.71	-6.75	
Source: CalEEMod 2020 (S	see Appendix).			

As seen in the table, with implementation of the following mitigation measure, net carbon neutrality would be achieved. Therefore, implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

VIII-1. Prior to the issuance of building permits, the project applicant/developer shall demonstrate, to the satisfaction of the City, the incorporation of all-

¹⁷ California Energy Commission. 2009 California Residential Appliance Saturation Study. October 2010.

electric (no natural gas) water and space heaters into project Improvement Plans for review and approval by the City Engineer.

	HAZARDS AND HAZARDOUS MATERIALS. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			*	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?		*		
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			*	
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				*
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			*	
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			*	
g.	Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?				*

a. Hazardous materials would be stored, used, and transported in varying amounts during construction of the proposed project. Construction activities associated with the proposed project would involve use of various products such as concrete, paints, and adhesives, as well as operation of heavy equipment, which would contain fuels and oils. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local City and County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Compliance with such regulations would ensure that the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment during construction activities.

Operation of the proposed project would involve residential uses. Hazardous materials that would be stored, used, and transported to the project site to support the long-term use would include limited amounts of commercial and household-type maintenance products, such as cleaning agents and degreasers, paints, and pesticides and herbicides. Proper handling and usage of the aforementioned materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result.

Based on the above, the project would have a *less-than-significant* impact with respect to creating a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials or the location of the project on a hazardous materials site.

b. Per the State Water Resources Control Board GeoTracker data management system, hazardous materials sites, including leaking underground storage tank (LUST) sites and Department of Toxic Substances Control (DTSC) cleanup sites, have not been identified within a 1,000-foot radius of the project area. However, construction of the existing building occurred prior to 1978, and thus, the potential exists for asbestos containing materials (ACMs) and lead-based paint (LBP) to be present within the building. Further discussion of such potential hazards is provided below.

Asbestos-Containing Materials and Lead-Based Paint

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be "fibrous" and, through processing, can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. They are also long, thin, and flexible, such that they can be woven into cloth. Because of the above qualities, asbestos was considered an ideal product and has been used in thousands of consumer, industrial, maritime, automotive, scientific, and building products. However, later discoveries found that, when inhaled, the material caused serious illness.

For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as "presumed asbestos-containing material" unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. Because the existing onsite structure was built in 1948, the potential exists that ACMs were used in the construction of the building.

LBP is defined by federal guidelines as any paint, varnish, stain, or other applied coating that has one milligram of lead per square centimeter or greater. Lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. In buildings constructed after 1978, the presence of LBP is unlikely. Structures built prior to 1978 are expected to contain LBP. The existing on-site structure was constructed before the phase-out of LBP in the 1970s. Therefore, the potential exists that LBP is present in the building.

Based on the age of the existing on-site building, ACMs and LBP are presumed to be present. The proposed project would include demolition of the structure. Therefore, without implementation of the appropriate safety measures, the proposed project could potentially expose construction workers during structure demolition to LBP and ACMs.

State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/. Accessed February 12, 2020.

Conclusion

Based on the above, the proposed infill project site is not located in the vicinity of any identified hazardous materials sites that could pose a risk to future residents of the proposed project. However, development of the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, particularly associated with ACMs and LBP. Therefore, a **potentially significant** impact would occur.

Mitigation Measures

Implementation of the following mitigation measures would reduce the above impact to a less-than-significant level.

VIII-1

Prior to issuance of a demolition permit by the City for the existing on-site structure, the project applicant shall provide a site assessment that determines whether the structure contains asbestos. If the structure does not contain asbestos, further mitigation is not required. If asbestoscontaining materials are detected, the applicant shall prepare and implement an asbestos abatement plan consistent with federal, State, and local standards, subject to approval by the City Engineer, City Building Official, and the Yolo-Solano Air Quality Management District.

Implementation of the asbestos abatement plan shall include the removal and disposal of the asbestos-containing materials by a licensed and certified asbestos removal contractor, in accordance with local, State, and federal regulations. In addition, the demolition contractor shall be informed that all building materials shall be considered as containing asbestos. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing asbestos in accordance with local, State, and federal regulations subject to approval by the City Engineer, City Building Official, and the Yolo-Solano Air Quality Management District.

VIII-2

Prior to issuance of a demolition permit by the City for the existing on-site structure, the project applicant shall provide a site assessment that determines whether the structure contains lead-based paint. If the structure does not contain lead-based paint, further mitigation is not required. If lead-based paint is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with federal, State, and local regulations. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to approval by the City Engineer.

c. The nearest schools relative to the proposed project site are Discovery Preschool and Little Friends Montessori School, located approximately 250 feet and 200 feet, respectively, west of the site. As discussed above, the proposed project would not

involve the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials. Therefore, a *less-than-significant* impact would occur associated with the handling of hazardous materials within 0.25-mile of a school.

- d. Based on a search of the DTSC's Envirostor database, the project site is not near any hazardous waste and substances sites identified on the Cortese List. 19 Therefore, the proposed would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, a *no impact* would occur.
- e. The proposed project is located approximately 2.8 miles northeast of UC Davis's University Airport, which is operated as a general aviation airport and is open to the public. The University Airport does not have an airport land use plan. However, University Airport Rules and Regulations have been established to protect health, safety, and peace and to provide for the orderly conduct of activities on the Airport site. In addition, the Airport Layout Plan for the University Airport includes clearance heights necessary for operations at the airport. According to the Airport Layout Plan, a total clear space of approximately 240 vertical feet is needed at a distance of approximately one mile. ²⁰

Given that the project site is 2.8 miles away from University Airport, the clearance height needed would be higher than 240 vertical feet. For every 20 horizontal feet a plane travels, one additional foot of vertical height is needed. Therefore, the clearance height at the project site would be approximately 715 feet at a distance of 2.8 miles. The tallest point of the proposed building would be 41 feet, 10 inches in height, which is well below the necessary 240 vertical feet of clearance at one mile and 715 feet at 2.8 miles. As a result, the proposed project would not introduce any obstructions to the necessary airport clear space, and a safety hazard for people residing or working in the project area would not occur due to development of the proposed project. Therefore, impacts related to safety hazards associated with airport operations would be *less than significant*.

f. According to the City's General Plan, the City of Davis Multi-Hazard Functional Planning Guide states that all major roads are available for emergency evacuation routes in the event of a disaster, depending on the location and type of emergency that arises. Major roads identified for evacuation include Russell Boulevard, State Route (SR) 113, Interstate 80 (I-80), Richards Boulevard, County Road (CR) 102/Pole Line Road, Mace Boulevard southbound, CR 32A, Covell Boulevard/CR 31, "F" Street/CR 101A, and North Sycamore Frontage Road.

The proposed project does not involve any operations or changes to the existing roadway network that would impair implementation or physically interfere with the City's Multi-Hazard Functional Planning Guide or the County's Emergency Operations Plan or Multi-Hazard Mitigation Plan (MHMP). Construction activities are not expected to affect any of the identified evacuation routes. Therefore, the project would have a *less-than-*

Department of Toxic Substances Control. EnviroStor: Hazardous Waste and Substances Site List. Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS &status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTES E%29. Accessed: February 3, 2020.

Wadell Engineering Corporation. Airport Layout Plan University Airport, A University of California Aviation Facility, Davis, California, FAA AIP Project No. 3-06-0059-04. December 2006.

significant impact with respect to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS/MND. As noted therein, the project site is not located within or near a Very High Fire Hazard Severity Zone.²¹ The project site is located in an urban area and is bordered by residential development to the north, south, and west, and bounded by California Northern rail line tracks to the east. As such, wildlands that could be subject to wildfire do not exist in proximity to the project site. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and *no impact* would occur.

City of Davis 50 Paul's Place February 2020 Initial Study

California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2007.

X. Wo	HYDRO	DLOGY AND WATER QUALITY. project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	discharg degrade	any water quality standards or waste ge requirements or otherwise substantially surface or ground water quality?			*	
b.	interfere such tha	tially decrease groundwater supplies or substantially with groundwater recharge at the project may impede sustainable vater management of the basin?			*	
C.	the site of the cours	tially alter the existing drainage pattern of or area, including through the alteration of se of a stream or river or through the of impervious surfaces, in a manner which				
		Result in substantial erosion or siltation on- or off-site;			*	
		Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			*	
		Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			*	
		Impede or redirect flood flows?		*		
d.	release	hazard, tsunami, or seiche zones, risk of pollutants due to project inundation? with or obstruct implementation of a water				*
e.	quality c	ontrol plan or sustainable groundwater ment plan?				*

a,ci-ciii.

The proposed project's potential to result in water quality impacts and changes to drainage patterns during construction and operations is discussed in further detail separately below.

Construction

The proposed project would include ground-disturbing construction activities that would result in temporary topsoil exposure. During such stages of construction, and prior to overlaying the ground surface with structures and impervious surfaces, the potential exists for wind erosion to occur, which could affect the project area and potentially inadvertently transport eroded soils to downstream drainage facilities. However, the project site is already predominantly impervious, and construction of the proposed project would involve ground disturbance on a relatively small area.

The SWRCB regulates stormwater discharges associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. In addition, Chapter 30.03.010 of City of Davis Municipal Code adopts by reference the standards of the State of California's NPDES General Permit for Stormwater Discharges Associated with Construction Activity (NPDES General Permit No. CAS000002). Given that the proposed project would disturb less than one acre of

land, the proposed construction activities would not be subject to applicable SWRCB regulations. However, the project applicant would be required to submit and implement an erosion and sediment control plan prior to issuance of a grading or building permit pursuant to Municipal Code Section 30.03.010(c). Therefore, due to the limited size of the disturbance area and the mandated sediment control plan, the project would not violate any water quality standards or water discharge requirements during construction.

Operation

After project completion, impervious surfaces on the project site could contribute incrementally to the degradation of downstream water quality during storm events. Currently, the project site includes approximately 2,800 sf of impervious surfaces associated with the existing building and driveway. Upon implementation of the proposed project, the project site would include a total of approximately 4,936 sf of impervious surfaces, including building roofs, overhangs, and paved areas.

Section E.12.b.(i) of the SWCRB Phase II Small MS4 General Permit states that projects that create and/or replace between 2,500 sf and 5,000 sf of impervious surfaces are only required to implement site design measures for runoff control and treatment. Because the proposed project would result in a total impervious surface area of 4,936 sf, the project would be required to implement site design measures consistent with Section E.12.b.(ii), which require implementation of one or more of the following:

- (a) Stream Setbacks and Buffers a vegetated area including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake reservoir, or coastal estuarine area;
- (b) Soil Quality Improvement and Maintenance improvement and maintenance soil through soil amendments and creation of microbial community;
- (c) Tree Planting and Preservation planting and preservation of healthy, established trees that include both evergreens and deciduous, as applicable;
- (d) Rooftop and Impervious Area Disconnection rerouting of rooftop drainage pipes to drain rainwater to rain barrels, cisterns, or permeable areas instead of the storm sewer; (e) Porous Pavement - pavement that allows runoff to pass through it, thereby reducing the runoff from a site and surrounding areas and filtering pollutants;
- (f) Green Roofs a vegetative layer grown on a roof (rooftop garden);
- (g) Vegetated Swales a vegetated, open-channel management practice designed specifically to treat and attenuate storm water runoff;
- (h) Rain Barrels and Cisterns system that collects rainwater.

The proposed project's design features include rainwater catchment to store water, tree planting and preservation, and porous pavement. Any excess runoff would drain into the existing stormwater infrastructure in the project vicinity. As such, the project would comply with applicable SWRCB standards during operations. In addition, redevelopment of the site would increase the total amount of on-site impervious surfaces by approximately 2,100 sf. Therefore, with implementation of the site design features consistent with the Permit, the proposed project would not substantially increase stormwater runoff relative to existing conditions.

Conclusion

Construction and operations of the proposed project would not substantially degrade water quality standards nor significantly alter the existing drainage pattern of the site or area. As a result, the project would have a *less-than-significant* impact to water quality and drainage.

b,e. The City of Davis' groundwater is derived from the Yolo Subbasin, which is part of the Sacramento Valley Groundwater Basin. ²² In June 2016, the City of Davis began receiving treated surface water through the Woodland Davis Clean Water Agency (WDCWA) at an amount of approximately 10.2 million gallons per day (mgd) to reduce the City's reliance on groundwater and deep aquifer wells. The City plans to maximize surface water use by routinely using the surface water supply as a base load and using the deep aquifer wells as a supplemental supply during the summer when demands would exceed the surface water supply capacity. ²³ Given that the majority of the City's water supplies are provided by surface water sources, and the relatively small size of the proposed project, increases in water demand associated with the proposed project would not be anticipated to substantially deplete groundwater supplies.

The proposed project would involve the demolition and redevelopment of the existing onsite building. Considering the site is currently developed with impervious surfaces, and the small size of the proposed project, implementation of the proposed project would not result in the creation of substantially large amounts of impervious surfaces with the potential to decrease the amount of groundwater recharge from the site. In addition, some of the paved surfaces on-site would be permeable, and allow for continued percolate and groundwater recharge. Therefore, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

Based on the above, the proposed project would not substantially interfere with groundwater supply or recharge, nor would the project conflict with any applicable groundwater management plans. Thus, a *less-than-significant* impact would occur

civ. According to the Yolo County Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Map Number 06113C0611G, the proposed project site is located within Flood Hazard Zone AH, which is described by FEMA as an area of Special Flood Hazard subject to inundation by a 100-year flood where average depths are between one and three feet. The current base flood elevation (BFE) at the project site is identified at 44 feet. Based upon more recent data, the BFE has been identified by the City as 41.75 feet. A Letter of Map Revision (LOMR) is currently being processed to accurately reflect the BFE on the FEMA FIRM. For flood protection purposes, the proposed building would be designed with the first floor above 42 feet. Without FEMA approval, the proposed project could result in a **potentially significant** impact related to flood flows.

-

²² City of Davis. Public Draft 2015 Urban Water Management Plan. May 2016.

Woodland – Davis Clean Water Agency. The Project. Available at: https://www.wdcwa.com/project-overview/ Accessed February 2020.

²⁴ Federal Emergency Management Agency. *Flood Insurance Rate Map Number 06113C0611G.* June 18, 2010.

Mitigation Measures

Implementation of the following mitigation measure would reduce the above impact to a less-than-significant level.

- XI-1 Prior to City acceptance of project improvements as complete, a copy of the Letter of Map Revision (LOMR) from FEMA shall be provided to the Public Works Department.
- d. A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, which has a destructive capacity that is lesser than that of tsunamis. Seiches are known to have occurred during earthquakes. Tsunamis are defined as sea waves created by undersea fault movement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches a shoreline, a high swell of water breaks and washes inland with great force. Waves may reach fifty feet in height on unprotected coasts. Furthermore, mudflow typically occurs in mountainous or hilly terrain. As the City of Davis is not located near waters subject to tidal changes, closed bodies of water, or hilly or mountainous terrain, the proposed project would not pose a risk related to the release of pollutants due to project inundation due to flooding, tsunami, or seiche, and *no impact* would occur.

	LAND USE AND PLANNING. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Physically divide an established community?			*	
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			*	

- a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community, or isolate an existing land use. The proposed project would involve redevelopment of the project site with an improved residential building, and is considered to be an infill development. The project site is currently developed with a 2,800-sf resource center and transitional housing facility owned and operated by Davis Community Meals and Housing. The site is bordered by H Street and the California Northern rail line tracks to the east, 11th Street to the south, Park Terrace Apartments to the west, and Academy Lane Apartments to the north. The proposed project would not result in the addition of any roadways or structures with the potential to divide an existing community. Therefore, the proposed project would not physically divide an established community and a *less-than-significant* impact would occur.
- b. Per the City's General Plan, the proposed project site is currently designated Residential Medium High Density, and the site is zoned Residential Garden Apartment (R-3-M). The proposed project is consistent with the standards for a Residential Medium High Density land use designation. However, the proposed project would require a rezone of the project site from R-3-M to Preliminary Planned Development (P-D). The Davis Municipal Code defines allowable R-3 land uses as single-family or multiple-family dwellings, agriculture, family and group care homes, supportive housing, and transitional housing. P-D zoning allows more flexible land uses and standards, and is often used to define districts that include the development of housing for low-income persons and residential developments with a mix of housing styles, such as those included in the proposed project. Upon approval of the requested rezone, the project would not conflict with any applicable land use plans.

In addition, the proposed project would be generally consistent with General Plan policies and other applicable policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect. For example, the proposed project would comply with the City of Davis General Plan Noise Element. Additionally, as discussed in Section IV, Biological Resources, the proposed project would comply with Chapter 37, Tree Planting, Preservation, and Protection, of the City's Municipal Code.

Based on the above, the proposed project would not cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purposed of avoiding or mitigating an environmental effect. Therefore, impacts would be *less-than-significant*.

	. MINERAL RESOURCES. buld the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				*
b.	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				*

a,b. The most important mineral resources in the region are sand and gravel, which are mined on Cache Creek and other channels in Yolo County. A survey of aggregate resources by the State Division of Mines and Geology showed that significant deposits of aggregate resources are not located in the City of Davis Planning Area. The only mineral resource known to exist in the City's Planning area is natural gas; however, specific resource areas have not been identified. General Plan policies provide for minimizing resource exploitation. Because of the lack of mineral resources in the Planning Area, *no impact* to mineral resources would occur and further analysis is not required.

	I. NOISE. ould the project result in:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			*	
b.	Generation of excessive groundborne vibration or groundborne noise levels?		*		
C.	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			*	

a. The following section includes a discussion of the sensitive receptors in the project area, and the potential impacts related to construction, traffic, and non-transportation noise sources associated with the proposed project.

Sensitive Noise Receptors

Sensitive receptors to noise include residential areas, schools, churches, nursing homes/senior housing, hospitals, libraries, and childcare facilities. The nearest sensitive receptors would be the single-family residence located approximately 20 feet south of the project site, as well as the apartment buildings to the north and west which are both approximately 25 feet away from the site.

Construction Noise

Construction activities associated with development of the project site would result in temporarily increased noise levels. Construction noise from site development would include mechanical equipment such as earthmovers, dump trucks, and similar equipment during the delivery of construction materials, construction/redevelopment of foundations, framing, roofing, and similar operations. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. According to the Federal Highway Administration, activities involved in construction typically generate maximum noise levels ranging from 84 to 98 dBA L_{max} at a distance of 20 feet.²⁵

Construction activity would occur over a relatively short period of time and would be anticipated to occur during normal daytime hours, consistent with Chapter 24.02.040 of the Davis Municipal Code, which states that construction noise levels are exempt between the hours of 7:00 AM and 7:00 PM Monday through Friday and between the hours of 8:00 AM to 8:00 PM on Saturdays and Sundays if they meet at least one of the following noise limitations:

1. No individual piece of equipment shall produce a noise level exceeding eightythree dBA at a distance of twenty-five feet. If the device is housed within a

Federal Highway Administration. Roadway Construction Noise Model User's Guide. January 2006.

- structure on the property, the measurement shall be made outside the structure at a distance as close to twenty feet from the equipment as possible.
- 2. The noise level at any point outside of the property plane of the project shall not exceed eighty-six dBA.
- 3. The provisions of subdivisions (1) and (2) of this subsection shall not be applicable to impact tools and equipment; provided, that such impact tools and equipment shall have intake and exhaust mufflers recommended by manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation, and that pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the director of public works as best accomplishing maximum noise attenuation. In the absence of manufacturer's recommendations, the director of public works may prescribe such means of accomplishing maximum noise attenuation as he or she may determine to be in the public interest. Construction projects located more than two hundred feet from existing homes may request a special use permit to begin work at 6:00 a.m. on weekdays from June 15th until September 1st. No percussion type tools (such as ramsets or jackhammers) can be used before 7:00 a.m. The permit shall be revoked if any noise complaint is received by the police department.
- 4. No individual powered blower shall produce a noise level exceeding seventy dBA measured at a distance of fifty feet.
- 5. No powered blower shall be operated within one hundred feet radius of another powered blower simultaneously.
- 6. On single-family residential property, the seventy dBA at fifty feet restriction shall not apply if operated for less than ten minutes per occurrence.

The proposed project would be required to comply with the standards listed above, which would ensure that construction noise levels at the nearest sensitive receptors would be minimized to the maximum extent feasible. Thus, construction noise associated with the proposed project would not be considered to generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the noise ordinance.

Traffic Noise

As discussed in Section XVI, Transportation, of this IS/MND, the proposed project would only include four parking spaces for staff members. Given the nature of the proposed project, the majority of the residents would bike or walk as the primary modes of transportation. Therefore, trip generation associated with the proposed project would be relatively low compared to existing traffic volumes in the area. The existing on-site facility generates approximately 24 average daily trips. With redevelopment of the project site, the proposed project is expected to generate approximately 32 average daily trips. As such, implementation of the proposed project would result in a net increase of eight daily trips, which would not be sufficient to cause any perceptible increase in ambient noise levels.

Non-Transportation Noise

For stationary noise sources, Section 24 of the City's Municipal Code establishes a maximum noise level standard of 55 dB during the hours of 7:00 AM to 9:00 PM, and 50 dB during the hours of 9:00 PM to 7:00 AM. The proposed project would not include

loading dock operations or frequent use of noise-generating industrial equipment, such as forklifts. Noise-generating operations associated with the proposed project would primarily consist of landscaping maintenance and heating, ventilation, and air conditioning (HVAC) systems, typical of other existing residential development in the project vicinity.

Per Section 24.02.040 of the City's Municipal Code, air conditioners and similar equipment are exempt from the City's Noise Ordinance as long as they are in normal working order. Landscaping equipment use is subject to the same provisions as construction equipment, and is exempt from the Noise Ordinance when used between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and between the hours of 8:00 AM to 8:00 PM on Saturdays and Sundays. Considering the project HVAC systems would be in working order, and landscaping would occur in compliance with the restrictions established by the City's Noise Ordinance, stationary noise sources associated with the proposed project would not substantially increase noise levels from what currently exists in the project area and would not cause noise levels at the neighboring receptors to exceed the City's stationary noise source standards.

Conclusion

Based on the above, construction and operations of the proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the City's General Plan or Municipal Code. Therefore, impacts would be considered *less than significant*.

b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception, as well as damage to structures have been developed for vibration levels defined in terms of PPV.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 8, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures. As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any operations that would generate substantial groundborne vibration. Although noise and vibration associated with construction of the project would add to the noise and vibration environment in the immediate project vicinity, construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours, consistent with Section 24.02.040 of the Municipal

Code. Because the proposed project would not cause continuous, long-term vibrations, the project would not be expected to result in extended annoyance to the nearby sensitive receptors.

	Table 8 Effects of Vibration on People and Buildings				
PI	PV	tis of vibration on People ar	la Bullaings		
in/sec mm/sec		Human Reaction	Effect on Buildings		
0.15 to	0.006 to	Threshold of perception;	Vibrations unlikely to cause		
0.30	0.019	possibility of intrusion	damage of any type		
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected		
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings		
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage		
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage		

Table 9 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with construction activities is the use of vibratory compactors. Use of vibratory compactors/rollers may be required during construction of the proposed on-site parking area, a portion of which would be located approximately 20 feet from the existing residential structure to the north of the site.

Table 9 Vibration Levels for Various Construction Equipment						
Type of Equipment PPV at 25 feet (in/sec) PPV at 50 feet (in/sec)						
Large Bulldozer	0.089	0.029				
Loaded Trucks	0.076	0.025				
Small Bulldozer	0.003	0.000				
Auger/drill Rigs	0.089	0.029				
Jackhammer	0.035	0.011				
Vibratory Hammer	0.070	0.023				
Vibratory Compactor/roller	0.210	0.070				

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

Based on the above, the potential use of vibratory compactors/rollers during construction activities could expose people to or generate excessive groundborne vibration or groundborne noise levels, and impacts could be **potentially significant**.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- XIII-1. During construction activities associated with the proposed project, any compaction required within 50 feet of existing structures adjacent to the project site shall be accomplished by using static drum rollers rather than vibratory compactors. The above requirement shall be included via notation on any grading plans approved for the project to the satisfaction of the City of Davis Department of Community Development and Sustainability.
- c. The nearest airport to the project site is University Airport, located approximately 2.8 miles southwest of the site. The airport is used almost exclusively for flight training and for infrequent, short-duration operations. In addition, University Airport does not have an adopted land use plan. Given that the project site is not located within two miles of a public or private airport, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airports. Thus, a *less-than-significant* impact would occur.

XIV. POPULATION AND HOUSING. Would the project:		Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?			*	
b.	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			*	

a. The proposed project would involve the development of a new multi-functional homeless services facility with 18 permanent supportive micro-housing units, 10 transitional housing units, and four emergency shelter beds. The future tenants at the project would be previously homeless, likely from within the Davis area. Furthermore, the project site consists of an existing homeless facility, which provides shelter for up to 12 persons, with 10 transitional housing beds and two emergency shelter beds. The proposed project would house a maximum of 32 residents, resulting in a population increase of 20 individuals. As such, the proposed project would not be expected to increase population in a manner that is substantially greater than what currently exists.

Based on the above, the proposed project would not contribute to population growth, but, rather, would continue to help relocate homeless individuals already in the area. Therefore, development of the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a *less-than-significant* impact would occur.

b. As discussed above, the project site is currently developed with an existing homeless facility. The proposed project would include demolition of the existing facility to construct a new facility. Although the individuals that currently reside in the facility would be displaced, the displacement would be short-term and temporary in nature. In addition, the current facility does not provide permanent housing, but rather 'temporary' support. Thereby, individual tenants vary regularly, and displacement during construction would not remove the 12 individuals from a long-term, permanent housing situation. During construction of the new facility, residents of the existing transitional housing program would be relocated to the adjacent duplex located at 1101 H Street, which has been purchased by the City. The resource center would also be temporarily relocated. Additionally, other homeless facilities exist in the City of Davis that could help house the displaced individuals and provide services until the new facility is constructed. In addition, the proposed project would increase the number of housing options for the homeless, providing more housing in general. Therefore, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, and a less-than-significant would occur.

Wo phy or p nev cor env acc	PUBLIC SERVICES. Sould the project result in substantial adverse exical impacts associated with the provision of new physically altered governmental facilities, need for exercise or or physically altered governmental facilities, the instruction of which could cause significant exironmental impacts, in order to maintain ceptable service ratios, response times or other formance objectives for any of the public services:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Fire protection?			*	
b.	Police protection?			*	
C.	Schools?			*	
d.	Parks?			*	
e.	Other Public Facilities?			*	

a-e. The project site is located within the jurisdiction of the Davis Fire Department, Davis Police Department, and Davis Joint Unified School District. Several public parks exist in the vicinity of the project site, and the proposed project includes outdoor recreation areas. The proposed project would increase residents on the project site by 20 individuals. The project site is currently developed, and therefore, currently served by the same public service providers. As such, the demand on fire, police, school, and park services would nominally increase to serve the additional 20 residents.

The structure would be designed in compliance with all applicable provisions of the California Fire Code, and would include security features such as outdoor lighting to reduce the likelihood of crime. The City of Davis has adopted citywide development impact fees, and the development review process for the proposed project would include the payment of any necessary fees to mitigate potential impacts to public services.²⁶

The increase in 20 residents would not be substantial such that acceptable service ratio, response times, or other services cannot be met by existing resources or facilities and construction of such facilities would not be necessary. Furthermore, increases in demand for public services at the project site would be similar to what has been anticipated in the General Plan. Therefore, the proposed project would not result in a need for new, or improvements to existing public services, the construction of which could cause significant environmental impacts; as a result, a *less-than-significant* impact would occur.

_

²⁶ City of Davis. *Fee Schedule*. Available at: http://cityofdavis.org/city-hall/finance/fee-schedules. Accessed June 2018.

	VI.RECREATION. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			*	
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			*	

a,b. As discussed in questions d and e of Section XV, Public Services, the proposed project would include the construction of on-site recreational facilities, including outdoor activity areas, a community garden bed, and indoor lobby and family room that would provide space for recreational opportunities for residents. Based on the number of beds, the proposed project is intended to increase the local population by 20 people, from the 12 current residents to 32 residents. An increase in 20 people is not substantial, and deterioration of recreational facilities would not occur nor be accelerated. Furthermore, the 20 individuals are expected to be homeless and already located in the area and potentially using the regional parks and public recreational facilities. Nonetheless, the City of Davis collects impact fees from new developments for recreation facilities, which the proposed project would be required to pay. Assuming payment of the required park impact fees, the impact of the increased population on the parkland ratio would be considered *less than significant*.

	II. TRANSPORTATION AND CIRCULATION. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?		*		
b.	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			*	
C.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			*	
d.	Result in inadequate emergency access?			*	

a. During construction, a temporary increase in traffic along H Street and 11th Street would occur due to trucks transporting materials to and from the project site and construction employees commuting to the site. However, construction of the proposed facility would be relatively short-term compared to the lifetime of the proposed project, as construction is anticipated to occur over approximately one year. The total number of vehicle trips during construction would be relatively few, and local roadways have adequate capacity to support the small increase in traffic. However, project construction activities would disrupt vehicle, pedestrian, bicycle, and emergency vehicle access to and from adjacent uses during construction. Therefore, construction activities associated with the proposed project would cause a significant impact to the surrounding transportation system.

During operations, staff of the proposed shelter would likely drive to the project site. However, a maximum of six employees and two volunteers are expected to be on-site at any given time. Assuming all eight workers had four daily trips (to account for driving to and from the site, and into town for their lunch break), a total of 32 daily trips could be expected. Compared to the assumed 24 daily trips associated with the existing building, the net increase of eight daily trips would be considered a negligible increase in traffic on local roadways relative to existing conditions.

With regard to other modes of transit available in the project area, the F Street at 11th Street Yolobus stop is located 400 feet west of the project site, and the F Street and 12th Street Unitrans stop is approximately 350 feet northwest of the project site. As such, in compliance with General Plan Policy TRANS 1.2, public transit access is available in the project vicinity. While marked bike lanes do not exist along H Street, vehicle speeds along H Street are relatively slow and the street is considered bikeable. Sidewalks exist on both sides of H Street and 11th Street. Policy TRANS 1.6 of the General Plan encourages the use of non-motorized transportation systems. Accordingly, the availability of public transit, bikeable roads, and sidewalks would contribute to a decreased demand for individual vehicle use. The target population for the proposed project is expected to have a relatively low single-occupant motor vehicle use ratio. As a result, a substantial increase in vehicular traffic is not anticipated during operations of the proposed project. As such, operations of the proposed project are not anticipated to conflict with local transportation systems.

Based on the above, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and

pedestrian facilities during operations. However, during construction activities, a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

XVII-1 Before commencement of any construction activities for the project site, the project applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval by the City Department of Public Works. The Plan shall ensure that acceptable operating conditions on local roadways are maintained during construction. At a minimum, the

Plan shall include:

- The number of truck trips, time, and day of street closures;
- Time of day of arrival and departure of trucks;
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting;
- Provision of a truck circulation pattern;
- Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas);
- Maintain safe and efficient access routes for emergency vehicles;
- Manual traffic control when necessary;
- Proper advance warning and posted signage concerning street closures; and
- Provisions for bicycle, pedestrian, and transit access and safety.

A copy of the Construction Traffic Control Plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Per Section 15064.3(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, the method of analysis does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving. While a qualitative discussion of VMT has been provided below, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VTM is not required Statewide until July 1, 2020.

As discussed in question (a), vehicle trips associated with construction would include transporting materials to the project site along with employee commutes. Construction of the proposed facility would be relatively short-term compared to the lifetime of the

proposed development. Due to the temporary nature of construction, the small increase in VMT would not cause a substantial impact to transportation.

VMT during project operations would increase primarily due to visitors and staff members commuting to the project site. Residents of the proposed shelter are not anticipated to significantly contribute to overall VMT, as most of the future residents are expected to rely on bicycles and public transit as the primary modes of transportation. Because the future resident car ownership is expected to be low, the use of single-passenger vehicles and associated VMT would be low.

Based on the above, impacts to transportation are not expected to be substantial, and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Thus, a *less-than-significant* impact would occur.

- c. The proposed project would not include any design features that would affect traffic safety, nor cause incompatible uses to be present on local roads. Construction of new public roads is not proposed as part of the project, and a significant increase in traffic is not projected during project construction or operations. Significant adverse impacts related to roadway design features or incompatible uses would not result from implementation of the proposed project, and *less-than-significant* would occur.
- d. With implementation of Mitigation Measure XVII-1, during project construction, public roads in the vicinity would remain open and available for use by emergency vehicles and other traffic. The project site would be accessible along the H Street frontage by way of the entrance driveway from H Street, and the driveway would be wide enough to accommodate emergency vehicles. Therefore, the proposed project would not result in inadequate emergency access to the project area nor result in any road closures, and a less-than-significant impact to emergency access would occur.

ΧV	III. TRIBAL CULTURAL RESOURCES.				
cha res sed cul in t sad	ould the project cause a substantial adverse ange in the significance of a tribal cultural cource, defined in Public Resources Code action 21074 as either a site, feature, place, tural landscape that is geographically defined terms of the size and scope of the landscape, ared place, or object with cultural value to a lifornia Native American Tribe, and that is:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).		*		
b.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		×		

a,b. Pursuant to Public Resources Code section 21080.3.1, formal notification of the City's consideration of the proposed project and preparation of the environmental document was provided to the applicable California Native American tribes, consisting of the Ione Band of Miwok Indians, the Yocha Dehe Wintun Nation, and the Cortina Band of Indians. A request for consultation was not received.

As discussed in Section V, Cultural Resources, of this IS/MND, known cultural resources have been identified in the area north of the project site and, thus, previously unknown cultural resources could potentially occur on-site. Because the possibility exists that disturbance resulting from construction of the proposed project could result in an adverse change in the significance of a Tribal Cultural Resource, if a previously unknown Tribal Cultural Resource is uncovered during ground-disturbing activities on the site, a **potentially significant** impact to Tribal Cultural Resources could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a less-than-significant level.

XVIII-1. Implement Mitigation Measures V-1 and V-2.

	C.UTILITIES AND SERVICE SYSTEMS. ould the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			*	
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			*	
C.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			*	
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			*	
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			*	

a-e. The proposed project would involve redevelopment of the project site, which would increase the number of on-site residents by 20 individuals. The project site is currently developed, and is being served by utility providers, and an increase in 20 residents is not considered substantial considering the scale of the City. However, a brief discussion of water, wastewater, stormwater, solid waste, and other utilities is included below.

Water

Prior to 2016, the City of Davis relied solely on groundwater for all drinking water supply. In 2009, the Cities of Woodland and Davis partnered to form the Woodland-Davis Clean Water Agency to develop a new water supply from the Sacramento River. Currently, approximately 6.5 million gallons of water are diverted from the Sacramento River to Davis each day.²⁷ The increase in the water demand resulting from implementation of the proposed project is within the growth rate planned for and anticipated by the City. In addition, water services already exist at the project site to serve the existing building.

Given that the proposed project would be consistent with the type and intensity of development anticipated for the site per the City's General Plan, increases in water use associated with development of the site as proposed have been analyzed in the General Plan EIR and accounted for in local water supply planning efforts, such as the City's 2015 Urban Water Management Plan.

Woodland-Davis Clean Water Agency. *Our Water: Water for Woodland, Davis and UC Davis.* Available at: https://www.wdcwa.com/our-water-1. Accessed February 6, 2020.

Wastewater

The City of Davis Public Works Department provides sewer service to the Davis Planning Area. Sewer service is controlled through the use of connection fees and through requirements contained in the City's sewer ordinance. The proposed project would only increase the demand on wastewater treatment services by 20 individuals, and the currently-developed project site already has access to the sewer system.

Given that the proposed project would be consistent with what was anticipated and analyzed in the General Plan, wastewater generation associated with development of the site as proposed has been accounted for in local wastewater infrastructure planning efforts. As such, the proposed project would not exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board, and the City would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, a significant impact to wastewater services is not anticipated.

Stormwater

The project site is already developed with impervious surfaces, and the new design incorporates the use of porous paving and landscape areas that would absorb stormwater. Any excess runoff would drain into the existing stormwater infrastructure in the project vicinity. As such, the proposed project would not cause a substantial change to existing stormwater drainage. A more detailed discussion related to stormwater is available in Section X, Hydrology and Water Quality, of this IS/MND.

Solid Waste

Solid waste services are provided to all Davis residents, businesses, and multi-family properties by Recology Davis, and non-recyclable wastes are disposed of at the Yolo County Central Landfill. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Yolo County Central Landfill has a remaining capacity of 35,171,142 cubic yards out of a total permitted capacity of 49,035,200, or 71 percent remaining capacity. Due to the substantial amount of available capacity remaining at the Yolo County Central Landfill, sufficient capacity would be available to accommodate the project's solid waste disposal needs.

Other Utilities

Electricity, natural gas, and telecommunications utilities would be provided by way of connections to existing infrastructure. Because the site is already developed with residential uses, connections to the utilities must already exist. The expected population increase of 20 residents would not significantly increase demand for such utilities.

California Department of Resources Recycling and Recovery (CalRecycle). SWIS Facility Detail, Yolo County Central Landfill (57-AA-0001). Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/. Accessed November 20, 2019.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities. Thus, the project would result in a *less-than-significant* impact related to utilities and service systems.

If Id cla	A.WILDFIRE. Cocated in or near state responsibility areas or lands assified as very high fire hazard severity zones, and the project:	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?			*	
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			*	
C.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			*	
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			×	

a-d. According to the CAL FIRE Fire and Resource Assessment Program, the project site is not located within or near a state responsibility area²⁹ or lands classified as a Very High Fire Hazard Severity Zone.³⁰ The nearest Fire Hazard Severity Zone is north of Davis city limits. In addition, the project site is already developed and surrounded by development on all sides. As such, the project site is not located in close proximity to a rural area with high risk of wildfires. Therefore, the proposed project would not be subject to substantial risks related to wildfires, and a *less-than-significant* impact would occur.

-

California Department of Forestry and Fire Protection. Yolo County, Fire Hazard Severity Zones in SRA. November 7, 2007.

California Department of Forestry and Fire Protection. Yolo County, Draft Fire Hazard Severity Zones in LRA. October 5, 2007.

XX	I. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			×	
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			*	
C.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			*	

- a. As discussed in Section IV, Biological Resources, of this IS/MND, implementation of the proposed project would have a less-than-significant impact on wildlife species. In addition, the site does not contain known historic or cultural resources. Although unlikely, the possibility exists that construction activities could unearth deposits of cultural significance; however, Mitigation Measures V-1 and V-2 would reduce associated impacts to less-than-significant levels. Therefore, within implementation of the aforementioned mitigation measures, the proposed project would have a *less-than-significant* impact related to degradation of the quality of the environment, reduction of habitat or plant and wildlife species, and elimination of important examples of California history or prehistory.
- b. The proposed project, in conjunction with other developments throughout the City, could incrementally contribute to cumulative impacts in the area. However, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level through compliance with the mitigation measures included in this IS/MND, as well as applicable General Plan policies, Municipal Code standards, and other applicable local and State regulations. In addition, development of the proposed project would be consistent with the General Plan land use designation for the site, and thus, associated cumulative impacts have been analyzed within the General Plan EIR. Therefore, development of the proposed project would not result in a cumulatively considerable contribution to cumulative impacts in the City of Davis, and the project's incremental contribution to cumulative impacts would be less than significant.
- c. As described in this IS/MND, implementation of the proposed project would not result in significant direct or indirect impacts to human beings. All impacts related to air quality, hazards and hazardous materials, and traffic have been determined to be less than significant, and mitigation is not required. Potential impacts have been identified for construction noise; however, implementation of Mitigation Measure XIII-1 would ensure

that such impacts are reduced to less-than-significant levels. Therefore, the project's impact would be *less than significant*.

References and Sources:

- 1. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
- 2. California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed February 3, 2020.
- California Department of Conservation. CGS Information Warehouse: Regulatory Maps.
 Available
 http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed February 2020.
- 4. California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2007.
- 5. California Department of Forestry and Fire Protection. *Yolo County, Fire Hazard Severity Zones in SRA*. November 7, 2007.
- 6. California Department of Forestry and Fire Protection. *Yolo County, Draft Fire Hazard Severity Zones in LRA*. October 5, 2007.
- California Department of Resources Recycling and Recovery (CalRecycle). SWIS Facility Detail, Yolo County Central Landfill (57-AA-0001). Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/ Accessed November 20, 2019.
- 8. California Energy Commission. 2009 California Residential Appliance Saturation Study. October 2010.
- 9. California Geologic Survey. *Earthquake Zones of Required Investigation*. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed February 4, 2020.
- 10. City of Davis, Fire Department. *About DFD.* Available at: https://cityofdavis.org/city-hall/fire-department/about-dfd. Accessed May 2019.
- 11. City of Davis. City of Davis Designated Historical Resources: The Davis Register. March 23, 2010.
- 12. City of Davis. Davis City Council Hearing Minutes. January 29, 2013.
- 13. City of Davis. Davis Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School. January 2000.
- 14. City of Davis. Fee Schedule. Available at: http://cityofdavis.org/city-hall/finance/fee-schedules. Accessed June 2018.
- 15. City of Davis. Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School. January 2000.

- 16. City of Davis. Program EIR for the City of Davis General Plan Update and Project EIR for Establishment of a New Junior High School. January 2000.
- 17. City of Davis. Public Draft 2015 Urban Water Management Plan. May 2016.
- 18. Davis Joint Unified School District. *DJUSD Overview*. Available at: https://www.djusd.net/about/overview. Accessed February 6, 2020.
- 19. Davis Police Department. 2017 Annual Report. 2017.
- 20. Department of Toxic Substances Control. *EnviroStor: Hazardous Waste and Substances Site List.* Available at: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&s ite_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+A ND+SUBSTANCES+SITE+LIST+%28CORTESE%29. Accessed: February 3, 2020.
- 21. Federal Emergency Management Agency. *Flood Insurance Rate Map Number 06113C0611G.* June 18, 2010.
- 22. Federal Highway Administration. *Roadway Construction Noise Model User's Guide.* January 2006.
- 23. Paul's Place Davis. *Paul's Place at 1111 H Street: Project Overview.* Available at: https://paulsplacedavis.org/project-overview/. Accessed February 12, 2020.
- 24. State of California Department of Parks and Recreation. *District Record Bowers Acres*. October 3, 2014.
- 25. State Water Resources Control Board. *GeoTracker*. Available at: https://geotracker.waterboards.ca.gov/. Accessed February 12, 2020.
- 26. Sutter Health. Getting to Zero. January 2019.
- 27. Wadell Engineering Corporation. Airport Layout Plan University Airport, A University of California Aviation Facility, Davis, California, FAA AIP Project No. 3-06-0059-04. December 2006.
- 28. Woodland Davis Clean Water Agency. *The Project.* Available at: https://www.wdcwa.com/project-overview/ Accessed February 2020.
- 29. Woodland-Davis Clean Water Agency. *Our Water: Water for Woodland, Davis and UC Davis.* Available at: https://www.wdcwa.com/our-water-1. Accessed February 6, 2020.
- 30. Yolo Habitat Conservancy and U.S. Fish and Wildlife Service. Yolo Habitat Conservation Plan/Natural Community Conservation Plan Draft Environmental Impact Report. May 2017.
- 31. Yolo-Solano Air Quality Management District. *Handbook for Assessing and Mitigating Air Quality Impacts*. July 11, 2007.

Appendix CalEEMod Results

CalEEMod Results Existing Conditions

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Paul's Place - Existing Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	24.00	Dwelling Unit	1.50	2,800.00	24

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	55
Climate Zone	4			Operational Year	2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Project Characteristics - CO2 intensity factor updated to reflect PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

Construction Phase - construction not modeled

Off-road Equipment - construction not modeled

Trips and VMT - construction not modeled

Demolition -

Grading - construction not modeled

Vehicle Trips - Trip rate adjusted based on employee information provided by the project applicant.

Road Dust - 100 percent of roads in the vicinity are paved.

Energy Use -

Energy Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblLandUse	LandUseSquareFeet	24,000.00	2,800.00
tblLandUse	Population	69.00	24.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Page 4 of 18

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:04 PM

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	2.2483	0.0414	2.9356	4.9900e- 003		0.3876	0.3876	! !	0.3876	0.3876	36.8506	10.6881	47.5387	0.0347	2.8000e- 003	49.2399
Energy	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004	i i	7.7000e- 004	7.7000e- 004	0.0000	21.7070	21.7070	1.3600e- 003	4.4000e- 004	21.8721
Mobile	7.4600e- 003	0.0553	0.0787	3.3000e- 004	0.0238	2.8000e- 004	0.0241	6.4000e- 003	2.6000e- 004	6.6600e- 003	0.0000	30.8876	30.8876	1.5500e- 003	0.0000	30.9264
Waste						0.0000	0.0000	1 1 1	0.0000	0.0000	4.4455	0.0000	4.4455	0.2627	0.0000	11.0135
Water	61 61 61		1 			0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.4961	1.4561	1.9522	0.0511	1.2400e- 003	3.5981
Total	2.2569	0.1062	3.0184	5.3800e- 003	0.0238	0.3887	0.4125	6.4000e- 003	0.3887	0.3951	41.7922	64.7388	106.5310	0.3515	4.4800e- 003	116.6501

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr											MT/yr						
Area	0.0182	2.0600e- 003	0.1784	1.0000e- 005		9.9000e- 004	9.9000e- 004		9.9000e- 004	9.9000e- 004	0.0000	0.2912	0.2912	2.8000e- 004	0.0000	0.2982		
Energy	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004	 	7.7000e- 004	7.7000e- 004	0.0000	21.7070	21.7070	1.3600e- 003	4.4000e- 004	21.8721		
Mobile	7.4600e- 003	0.0553	0.0787	3.3000e- 004	0.0238	2.8000e- 004	0.0241	6.4000e- 003	2.6000e- 004	6.6600e- 003	0.0000	30.8876	30.8876	1.5500e- 003	0.0000	30.9264		
Waste	i i	 	i i			0.0000	0.0000		0.0000	0.0000	4.4455	0.0000	4.4455	0.2627	0.0000	11.0135		
Water	1 1 1 1	 				0.0000	0.0000		0.0000	0.0000	0.4961	1.4561	1.9522	0.0511	1.2400e- 003	3.5981		
Total	0.0268	0.0669	0.2612	4.0000e- 004	0.0238	2.0400e- 003	0.0258	6.4000e- 003	2.0200e- 003	8.4200e- 003	4.9416	54.3418	59.2834	0.3170	1.6800e- 003	67.7084		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	98.81	37.03	91.35	92.57	0.00	99.48	93.74	0.00	99.48	97.87	88.18	16.06	44.35	9.80	62.50	41.96

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	2/6/2017	2/6/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.04

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length		Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

3.2 Site Preparation - 2017
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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

3.2 Site Preparation - 2017

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Willigatou	7.4600e- 003	0.0553	0.0787	3.3000e- 004	0.0238	2.8000e- 004	0.0241	6.4000e- 003	2.6000e- 004	6.6600e- 003	0.0000	30.8876	30.8876	1.5500e- 003	0.0000	30.9264
	7.4600e- 003	0.0553	0.0787	3.3000e- 004	0.0238	2.8000e- 004	0.0241	6.4000e- 003	2.6000e- 004	6.6600e- 003	0.0000	30.8876	30.8876	1.5500e- 003	0.0000	30.9264

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	24.00	24.00	24.00	62,982	62,982
Parking Lot	0.00	0.00	0.00		
Total	24.00	24.00	24.00	62,982	62,982

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Page 10 of 18

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:04 PM

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated		i i	i i			0.0000	0.0000		0.0000	0.0000	0.0000	10.6815	10.6815	1.1500e- 003	2.4000e- 004	10.7811
Electricity Unmitigated	r,	, ! ! !	, 	, ! ! !	 	0.0000	0.0000		0.0000	0.0000	0.0000	10.6815	10.6815	1.1500e- 003	2.4000e- 004	10.7811
NaturalGas Mitigated	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910
NaturalGas Unmitigated	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Congregate Care (Assisted Living)	206609	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Congregate Care (Assisted Living)	206609	1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.1100e- 003	9.5200e- 003	4.0500e- 003	6.0000e- 005		7.7000e- 004	7.7000e- 004		7.7000e- 004	7.7000e- 004	0.0000	11.0255	11.0255	2.1000e- 004	2.0000e- 004	11.0910

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano 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	
Congregate Care (Assisted Living)	85971.4	10.5094	1.1300e- 003	2.3000e- 004	10.6074
Parking Lot	1408	0.1721	2.0000e- 005	0.0000	0.1737
Total		10.6815	1.1500e- 003	2.3000e- 004	10.7811

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Congregate Care (Assisted Living)	85971.4	10.5094	1.1300e- 003	2.3000e- 004	10.6074
Parking Lot	1408	0.1721	2.0000e- 005	0.0000	0.1737
Total		10.6815	1.1500e- 003	2.3000e- 004	10.7811

6.0 Area Detail

6.1 Mitigation Measures Area

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0182	2.0600e- 003	0.1784	1.0000e- 005		9.9000e- 004	9.9000e- 004		9.9000e- 004	9.9000e- 004	0.0000	0.2912	0.2912	2.8000e- 004	0.0000	0.2982
Unmitigated	2.2483	0.0414	2.9356	4.9900e- 003		0.3876	0.3876		0.3876	0.3876	36.8506	10.6881	47.5387	0.0347	2.8000e- 003	49.2399

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	1.7900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.2301	0.0393	2.7572	4.9800e- 003		0.3866	0.3866	 	0.3866	0.3866	36.8506	10.3970	47.2476	0.0344	2.8000e- 003	48.9417
Landscaping	5.3900e- 003	2.0600e- 003	0.1784	1.0000e- 005		9.9000e- 004	9.9000e- 004	 	9.9000e- 004	9.9000e- 004	0.0000	0.2912	0.2912	2.8000e- 004	0.0000	0.2982
Total	2.2483	0.0414	2.9356	4.9900e- 003		0.3876	0.3876		0.3876	0.3876	36.8506	10.6881	47.5387	0.0347	2.8000e- 003	49.2399

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	1.7900e- 003		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0110		 			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	5.3900e- 003	2.0600e- 003	0.1784	1.0000e- 005		9.9000e- 004	9.9000e- 004		9.9000e- 004	9.9000e- 004	0.0000	0.2912	0.2912	2.8000e- 004	0.0000	0.2982
Total	0.0182	2.0600e- 003	0.1784	1.0000e- 005		9.9000e- 004	9.9000e- 004		9.9000e- 004	9.9000e- 004	0.0000	0.2912	0.2912	2.8000e- 004	0.0000	0.2982

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	Γ/yr	
Mitigated		0.0511	1.2400e- 003	3.5981
Unmitigated		0.0511	1.2400e- 003	3.5981

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Congregate Care (Assisted Living)			0.0511	1.2400e- 003	3.5981
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		1.9522	0.0511	1.2400e- 003	3.5981

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 18 Date: 2/7/2020 2:04 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Congregate Care (Assisted Living)		1.9522	0.0511	1.2400e- 003	3.5981
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		1.9522	0.0511	1.2400e- 003	3.5981

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
willigated	4.4455	0.2627	0.0000	11.0135
Jgatea	4.4455	0.2627	0.0000	11.0135

Page 17 of 18

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:04 PM

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Congregate Care (Assisted Living)		4.4455	0.2627	0.0000	11.0135
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.4455	0.2627	0.0000	11.0135

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Congregate Care (Assisted Living)		4.4455	0.2627	0.0000	11.0135
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.4455	0.2627	0.0000	11.0135

9.0 Operational Offroad

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

Paul's Place - Existing - Yolo/Solano AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Boilers

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

User Defined Equipment

Equipment Type	Number
• • • • • • • • • • • • • • • • • • • •	

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

Paul's Place - Existing Yolo/Solano AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	24.00	Dwelling Unit	1.50	2,800.00	24

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)6.8Precipitation Freq (Days)55Climate Zone4Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

Project Characteristics - CO2 intensity factor updated to reflect PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

Construction Phase - construction not modeled

Off-road Equipment - construction not modeled

Trips and VMT - construction not modeled

Demolition -

Grading - construction not modeled

Vehicle Trips - Trip rate adjusted based on employee information provided by the project applicant.

Road Dust - 100 percent of roads in the vicinity are paved.

Energy Use -

Energy Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblLandUse	LandUseSquareFeet	24,000.00	2,800.00
tblLandUse	Population	69.00	24.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year	lb/day											lb/day						
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		

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

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	lb/day										
Area	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6
Energy	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Mobile	0.0491	0.2963	0.4688	1.9500e- 003	0.1349	1.5400e- 003	0.1365	0.0362	1.4400e- 003	0.0377		198.9237	198.9237	9.3700e- 003		199.1581
Total	54.5783	1.3307	69.7220	0.1239	0.1349	9.4470	9.5819	0.0362	9.4469	9.4831	990.7516	548.6136	1,539.365 2	0.9400	0.0764	1,585.629 8

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	lb/day										
Area	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522
Energy	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Mobile	0.0491	0.2963	0.4688	1.9500e- 003	0.1349	1.5400e- 003	0.1365	0.0362	1.4400e- 003	0.0377		198.9237	198.9237	9.3700e- 003		199.1581
Total	0.1854	0.3713	2.4736	2.3800e- 003	0.1349	0.0167	0.1516	0.0362	0.0166	0.0528	0.0000	269.0842	269.0842	0.0141	1.2200e- 003	269.8004

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

Date: 2/7/2020 2:05 PM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	99.66	72.10	96.45	98.08	0.00	99.82	98.42	0.00	99.82	99.44	100.00	50.95	82.52	98.50	98.40	82.98

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	2/6/2017	2/6/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.04

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

3.2 Site Preparation - 2017

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
l agiavo Buot					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	0.0491	0.2963	0.4688	1.9500e- 003	0.1349	1.5400e- 003	0.1365	0.0362	1.4400e- 003	0.0377		198.9237	198.9237	9.3700e- 003		199.1581
Unmitigated	0.0491	0.2963	0.4688	1.9500e- 003	0.1349	1.5400e- 003	0.1365	0.0362	1.4400e- 003	0.0377		198.9237	198.9237	9.3700e- 003		199.1581

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	24.00	24.00	24.00	62,982	62,982
Parking Lot	0.00	0.00	0.00		
Total	24.00	24.00	24.00	62,982	62,982

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	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
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Page 9 of 13

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

Date: 2/7/2020 2:05 PM

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
NaturalGas Unmitigated	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Land Use	kBTU/yr	lb/day											lb/day						
Congregate Care (Assisted Living)	566.052	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		
Total		6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901		

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Land Use	kBTU/yr	lb/day											lb/day						
Congregate Care (Assisted Living)	0.566052	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		
Total		6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901		

6.0 Area Detail

6.1 Mitigation Measures Area

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522	
Unmitigated	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6	

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	9.7800e- 003					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000		
	0.0605					0.0000	0.0000	 	0.0000	0.0000		! ! ! !	0.0000			0.0000		
Hearth	54.3929	0.9594	67.2484	0.1215		9.4302	9.4302	 	9.4302	9.4302	990.7516	279.5294	1,270.281 0	0.9259	0.0752	1,315.829 5		
Landscaping	0.0599	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110		3.5661	3.5661	3.4400e- 003		3.6522		
Total	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6		

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	lay		
Architectural Coating	9.7800e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0605					0.0000	0.0000	i i	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	0.0599	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110		3.5661	3.5661	3.4400e- 003		3.6522
Total	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522

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/Dav	Days/Year	Horse Power	Load Factor	Fuel Type
Equipment Type	Number	1 louis/Day	Days/Teal	11015e FOWel	Luau Factor	r der rype

10.0 Stationary Equipment

Paul's Place - Existing - Yolo/Solano AQMD Air District, Summer

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

Paul's Place - Existing Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	24.00	Dwelling Unit	1.50	2,800.00	24

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)6.8Precipitation Freq (Days)55Climate Zone4Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

Project Characteristics - CO2 intensity factor updated to reflect PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

Construction Phase - construction not modeled

Off-road Equipment - construction not modeled

Trips and VMT - construction not modeled

Demolition -

Grading - construction not modeled

Vehicle Trips - Trip rate adjusted based on employee information provided by the project applicant.

Road Dust - 100 percent of roads in the vicinity are paved.

Energy Use -

Energy Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	1.00
tblLandUse	LandUseSquareFeet	24,000.00	2,800.00
tblLandUse	Population	69.00	24.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano 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/d	day							lb/d	lay		
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano 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/e	day							lb/d	day		
Area	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6
Energy	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Mobile	0.0397	0.3078	0.4572	1.8000e- 003	0.1349	1.5700e- 003	0.1365	0.0362	1.4700e- 003	0.0377		183.1093	183.1093	9.8100e- 003		183.3547
Total	54.5688	1.3422	69.7104	0.1237	0.1349	9.4470	9.5819	0.0362	9.4469	9.4831	990.7516	532.7992	1,523.550 8	0.9405	0.0764	1,569.826 4

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/e	day							lb/d	day		
Area	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522
Energy	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Mobile	0.0397	0.3078	0.4572	1.8000e- 003	0.1349	1.5700e- 003	0.1365	0.0362	1.4700e- 003	0.0377		183.1093	183.1093	9.8100e- 003		183.3547
Total	0.1759	0.3828	2.4620	2.2300e- 003	0.1349	0.0167	0.1517	0.0362	0.0166	0.0529	0.0000	253.2698	253.2698	0.0145	1.2200e- 003	253.9970

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

Date: 2/7/2020 2:05 PM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	99.68	71.48	96.47	98.20	0.00	99.82	98.42	0.00	99.82	99.44	100.00	52.46	83.38	98.46	98.40	83.82

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	2/6/2017	2/6/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.04

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Site Preparation	0	0.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

3.2 Site Preparation - 2017

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.0397	0.3078	0.4572	1.8000e- 003	0.1349	1.5700e- 003	0.1365	0.0362	1.4700e- 003	0.0377		183.1093	183.1093	9.8100e- 003		183.3547
Unmitigated	0.0397	0.3078	0.4572	1.8000e- 003	0.1349	1.5700e- 003	0.1365	0.0362	1.4700e- 003	0.0377		183.1093	183.1093	9.8100e- 003		183.3547

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	24.00	24.00	24.00	62,982	62,982
Parking Lot	0.00	0.00	0.00		
Total	24.00	24.00	24.00	62,982	62,982

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Page 9 of 13

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

Date: 2/7/2020 2:05 PM

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
NaturalGas Unmitigated	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	566.052	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	0.566052	6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		6.1000e- 003	0.0522	0.0222	3.3000e- 004		4.2200e- 003	4.2200e- 003		4.2200e- 003	4.2200e- 003		66.5944	66.5944	1.2800e- 003	1.2200e- 003	66.9901

6.0 Area Detail

6.1 Mitigation Measures Area

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522
Unmitigated	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6

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/d	day							lb/d	day		
Architectural Coating	9.7800e- 003					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000		1 1 1	0.0000
Consumer Products	0.0605			 		0.0000	0.0000	 	0.0000	0.0000			0.0000	 	 	0.0000
Hearth	54.3929	0.9594	67.2484	0.1215		9.4302	9.4302	 	9.4302	9.4302	990.7516	279.5294	1,270.281 0	0.9259	0.0752	1,315.829 5
Landscaping	0.0599	0.0229	1.9826	1.0000e- 004		0.0110	0.0110	1 1 1	0.0110	0.0110		3.5661	3.5661	3.4400e- 003	1 1 1	3.6522
Total	54.5231	0.9823	69.2310	0.1216		9.4412	9.4412		9.4412	9.4412	990.7516	283.0955	1,273.847 1	0.9294	0.0752	1,319.481 6

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 13 Date: 2/7/2020 2:05 PM

Paul's Place - Existing - Yolo/Solano 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/d	day							lb/d	day		
0 41	9.7800e- 003			 		0.0000	0.0000	 	0.0000	0.0000			0.0000	 		0.0000
Consumer Products	0.0605		 	 		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	0.0599	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110		3.5661	3.5661	3.4400e- 003		3.6522
Total	0.1302	0.0229	1.9826	1.0000e- 004		0.0110	0.0110		0.0110	0.0110	0.0000	3.5661	3.5661	3.4400e- 003	0.0000	3.6522

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Paul's Place - Existing - Yolo/Solano AQMD Air District, Winter

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Paul's Place - Existing

Yolo/Solano AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	со	SO2	Exhaust PM10 Reduction	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Site Preparation	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Graders	Diesel	No Change	0	0	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	0	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	0	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		Ur	nmitigated tons/yr						Unmitiga	ted mt/yr		
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/ Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 7

Date: 2/7/2020 2:06 PM

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
		M	itigated tons/yr						Mitigate	ed mt/yr		
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Pe	rcent Reduction						
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 7 Date: 2/7/2020 2:06 PM

		Unm	Unmitigated		tigated	Percent Reduction		
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00	

Operational Percent Reduction Summary

Category	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
			Percent	Reduction								
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.08	0.29		

CalEEMod Version: CalEEMod.2016.3.2

Page 4 of 7

Date: 2/7/2020 2:06 PM

No	Land Use	Improve Walkability Design	0.00	T	
No	Land Use	Improve Destination Accessibility	0.00		······································
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		! !
No	Neighborhood Enhancements	Improve Pedestrian Network		 !	<u> </u>
No	:: Neighborhood Enhancements	‡ ;Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00	 	
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
	· 	Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program		 	
No	Commute	Transit Subsidy		-	
No	Commute	Implement Employee Parking "Cash Out"		 	
No	Commute	Workplace Parking Charge		 	

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 7 Date: 2/7/2020 2:06 PM

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00	
No	Commute	Market Commute Trip Reduction Option	0.00	
No	Commute	Employee Vanpool/Shuttle	0.00	2.00
No	Commute	Provide Ride Sharing Program	 	
	Commute	Commute Subtotal	0.00	
No	School Trip	Implement School Bus Program	0.00	
		Total VMT Reduction	0.00	:

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	-
Yes	No Hearth	T -
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Page 6 of 7

Date: 2/7/2020 2:06 PM

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting	 	
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher	;	15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

CalEEMod Results Proposed Project

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Paul's Place - Proposed Yolo/Solano AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	32.00	Dwelling Unit	2.00	16,928.00	32

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)6.8Precipitation Freq (Days)55Climate Zone4Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:56 PM

Project Characteristics - CO2 intensity adjusted per PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

On-road Fugitive Dust - % of paved roads set to 100

Demolition -

Vehicle Trips - Trip generation rate is adjusted based on the employee information provided by the project applicant.

Road Dust - All roads in the project vicinity are paved.

Energy Use - Per 2019 CBSC requirements, structures built after Jan 1, 2020, must be 7 percent more efficient than what was required under the 2016 CBSC. Accordingly, Title-24 Electricity and Natural Gas Intensities were reduced to 93% of their default values.

Energy Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation - This figure is based on the Davis Integrated Waste Management Plan

City of Davis Public Works Department. Davis Integrated Waste Management Plan [pg. 3-6]. July 2013.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblEnergyUse	T24E	332.81	309.51
tblEnergyUse	T24NG	5,484.45	5,100.54
tblLandUse	LandUseSquareFeet	32,000.00	16,928.00
tblLandUse	Population	92.00	32.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Page 3 of 35

Date: 2/7/2020 2:56 PM

tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00
-	•	•	

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2020	0.2783	2.1721	1.8166	3.2600e- 003	0.0460	0.1146	0.1607	0.0166	0.1094	0.1260	0.0000	275.1353	275.1353	0.0532	0.0000	276.4653
2021	0.1259	0.1601	0.1612	2.8000e- 004	1.9500e- 003	8.3100e- 003	0.0103	5.2000e- 004	7.8700e- 003	8.3900e- 003	0.0000	23.6994	23.6994	5.0700e- 003	0.0000	23.8261
Maximum	0.2783	2.1721	1.8166	3.2600e- 003	0.0460	0.1146	0.1607	0.0166	0.1094	0.1260	0.0000	275.1353	275.1353	0.0532	0.0000	276.4653

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ıs/yr							M	Γ/yr		
2020	0.2783	2.1721	1.8165	3.2600e- 003	0.0460	0.1146	0.1607	0.0166	0.1094	0.1260	0.0000	275.1350	275.1350	0.0532	0.0000	276.4650
2021	0.1259	0.1601	0.1612	2.8000e- 004	1.9500e- 003	8.3100e- 003	0.0103	5.2000e- 004	7.8700e- 003	8.3900e- 003	0.0000	23.6994	23.6994	5.0700e- 003	0.0000	23.8261
Maximum	0.2783	2.1721	1.8165	3.2600e- 003	0.0460	0.1146	0.1607	0.0166	0.1094	0.1260	0.0000	275.1350	275.1350	0.0532	0.0000	276.4650
	ROG	NOx	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

Page 5 of 35

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:56 PM

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-5-2020	5-4-2020	0.6957	0.6957
2	5-5-2020	8-4-2020	0.6680	0.6680
3	8-5-2020	11-4-2020	0.6682	0.6682
4	11-5-2020	2-4-2021	0.6178	0.6178
5	2-5-2021	5-4-2021	0.0905	0.0905
		Highest	0.6957	0.6957

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	MT/yr										
Area	3.0575	0.0552	3.9141	6.6500e- 003		0.5168	0.5168		0.5168	0.5168	49.1341	14.2508	63.3849	0.0463	3.7300e- 003	65.6532
Energy	1.4200e- 003	0.0122	5.1800e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004	1 1 1	9.8000e- 004	9.8000e- 004	0.0000	30.2240	30.2240	2.0100e- 003	6.2000e- 004	30.4582
Mobile	9.9500e- 003	0.0737	0.1049	4.5000e- 004	0.0317	3.8000e- 004	0.0321	8.5300e- 003	3.5000e- 004	8.8900e- 003	0.0000	41.1834	41.1834	2.0700e- 003	0.0000	41.2352
Waste						0.0000	0.0000	1 1 1	0.0000	0.0000	5.9273	0.0000	5.9273	0.3503	0.0000	14.6847
Water						0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.6615	1.9415	2.6029	0.0682	1.6500e- 003	4.7975
Total	3.0689	0.1411	4.0243	7.1800e- 003	0.0317	0.5182	0.5499	8.5300e- 003	0.5182	0.5267	55.7229	87.5997	143.3226	0.4688	6.0000e- 003	156.8288

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT/yr					
Area	0.0791	2.7400e- 003	0.2379	1.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	0.3882	0.3882	3.7000e- 004	0.0000	0.3976
Energy	1.3400e- 003	0.0114	4.8600e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	16.4276	16.4276	6.0000e- 004	3.1000e- 004	16.5361
Mobile	9.9500e- 003	0.0737	0.1049	4.5000e- 004	0.0317	3.8000e- 004	0.0321	8.5300e- 003	3.5000e- 004	8.8900e- 003	0.0000	41.1834	41.1834	2.0700e- 003	0.0000	41.2352
Waste	6;	 	1 1 1			0.0000	0.0000		0.0000	0.0000	4.1491	0.0000	4.1491	0.2452	0.0000	10.2793
Water	6; 6; 6; 6; 6;		1 1			0.0000	0.0000		0.0000	0.0000	0.5292	1.6657	2.1948	0.0545	1.3200e- 003	3.9515
Total	0.0904	0.0879	0.3477	5.3000e- 004	0.0317	2.6100e- 003	0.0343	8.5300e- 003	2.5800e- 003	0.0111	4.6783	59.6649	64.3432	0.3028	1.6300e- 003	72.3997

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	97.05	37.70	91.36	92.62	0.00	99.50	93.76	0.00	99.50	97.89	91.60	31.89	55.11	35.42	72.83	53.84

3.0 Construction Detail

Construction Phase

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/5/2020	3/3/2020	5	20	
2	Site Preparation	Site Preparation	3/4/2020	3/6/2020	5	3	
3	Grading	Grading	3/7/2020	3/16/2020	5	6	
4	Building Construction	Building Construction	3/17/2020	1/18/2021	5	220	
5	Paving	Paving	1/19/2021	2/1/2021	5	10	
6	Architectural Coating	Architectural Coating	2/2/2021	2/15/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.04

Residential Indoor: 34,279; Residential Outdoor: 11,426; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 96 (Architectural Coating – sqft)

OffRoad Equipment

Page 8 of 35

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:56 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Date: 2/7/2020 2:56 PM

Page 9 of 35

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	13.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	4.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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					ton	s/yr							MT	/yr		
Fugitive Dust					1.6100e- 003	0.0000	1.6100e- 003	2.4000e- 004	0.0000	2.4000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e- 004		0.0115	0.0115	1 1 1 1	0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e- 003	0.0000	21.2031
Total	0.0213	0.2095	0.1466	2.4000e- 004	1.6100e- 003	0.0115	0.0131	2.4000e- 004	0.0108	0.0110	0.0000	21.0677	21.0677	5.4200e- 003	0.0000	21.2031

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.2 Demolition - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.0000e- 005	1.7600e- 003	2.9000e- 004	1.0000e- 005	1.1000e- 004	1.0000e- 005	1.2000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.5056	0.5056	2.0000e- 005	0.0000	0.5061
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	4.5000e- 004	3.1000e- 004	3.1300e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8721	0.8721	2.0000e- 005	0.0000	0.8727
Total	5.0000e- 004	2.0700e- 003	3.4200e- 003	2.0000e- 005	1.0700e- 003	2.0000e- 005	1.0800e- 003	2.8000e- 004	2.0000e- 005	3.0000e- 004	0.0000	1.3777	1.3777	4.0000e- 005	0.0000	1.3788

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					ton	s/yr							MT	/yr		
Fugitive Dust					1.6100e- 003	0.0000	1.6100e- 003	2.4000e- 004	0.0000	2.4000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e- 004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0676	21.0676	5.4200e- 003	0.0000	21.2030
Total	0.0213	0.2095	0.1466	2.4000e- 004	1.6100e- 003	0.0115	0.0131	2.4000e- 004	0.0108	0.0110	0.0000	21.0676	21.0676	5.4200e- 003	0.0000	21.2030

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.2 Demolition - 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					ton	s/yr							MT	/yr		
Hauling	5.0000e- 005	1.7600e- 003	2.9000e- 004	1.0000e- 005	1.1000e- 004	1.0000e- 005	1.2000e- 004	3.0000e- 005	1.0000e- 005	4.0000e- 005	0.0000	0.5056	0.5056	2.0000e- 005	0.0000	0.5061
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	4.5000e- 004	3.1000e- 004	3.1300e- 003	1.0000e- 005	9.6000e- 004	1.0000e- 005	9.6000e- 004	2.5000e- 004	1.0000e- 005	2.6000e- 004	0.0000	0.8721	0.8721	2.0000e- 005	0.0000	0.8727
Total	5.0000e- 004	2.0700e- 003	3.4200e- 003	2.0000e- 005	1.0700e- 003	2.0000e- 005	1.0800e- 003	2.8000e- 004	2.0000e- 005	3.0000e- 004	0.0000	1.3777	1.3777	4.0000e- 005	0.0000	1.3788

3.3 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					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e- 003	0.0299	0.0169	4.0000e- 005		1.1700e- 003	1.1700e- 003		1.0700e- 003	1.0700e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551
Total	2.4800e- 003	0.0299	0.0169	4.0000e- 005	2.3900e- 003	1.1700e- 003	3.5600e- 003	2.6000e- 004	1.0700e- 003	1.3300e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.3 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	2.9000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0806
Total	4.0000e- 005	3.0000e- 005	2.9000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0806

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					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4800e- 003	0.0299	0.0169	4.0000e- 005		1.1700e- 003	1.1700e- 003		1.0700e- 003	1.0700e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551
Total	2.4800e- 003	0.0299	0.0169	4.0000e- 005	2.3900e- 003	1.1700e- 003	3.5600e- 003	2.6000e- 004	1.0700e- 003	1.3300e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.3 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	2.9000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0806
Total	4.0000e- 005	3.0000e- 005	2.9000e- 004	0.0000	9.0000e- 005	0.0000	9.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0806

3.4 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	5.7700e- 003	0.0640	0.0298	6.0000e- 005		2.9700e- 003	2.9700e- 003		2.7300e- 003	2.7300e- 003	0.0000	5.4333	5.4333	1.7600e- 003	0.0000	5.4773
Total	5.7700e- 003	0.0640	0.0298	6.0000e- 005	0.0197	2.9700e- 003	0.0226	0.0101	2.7300e- 003	0.0128	0.0000	5.4333	5.4333	1.7600e- 003	0.0000	5.4773

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.4 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e- 004	7.0000e- 005	7.2000e- 004	0.0000	2.2000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2013	0.2013	1.0000e- 005	0.0000	0.2014
Total	1.0000e- 004	7.0000e- 005	7.2000e- 004	0.0000	2.2000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2013	0.2013	1.0000e- 005	0.0000	0.2014

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii ii				0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7700e- 003	0.0640	0.0298	6.0000e- 005		2.9700e- 003	2.9700e- 003		2.7300e- 003	2.7300e- 003	0.0000	5.4333	5.4333	1.7600e- 003	0.0000	5.4773
Total	5.7700e- 003	0.0640	0.0298	6.0000e- 005	0.0197	2.9700e- 003	0.0226	0.0101	2.7300e- 003	0.0128	0.0000	5.4333	5.4333	1.7600e- 003	0.0000	5.4773

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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
· · · · · · · · ·	1.0000e- 004	7.0000e- 005	7.2000e- 004	0.0000	2.2000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2013	0.2013	1.0000e- 005	0.0000	0.2014
Total	1.0000e- 004	7.0000e- 005	7.2000e- 004	0.0000	2.2000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.2013	0.2013	1.0000e- 005	0.0000	0.2014

3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2379	1.8131	1.5493	2.6000e- 003		0.0986	0.0986		0.0945	0.0945	0.0000	215.9502	215.9502	0.0438	0.0000	217.0459
Total	0.2379	1.8131	1.5493	2.6000e- 003		0.0986	0.0986		0.0945	0.0945	0.0000	215.9502	215.9502	0.0438	0.0000	217.0459

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.5 Building Construction - 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					ton	s/yr							МТ	/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
Verider	1.4800e- 003	0.0476	9.3800e- 003	1.2000e- 004	2.6300e- 003	2.1000e- 004	2.8400e- 003	7.6000e- 004	2.0000e- 004	9.6000e- 004	0.0000	11.0507	11.0507	6.8000e- 004	0.0000	11.0677
1	8.7200e- 003	5.8900e- 003	0.0601	1.9000e- 004	0.0184	1.3000e- 004	0.0185	4.8800e- 003	1.2000e- 004	5.0000e- 003	0.0000	16.7449	16.7449	4.2000e- 004	0.0000	16.7555
Total	0.0102	0.0535	0.0695	3.1000e- 004	0.0210	3.4000e- 004	0.0213	5.6400e- 003	3.2000e- 004	5.9600e- 003	0.0000	27.7957	27.7957	1.1000e- 003	0.0000	27.8232

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirricad	0.2379	1.8131	1.5493	2.6000e- 003		0.0986	0.0986	 	0.0945	0.0945	0.0000	215.9499	215.9499	0.0438	0.0000	217.0456
Total	0.2379	1.8131	1.5493	2.6000e- 003		0.0986	0.0986		0.0945	0.0945	0.0000	215.9499	215.9499	0.0438	0.0000	217.0456

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.5 Building Construction - 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4800e- 003	0.0476	9.3800e- 003	1.2000e- 004	2.6300e- 003	2.1000e- 004	2.8400e- 003	7.6000e- 004	2.0000e- 004	9.6000e- 004	0.0000	11.0507	11.0507	6.8000e- 004	0.0000	11.0677
Worker	8.7200e- 003	5.8900e- 003	0.0601	1.9000e- 004	0.0184	1.3000e- 004	0.0185	4.8800e- 003	1.2000e- 004	5.0000e- 003	0.0000	16.7449	16.7449	4.2000e- 004	0.0000	16.7555
Total	0.0102	0.0535	0.0695	3.1000e- 004	0.0210	3.4000e- 004	0.0213	5.6400e- 003	3.2000e- 004	5.9600e- 003	0.0000	27.7957	27.7957	1.1000e- 003	0.0000	27.8232

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0123	0.0962	0.0874	1.5000e- 004		4.9000e- 003	4.9000e- 003		4.7000e- 003	4.7000e- 003	0.0000	12.4589	12.4589	2.4500e- 003	0.0000	12.5202
Total	0.0123	0.0962	0.0874	1.5000e- 004		4.9000e- 003	4.9000e- 003		4.7000e- 003	4.7000e- 003	0.0000	12.4589	12.4589	2.4500e- 003	0.0000	12.5202

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.5 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e- 005	2.5300e- 003	4.7000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.6000e- 004	4.0000e- 005	1.0000e- 005	5.0000e- 005	0.0000	0.6317	0.6317	4.0000e- 005	0.0000	0.6326
Worker	4.7000e- 004	3.0000e- 004	3.1700e- 003	1.0000e- 005	1.0600e- 003	1.0000e- 005	1.0700e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.9323	0.9323	2.0000e- 005	0.0000	0.9329
Total	5.4000e- 004	2.8300e- 003	3.6400e- 003	2.0000e- 005	1.2100e- 003	2.0000e- 005	1.2300e- 003	3.2000e- 004	2.0000e- 005	3.4000e- 004	0.0000	1.5640	1.5640	6.0000e- 005	0.0000	1.5655

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0123	0.0962	0.0874	1.5000e- 004		4.9000e- 003	4.9000e- 003		4.7000e- 003	4.7000e- 003	0.0000	12.4589	12.4589	2.4500e- 003	0.0000	12.5202
Total	0.0123	0.0962	0.0874	1.5000e- 004		4.9000e- 003	4.9000e- 003		4.7000e- 003	4.7000e- 003	0.0000	12.4589	12.4589	2.4500e- 003	0.0000	12.5202

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
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	7.0000e- 005	2.5300e- 003	4.7000e- 004	1.0000e- 005	1.5000e- 004	1.0000e- 005	1.6000e- 004	4.0000e- 005	1.0000e- 005	5.0000e- 005	0.0000	0.6317	0.6317	4.0000e- 005	0.0000	0.6326
1	4.7000e- 004	3.0000e- 004	3.1700e- 003	1.0000e- 005	1.0600e- 003	1.0000e- 005	1.0700e- 003	2.8000e- 004	1.0000e- 005	2.9000e- 004	0.0000	0.9323	0.9323	2.0000e- 005	0.0000	0.9329
Total	5.4000e- 004	2.8300e- 003	3.6400e- 003	2.0000e- 005	1.2100e- 003	2.0000e- 005	1.2300e- 003	3.2000e- 004	2.0000e- 005	3.4000e- 004	0.0000	1.5640	1.5640	6.0000e- 005	0.0000	1.5655

3.6 Paving - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	5.3200e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138
1 ,	5.0000e- 005		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.3700e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.6 Paving - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e- 004	1.6000e- 004	1.6500e- 003	1.0000e- 005	5.5000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4856	0.4856	1.0000e- 005	0.0000	0.4859
Total	2.4000e- 004	1.6000e- 004	1.6500e- 003	1.0000e- 005	5.5000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4856	0.4856	1.0000e- 005	0.0000	0.4859

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
On Road	5.3200e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138
Paving	5.0000e- 005					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.3700e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.6 Paving - 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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e- 004	1.6000e- 004	1.6500e- 003	1.0000e- 005	5.5000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4856	0.4856	1.0000e- 005	0.0000	0.4859
Total	2.4000e- 004	1.6000e- 004	1.6500e- 003	1.0000e- 005	5.5000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4856	0.4856	1.0000e- 005	0.0000	0.4859

3.7 Architectural Coating - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1063					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.1074	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.7 Architectural Coating - 2021 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e- 005	5.0000e- 005	5.5000e- 004	0.0000	1.8000e- 004	0.0000	1.9000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1619	0.1619	0.0000	0.0000	0.1620
Total	8.0000e- 005	5.0000e- 005	5.5000e- 004	0.0000	1.8000e- 004	0.0000	1.9000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1619	0.1619	0.0000	0.0000	0.1620

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1063		 - - -			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004	1	4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.1074	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

3.7 Architectural Coating - 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e- 005	5.0000e- 005	5.5000e- 004	0.0000	1.8000e- 004	0.0000	1.9000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1619	0.1619	0.0000	0.0000	0.1620
Total	8.0000e- 005	5.0000e- 005	5.5000e- 004	0.0000	1.8000e- 004	0.0000	1.9000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1619	0.1619	0.0000	0.0000	0.1620

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
ı	9.9500e- 003	0.0737	0.1049	4.5000e- 004	0.0317	3.8000e- 004	0.0321	8.5300e- 003	3.5000e- 004	8.8900e- 003	0.0000	41.1834	41.1834	2.0700e- 003	0.0000	41.2352
	9.9500e- 003	0.0737	0.1049	4.5000e- 004	0.0317	3.8000e- 004	0.0321	8.5300e- 003	3.5000e- 004	8.8900e- 003	0.0000	41.1834	41.1834	2.0700e- 003	0.0000	41.2352

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	32.00	32.00	32.00	83,976	83,976
Parking Lot	0.00	0.00	0.00		
Total	32.00	32.00	32.00	83,976	83,976

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	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
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.2011	3.2011	3.4000e- 004	7.0000e- 005	3.2309
Electricity Unmitigated	 	 			 	0.0000	0.0000		0.0000	0.0000	0.0000	16.1265	16.1265	1.7400e- 003	3.6000e- 004	16.2769
Mitigated	1.3400e- 003	0.0114	4.8600e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	13.2265	13.2265	2.5000e- 004	2.4000e- 004	13.3051
	1.4200e- 003	0.0122	5.1800e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	14.0975	14.0975	2.7000e- 004	2.6000e- 004	14.1813

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Congregate Care (Assisted Living)	264177	1.4200e- 003	0.0122	5.1800e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	14.0975	14.0975	2.7000e- 004	2.6000e- 004	14.1813
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.4200e- 003	0.0122	5.1800e- 003	8.0000e- 005		9.8000e- 004	9.8000e- 004		9.8000e- 004	9.8000e- 004	0.0000	14.0975	14.0975	2.7000e- 004	2.6000e- 004	14.1813

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Congregate Care (Assisted Living)	247856	1.3400e- 003	0.0114	4.8600e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	13.2265	13.2265	2.5000e- 004	2.4000e- 004	13.3051
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.3400e- 003	0.0114	4.8600e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	13.2265	13.2265	2.5000e- 004	2.4000e- 004	13.3051

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Congregate Care (Assisted Living)	131362	16.0581	1.7300e- 003	3.6000e- 004	16.2078
Parking Lot	560	0.0685	1.0000e- 005	0.0000	0.0691
Total		16.1265	1.7400e- 003	3.6000e- 004	16.2769

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Congregate Care (Assisted Living)	26074.2	3.1874	3.4000e- 004	7.0000e- 005	3.2171
Parking Lot	112	0.0137	0.0000	0.0000	0.0138
Total		3.2011	3.4000e- 004	7.0000e- 005	3.2309

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Use Low VOC Paint - Residential Interior
Use Low VOC Paint - Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0791	2.7400e- 003	0.2379	1.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	0.3882	0.3882	3.7000e- 004	0.0000	0.3976
Unmitigated	3.0575	0.0552	3.9141	6.6500e- 003		0.5168	0.5168		0.5168	0.5168	49.1341	14.2508	63.3849	0.0463	3.7300e- 003	65.6532

Paul's Place - Proposed - Yolo/Solano 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	0.0106		! !	 		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0662		 	 		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.9735	0.0525	3.6763	6.6400e- 003		0.5155	0.5155	 	0.5155	0.5155	49.1341	13.8626	62.9968	0.0459	3.7300e- 003	65.2556
Landscaping	7.1900e- 003	2.7400e- 003	0.2379	1.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	0.3882	0.3882	3.7000e- 004	0.0000	0.3976
Total	3.0575	0.0552	3.9142	6.6500e- 003		0.5168	0.5168		0.5168	0.5168	49.1341	14.2508	63.3849	0.0463	3.7300e- 003	65.6532

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano 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					ton	s/yr							МТ	√yr		
Architectural Coating	0.0106					0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0613					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	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.1900e- 003	2.7400e- 003	0.2379	1.0000e- 005		1.3100e- 003	1.3100e- 003	1 1 1 1	1.3100e- 003	1.3100e- 003	0.0000	0.3882	0.3882	3.7000e- 004	0.0000	0.3976
Total	0.0791	2.7400e- 003	0.2379	1.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	0.3882	0.3882	3.7000e- 004	0.0000	0.3976

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
Miligatou	2.1948	0.0545	1.3200e- 003	3.9515
Unmitigated	2.6029	0.0682	1.6500e- 003	4.7975

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Congregate Care (Assisted Living)		2.6029	0.0682	1.6500e- 003	4.7975
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		2.6029	0.0682	1.6500e- 003	4.7975

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Congregate Care (Assisted Living)		2.1948	0.0545	1.3200e- 003	3.9515
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		2.1948	0.0545	1.3200e- 003	3.9515

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
gatea	4.1491	0.2452	0.0000	10.2793
Jgatea	5.9273	0.3503	0.0000	14.6847

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Congregate Care (Assisted Living)		5.9273	0.3503	0.0000	14.6847
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		5.9273	0.3503	0.0000	14.6847

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
Congregate Care (Assisted Living)		4.1491	0.2452	0.0000	10.2793
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.1491	0.2452	0.0000	10.2793

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 35 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Annual

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Paul's Place - Proposed Yolo/Solano AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	32.00	Dwelling Unit	2.00	16,928.00	32

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)6.8Precipitation Freq (Days)55Climate Zone4Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Date: 2/7/2020 2:56 PM

Project Characteristics - CO2 intensity adjusted per PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

On-road Fugitive Dust - % of paved roads set to 100

Demolition -

Vehicle Trips - Trip generation rate is adjusted based on the employee information provided by the project applicant.

Road Dust - All roads in the project vicinity are paved.

Energy Use - Per 2019 CBSC requirements, structures built after Jan 1, 2020, must be 7 percent more efficient than what was required under the 2016 CBSC. Accordingly, Title-24 Electricity and Natural Gas Intensities were reduced to 93% of their default values.

Energy Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation - This figure is based on the Davis Integrated Waste Management Plan

City of Davis Public Works Department. Davis Integrated Waste Management Plan [pg. 3-6]. July 2013.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblEnergyUse	T24E	332.81	309.51
tblEnergyUse	T24NG	5,484.45	5,100.54
tblLandUse	LandUseSquareFeet	32,000.00	16,928.00
tblLandUse	Population	92.00	32.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Date: 2/7/2020 2:56 PM

Page 3 of 29

tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00
-	•	•	

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

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/e	day							lb/d	day		
2020	2.3970	21.3629	15.6436	0.0281	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,602.525 2	2,602.525 2	0.7691	0.0000	2,614.433 3
2021	21.4883	16.4886	15.2417	0.0280	0.2085	0.8194	1.0280	0.0559	0.7851	0.8410	0.0000	2,594.675 9	2,594.675 9	0.5445	0.0000	2,606.207 4
Maximum	21.4883	21.3629	15.6436	0.0281	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,602.525 2	2,602.525 2	0.7691	0.0000	2,614.433 3

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/	'day		
2020	2.3970	21.3629	15.6436	0.0281	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,602.525 2	2,602.525 2	0.7691	0.0000	2,614.433 3
2021	21.4883	16.4886	15.2417	0.0280	0.2085	0.8194	1.0280	0.0559	0.7851	0.8410	0.0000	2,594.675 9	2,594.675 9	0.5445	0.0000	2,606.207 4
Maximum	21.4883	21.3629	15.6436	0.0281	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,602.525 2	2,602.525 2	0.7691	0.0000	2,614.433 3
	ROG	NOx	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

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category		lb/day											lb/d	/day					
Area	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6			
Energy	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558			
Mobile	0.0655	0.3950	0.6251	2.6100e- 003	0.1799	2.0500e- 003	0.1820	0.0483	1.9200e- 003	0.0502		265.2317	265.2317	0.0125		265.5441			
Total	73.0981	1.7714	92.9613	0.1651	0.1799	12.5957	12.7756	0.0483	12.5956	12.6439	1,321.002	727.8419	2,048.844 0	1.2533	0.1018	2,110.508 5			

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/e	day							lb/d	day		
Area	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693
Energy	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637
Mobile	0.0655	0.3950	0.6251	2.6100e- 003	0.1799	2.0500e- 003	0.1820	0.0483	1.9200e- 003	0.0502		265.2317	265.2317	0.0125		265.5441
Total	0.5466	0.4881	3.2950	3.1500e- 003	0.1799	0.0217	0.2016	0.0483	0.0216	0.0699	0.0000	349.8752	349.8752	0.0186	1.4600e- 003	350.7771

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	99.25	72.45	96.46	98.09	0.00	99.83	98.42	0.00	99.83	99.45	100.00	51.93	82.92	98.51	98.57	83.38

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/5/2020	3/3/2020	5	20	
2	Site Preparation	Site Preparation	3/4/2020	3/6/2020	5	3	
3	Grading	Grading	3/7/2020	3/16/2020	5	6	
4	Building Construction	Building Construction	3/17/2020	1/18/2021	5	220	
5	Paving	Paving	1/19/2021	2/1/2021	5	10	
6	Architectural Coating	Architectural Coating	2/2/2021	2/15/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.04

Residential Indoor: 34,279; Residential Outdoor: 11,426; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 96 (Architectural Coating – sqft)

OffRoad Equipment

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Date: 2/7/2020 2:56 PM

Page 7 of 29

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Page 8 of 29

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	13.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	4.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.1614	0.0000	0.1614	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.312 7	2,322.312 7	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	0.1614	1.1525	1.3139	0.0245	1.0761	1.1006		2,322.312 7	2,322.312 7	0.5970		2,337.236 3

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.2 Demolition - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	5.1200e- 003	0.1708	0.0273	5.4000e- 004	0.0114	6.2000e- 004	0.0120	3.1100e- 003	5.9000e- 004	3.7000e- 003		56.2565	56.2565	2.1800e- 003		56.3111
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0275	0.3593	1.0600e- 003	0.0989	6.8000e- 004	0.0996	0.0262	6.2000e- 004	0.0269		105.5397	105.5397	2.6900e- 003		105.6068
Total	0.0567	0.1983	0.3865	1.6000e- 003	0.1103	1.3000e- 003	0.1116	0.0293	1.2100e- 003	0.0306		161.7962	161.7962	4.8700e- 003		161.9179

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.1614	0.0000	0.1614	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525	 	1.0761	1.0761	0.0000	2,322.312 7	2,322.312 7	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	0.1614	1.1525	1.3139	0.0245	1.0761	1.1006	0.0000	2,322.312 7	2,322.312 7	0.5970		2,337.236 3

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.2 Demolition - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	5.1200e- 003	0.1708	0.0273	5.4000e- 004	0.0114	6.2000e- 004	0.0120	3.1100e- 003	5.9000e- 004	3.7000e- 003		56.2565	56.2565	2.1800e- 003		56.3111
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0515	0.0275	0.3593	1.0600e- 003	0.0989	6.8000e- 004	0.0996	0.0262	6.2000e- 004	0.0269		105.5397	105.5397	2.6900e- 003		105.6068
Total	0.0567	0.1983	0.3865	1.6000e- 003	0.1103	1.3000e- 003	0.1116	0.0293	1.2100e- 003	0.0306		161.7962	161.7962	4.8700e- 003		161.9179

3.3 Site Preparation - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	0; 0; 0; 0; 0;				1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245	 	0.7771	0.7771		0.7149	0.7149		2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867		2,372.906 2	2,372.906	0.7675		2,392.092 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.3 Site Preparation - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0169	0.2211	6.5000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		64.9475	64.9475	1.6500e- 003		64.9888
Total	0.0317	0.0169	0.2211	6.5000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		64.9475	64.9475	1.6500e- 003		64.9888

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771	 	0.7149	0.7149	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.3 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0317	0.0169	0.2211	6.5000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		64.9475	64.9475	1.6500e- 003		64.9888
Total	0.0317	0.0169	0.2211	6.5000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		64.9475	64.9475	1.6500e- 003		64.9888

3.4 Grading - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day											lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000		
Off-Road	1.9219	21.3418	9.9355	0.0206	 	0.9902	0.9902		0.9110	0.9110		1,996.406 1	1,996.406 1	0.6457	 	2,012.548 0		
Total	1.9219	21.3418	9.9355	0.0206	6.5523	0.9902	7.5425	3.3675	0.9110	4.2784		1,996.406 1	1,996.406 1	0.6457		2,012.548 0		

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.4 Grading - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0396	0.0211	0.2764	8.1000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		81.1844	81.1844	2.0700e- 003		81.2360	
Total	0.0396	0.0211	0.2764	8.1000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		81.1844	81.1844	2.0700e- 003		81.2360	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust	 				6.5523	0.0000	6.5523	3.3675	0.0000	3.3675		1 1 1	0.0000			0.0000			
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902	 	0.9110	0.9110	0.0000	1,996.406 1	1,996.406 1	0.6457		2,012.548 0			
Total	1.9219	21.3418	9.9355	0.0206	6.5523	0.9902	7.5425	3.3675	0.9110	4.2784	0.0000	1,996.406 1	1,996.406 1	0.6457		2,012.548 0			

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0396	0.0211	0.2764	8.1000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		81.1844	81.1844	2.0700e- 003		81.2360	
Total	0.0396	0.0211	0.2764	8.1000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		81.1844	81.1844	2.0700e- 003		81.2360	

3.5 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.5 Building Construction - 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0140	0.4506	0.0832	1.1400e- 003	0.0260	1.9700e- 003	0.0279	7.4800e- 003	1.8900e- 003	9.3600e- 003		118.7950	118.7950	6.8200e- 003		118.9654
Worker	0.0952	0.0507	0.6632	1.9600e- 003	0.1826	1.2500e- 003	0.1838	0.0484	1.1500e- 003	0.0496		194.8425	194.8425	4.9600e- 003		194.9665
Total	0.1091	0.5014	0.7464	3.1000e- 003	0.2085	3.2200e- 003	0.2118	0.0559	3.0400e- 003	0.0589		313.6375	313.6375	0.0118		313.9319

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.5 Building Construction - 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/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0140	0.4506	0.0832	1.1400e- 003	0.0260	1.9700e- 003	0.0279	7.4800e- 003	1.8900e- 003	9.3600e- 003		118.7950	118.7950	6.8200e- 003		118.9654
Worker	0.0952	0.0507	0.6632	1.9600e- 003	0.1826	1.2500e- 003	0.1838	0.0484	1.1500e- 003	0.0496		194.8425	194.8425	4.9600e- 003		194.9665
Total	0.1091	0.5014	0.7464	3.1000e- 003	0.2085	3.2200e- 003	0.2118	0.0559	3.0400e- 003	0.0589		313.6375	313.6375	0.0118		313.9319

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.5 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0116	0.4157	0.0723	1.1200e- 003	0.0260	9.7000e- 004	0.0269	7.4800e- 003	9.2000e- 004	8.4000e- 003		117.7020	117.7020	6.5000e- 003		117.8645
Worker	0.0883	0.0454	0.6065	1.8900e- 003	0.1826	1.2100e- 003	0.1838	0.0484	1.1200e- 003	0.0495		188.0383	188.0383	4.4400e- 003		188.1493
Total	0.0999	0.4611	0.6787	3.0100e- 003	0.2085	2.1800e- 003	0.2107	0.0559	2.0400e- 003	0.0579		305.7403	305.7403	0.0109		306.0138

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0116	0.4157	0.0723	1.1200e- 003	0.0260	9.7000e- 004	0.0269	7.4800e- 003	9.2000e- 004	8.4000e- 003		117.7020	117.7020	6.5000e- 003		117.8645
Worker	0.0883	0.0454	0.6065	1.8900e- 003	0.1826	1.2100e- 003	0.1838	0.0484	1.1200e- 003	0.0495		188.0383	188.0383	4.4400e- 003		188.1493
Total	0.0999	0.4611	0.6787	3.0100e- 003	0.2085	2.1800e- 003	0.2107	0.0559	2.0400e- 003	0.0579		305.7403	305.7403	0.0109		306.0138

3.6 Paving - 2021

	ROG	NOx	CO	SO2	Fugitive 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/e	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.0105	 				0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000		: :	0.0000
Total	1.0738	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.110 7	1,709.110 7	0.5417		1,722.652 4

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.6 Paving - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0284	0.3791	1.1800e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		117.5239	117.5239	2.7800e- 003		117.5933
Total	0.0552	0.0284	0.3791	1.1800e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		117.5239	117.5239	2.7800e- 003		117.5933

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.0105	 				0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	1.0738	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.110 7	1,709.110 7	0.5417		1,722.652 4

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0284	0.3791	1.1800e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		117.5239	117.5239	2.7800e- 003		117.5933
Total	0.0552	0.0284	0.3791	1.1800e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		117.5239	117.5239	2.7800e- 003		117.5933

3.7 Architectural Coating - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	21.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941	1	0.0941	0.0941		281.4481	281.4481	0.0193	 	281.9309
Total	21.4699	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.7 Architectural Coating - 2021 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0184	9.4500e- 003	0.1264	3.9000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		39.1747	39.1747	9.3000e- 004		39.1978
Total	0.0184	9.4500e- 003	0.1264	3.9000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		39.1747	39.1747	9.3000e- 004	_	39.1978

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	21.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003	 	0.0941	0.0941	 	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	21.4699	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

3.7 Architectural Coating - 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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0184	9.4500e- 003	0.1264	3.9000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		39.1747	39.1747	9.3000e- 004		39.1978
Total	0.0184	9.4500e- 003	0.1264	3.9000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		39.1747	39.1747	9.3000e- 004		39.1978

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	0.0655	0.3950	0.6251	2.6100e- 003	0.1799	2.0500e- 003	0.1820	0.0483	1.9200e- 003	0.0502		265.2317	265.2317	0.0125		265.5441
Unmitigated	0.0655	0.3950	0.6251	2.6100e- 003	0.1799	2.0500e- 003	0.1820	0.0483	1.9200e- 003	0.0502		265.2317	265.2317	0.0125		265.5441

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	32.00	32.00	32.00	83,976	83,976
Parking Lot	0.00	0.00	0.00		
Total	32.00	32.00	32.00	83,976	83,976

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

	Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
	Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Ĺ	Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitiantod	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637
Unmitigated	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	723.773	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003	1 1 1	85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	0.679056	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

Use Low VOC Paint - Residential Interior
Use Low VOC Paint - Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693
Unmitigated	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

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/d	day							lb/d	day		
Architectural Coating	0.0582		! !			0.0000	0.0000	 	0.0000	0.0000			0.0000	! !	 	0.0000
Consumer Products	0.3628				 	0.0000	0.0000	 	0.0000	0.0000			0.0000		 	0.0000
Hearth	72.5238	1.2792	89.6646	0.1620		12.5737	12.5737	 	12.5737	12.5737	1,321.002 1	372.7059	1,693.708 0	1.2346	0.1002	1,754.439 3
Landscaping	0.0799	0.0305	2.6433	1.4000e- 004		0.0146	0.0146	 	0.0146	0.0146		4.7546	4.7546	4.5900e- 003		4.8693
Total	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 29 Date: 2/7/2020 2:56 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
SubCategory		lb/day										lb/day						
Architectural Coating	0.0582					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
	0.3357		1 			0.0000	0.0000	1 	0.0000	0.0000			0.0000			0.0000		
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Landscaping	0.0799	0.0305	2.6433	1.4000e- 004		0.0146	0.0146	1 	0.0146	0.0146		4.7546	4.7546	4.5900e- 003		4.8693		
Total	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693		

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Summer

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Paul's Place - Proposed Yolo/Solano AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	4.00	Space	0.04	1,600.00	0
Congregate Care (Assisted Living)	32.00	Dwelling Unit	2.00	16,928.00	32

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)6.8Precipitation Freq (Days)55Climate Zone4Operational Year2022

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 269.5
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Date: 2/7/2020 2:57 PM

Project Characteristics - CO2 intensity adjusted per PG&E's RPS projections.

Land Use - Updated square footage and population to reflect the intended building.

On-road Fugitive Dust - % of paved roads set to 100

Demolition -

Vehicle Trips - Trip generation rate is adjusted based on the employee information provided by the project applicant.

Road Dust - All roads in the project vicinity are paved.

Energy Use - Per 2019 CBSC requirements, structures built after Jan 1, 2020, must be 7 percent more efficient than what was required under the 2016 CBSC. Accordingly, Title-24 Electricity and Natural Gas Intensities were reduced to 93% of their default values.

Energy Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation - This figure is based on the Davis Integrated Waste Management Plan

City of Davis Public Works Department. Davis Integrated Waste Management Plan [pg. 3-6]. July 2013.

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblEnergyUse	T24E	332.81	309.51
tblEnergyUse	T24NG	5,484.45	5,100.54
tblLandUse	LandUseSquareFeet	32,000.00	16,928.00
tblLandUse	Population	92.00	32.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	HaulingPercentPave	94.00	100.00

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Date: 2/7/2020 2:57 PM

Page 3 of 29

tblOnRoadDust	HaulingPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	VendorPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblOnRoadDust	WorkerPercentPave	94.00	100.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	269.5
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	2.20	1.00
tblVehicleTrips	SU_TR	2.44	1.00
tblVehicleTrips	WD_TR	2.74	1.00

2.0 Emissions Summary

Paul's Place - Proposed - Yolo/Solano 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/d	day							lb/d	lay		
2020	2.3927	21.3684	15.5911	0.0279	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,576.755 1	2,576.755 1	0.7689	0.0000	2,588.673 4
2021	21.4873	16.5042	15.1912	0.0278	0.2085	0.8195	1.0280	0.0559	0.7852	0.8411	0.0000	2,569.693 7	2,569.693 7	0.5442	0.0000	2,581.235 6
Maximum	21.4873	21.3684	15.5911	0.0279	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,576.755 1	2,576.755 1	0.7689	0.0000	2,588.673 4

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day						lb/day				
2020	2.3927	21.3684	15.5911	0.0279	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,576.755 1	2,576.755 1	0.7689	0.0000	2,588.673 4
2021	21.4873	16.5042	15.1912	0.0278	0.2085	0.8195	1.0280	0.0559	0.7852	0.8411	0.0000	2,569.693 6	2,569.693 6	0.5442	0.0000	2,581.235 6
Maximum	21.4873	21.3684	15.5911	0.0279	6.6284	1.1538	7.6191	3.3877	1.0774	4.2991	0.0000	2,576.755 1	2,576.755 1	0.7689	0.0000	2,588.673 4
	ROG	NOx	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

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano 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	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6			
Energy	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558			
Mobile	0.0529	0.4103	0.6096	2.4000e- 003	0.1799	2.0900e- 003	0.1820	0.0483	1.9600e- 003	0.0503		244.1458	244.1458	0.0131		244.4729			
Total	73.0854	1.7868	92.9458	0.1649	0.1799	12.5957	12.7757	0.0483	12.5956	12.6439	1,321.002 1	706.7560	2,027.758 1	1.2539	0.1018	2,089.437 2			

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category		lb/day										lb/day						
Area	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693		
Energy	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003	1 	5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637		
Mobile	0.0529	0.4103	0.6096	2.4000e- 003	0.1799	2.0900e- 003	0.1820	0.0483	1.9600e- 003	0.0503		244.1458	244.1458	0.0131		244.4729		
Total	0.5340	0.5034	3.2795	2.9400e- 003	0.1799	0.0218	0.2017	0.0483	0.0216	0.0699	0.0000	328.7893	328.7893	0.0192	1.4600e- 003	329.7059		

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	99.27	71.83	96.47	98.22	0.00	99.83	98.42	0.00	99.83	99.45	100.00	53.48	83.79	98.47	98.57	84.22

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/5/2020	3/3/2020	5	20	
2	Site Preparation	Site Preparation	3/4/2020	3/6/2020	5	3	
3	Grading	Grading	3/7/2020	3/16/2020	5	6	
4	Building Construction	Building Construction	3/17/2020	1/18/2021	5	220	
5	Paving	Paving	1/19/2021	2/1/2021	5	10	
6	Architectural Coating	Architectural Coating	2/2/2021	2/15/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0.04

Residential Indoor: 34,279; Residential Outdoor: 11,426; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 96 (Architectural Coating – sqft)

OffRoad Equipment

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Date: 2/7/2020 2:57 PM

Page 7 of 29

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Page 8 of 29

Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	13.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	4.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.00	7.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2020**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.1614	0.0000	0.1614	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.312 7	2,322.312 7	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	0.1614	1.1525	1.3139	0.0245	1.0761	1.1006		2,322.312 7	2,322.312 7	0.5970		2,337.236 3

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.2 Demolition - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	5.3100e- 003	0.1764	0.0308	5.2000e- 004	0.0114	6.4000e- 004	0.0120	3.1100e- 003	6.1000e- 004	3.7200e- 003		55.0055	55.0055	2.4600e- 003		55.0670
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0488	0.0346	0.3215	9.4000e- 004	0.0989	6.8000e- 004	0.0996	0.0262	6.2000e- 004	0.0269		93.7297	93.7297	2.4200e- 003		93.7902
Total	0.0541	0.2110	0.3523	1.4600e- 003	0.1103	1.3200e- 003	0.1116	0.0293	1.2300e- 003	0.0306		148.7352	148.7352	4.8800e- 003		148.8571

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.1614	0.0000	0.1614	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.312 7	2,322.312 7	0.5970		2,337.236 3
Total	2.1262	20.9463	14.6573	0.0241	0.1614	1.1525	1.3139	0.0245	1.0761	1.1006	0.0000	2,322.312 7	2,322.312 7	0.5970		2,337.236 3

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.2 Demolition - 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/d	day							lb/d	day		
Hauling	5.3100e- 003	0.1764	0.0308	5.2000e- 004	0.0114	6.4000e- 004	0.0120	3.1100e- 003	6.1000e- 004	3.7200e- 003		55.0055	55.0055	2.4600e- 003		55.0670
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0488	0.0346	0.3215	9.4000e- 004	0.0989	6.8000e- 004	0.0996	0.0262	6.2000e- 004	0.0269		93.7297	93.7297	2.4200e- 003		93.7902
Total	0.0541	0.2110	0.3523	1.4600e- 003	0.1103	1.3200e- 003	0.1116	0.0293	1.2300e- 003	0.0306		148.7352	148.7352	4.8800e- 003		148.8571

3.3 Site Preparation - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771		0.7149	0.7149		2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867		2,372.906 2	2,372.906 2	0.7675		2,392.092 4

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.3 Site Preparation - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0300	0.0213	0.1978	5.8000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		57.6798	57.6798	1.4900e- 003		57.7170
Total	0.0300	0.0213	0.1978	5.8000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		57.6798	57.6798	1.4900e- 003		57.7170

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust	 				1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.6521	19.9196	11.2678	0.0245		0.7771	0.7771	 	0.7149	0.7149	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4
Total	1.6521	19.9196	11.2678	0.0245	1.5908	0.7771	2.3678	0.1718	0.7149	0.8867	0.0000	2,372.906 2	2,372.906 2	0.7675		2,392.092 4

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.3 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/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0300	0.0213	0.1978	5.8000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		57.6798	57.6798	1.4900e- 003		57.7170
Total	0.0300	0.0213	0.1978	5.8000e- 004	0.0609	4.2000e- 004	0.0613	0.0161	3.8000e- 004	0.0165		57.6798	57.6798	1.4900e- 003		57.7170

3.4 Grading - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902		0.9110	0.9110		1,996.406 1	1,996.406 1	0.6457	 	2,012.548 0
Total	1.9219	21.3418	9.9355	0.0206	6.5523	0.9902	7.5425	3.3675	0.9110	4.2784		1,996.406 1	1,996.406 1	0.6457		2,012.548 0

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.4 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0375	0.0266	0.2473	7.2000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		72.0998	72.0998	1.8600e- 003		72.1463
Total	0.0375	0.0266	0.2473	7.2000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		72.0998	72.0998	1.8600e- 003		72.1463

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675		1 1 1	0.0000			0.0000
Off-Road	1.9219	21.3418	9.9355	0.0206		0.9902	0.9902	 	0.9110	0.9110	0.0000	1,996.406 1	1,996.406 1	0.6457	i ! !	2,012.548 0
Total	1.9219	21.3418	9.9355	0.0206	6.5523	0.9902	7.5425	3.3675	0.9110	4.2784	0.0000	1,996.406 1	1,996.406 1	0.6457		2,012.548 0

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.4 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0375	0.0266	0.2473	7.2000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		72.0998	72.0998	1.8600e- 003		72.1463
Total	0.0375	0.0266	0.2473	7.2000e- 004	0.0761	5.2000e- 004	0.0766	0.0202	4.8000e- 004	0.0207		72.0998	72.0998	1.8600e- 003		72.1463

3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887	0.4646		2,300.501 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0148	0.4564	0.1004	1.1000e- 003	0.0260	2.0300e- 003	0.0280	7.4800e- 003	1.9500e- 003	9.4200e- 003		114.8279	114.8279	7.7200e- 003		115.0209
Worker	0.0900	0.0639	0.5935	1.7400e- 003	0.1826	1.2500e- 003	0.1838	0.0484	1.1500e- 003	0.0496		173.0395	173.0395	4.4700e- 003		173.1511
Total	0.1048	0.5203	0.6939	2.8400e- 003	0.2085	3.2800e- 003	0.2118	0.0559	3.1000e- 003	0.0590		287.8673	287.8673	0.0122		288.1720

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
- Cil rioda	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.5 Building Construction - 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/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0148	0.4564	0.1004	1.1000e- 003	0.0260	2.0300e- 003	0.0280	7.4800e- 003	1.9500e- 003	9.4200e- 003		114.8279	114.8279	7.7200e- 003		115.0209
Worker	0.0900	0.0639	0.5935	1.7400e- 003	0.1826	1.2500e- 003	0.1838	0.0484	1.1500e- 003	0.0496		173.0395	173.0395	4.4700e- 003		173.1511
Total	0.1048	0.5203	0.6939	2.8400e- 003	0.2085	3.2800e- 003	0.2118	0.0559	3.1000e- 003	0.0590		287.8673	287.8673	0.0122		288.1720

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.5 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/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0124	0.4196	0.0879	1.0900e- 003	0.0260	1.0200e- 003	0.0270	7.4800e- 003	9.8000e- 004	8.4500e- 003		113.7586	113.7586	7.3700e- 003		113.9429
Worker	0.0836	0.0571	0.5403	1.6800e- 003	0.1826	1.2100e- 003	0.1838	0.0484	1.1200e- 003	0.0495		166.9995	166.9995	3.9900e- 003	 	167.0992
Total	0.0960	0.4767	0.6283	2.7700e- 003	0.2085	2.2300e- 003	0.2108	0.0559	2.1000e- 003	0.0580		280.7581	280.7581	0.0114		281.0421

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0124	0.4196	0.0879	1.0900e- 003	0.0260	1.0200e- 003	0.0270	7.4800e- 003	9.8000e- 004	8.4500e- 003		113.7586	113.7586	7.3700e- 003	 	113.9429
Worker	0.0836	0.0571	0.5403	1.6800e- 003	0.1826	1.2100e- 003	0.1838	0.0484	1.1200e- 003	0.0495		166.9995	166.9995	3.9900e- 003	 	167.0992
Total	0.0960	0.4767	0.6283	2.7700e- 003	0.2085	2.2300e- 003	0.2108	0.0559	2.1000e- 003	0.0580		280.7581	280.7581	0.0114		281.0421

3.6 Paving - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.0105	 			 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0738	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.110 7	1,709.110 7	0.5417		1,722.652 4

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.6 Paving - 2021

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day											lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Worker	0.0523	0.0357	0.3377	1.0500e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		104.3747	104.3747	2.4900e- 003		104.4370		
Total	0.0523	0.0357	0.3377	1.0500e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		104.3747	104.3747	2.4900e- 003		104.4370		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.652 4			
Paving	0.0105	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000			
Total	1.0738	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.110 7	1,709.110 7	0.5417		1,722.652 4			

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.6 Paving - 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/d	lb/day										
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0523	0.0357	0.3377	1.0500e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		104.3747	104.3747	2.4900e- 003		104.4370
Total	0.0523	0.0357	0.3377	1.0500e- 003	0.1141	7.6000e- 004	0.1149	0.0303	7.0000e- 004	0.0310		104.3747	104.3747	2.4900e- 003		104.4370

3.7 Architectural Coating - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	21.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193	 	281.9309
Total	21.4699	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.7 Architectural Coating - 2021 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day											lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Worker	0.0174	0.0119	0.1126	3.5000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		34.7916	34.7916	8.3000e- 004		34.8123		
Total	0.0174	0.0119	0.1126	3.5000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		34.7916	34.7916	8.3000e- 004		34.8123		

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	21.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941	1 1 1 1	0.0941	0.0941	0.0000	281.4481	281.4481	0.0193	; ; ;	281.9309
Total	21.4699	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

3.7 Architectural Coating - 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/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0119	0.1126	3.5000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		34.7916	34.7916	8.3000e- 004		34.8123
Total	0.0174	0.0119	0.1126	3.5000e- 004	0.0380	2.5000e- 004	0.0383	0.0101	2.3000e- 004	0.0103		34.7916	34.7916	8.3000e- 004		34.8123

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.0529	0.4103	0.6096	2.4000e- 003	0.1799	2.0900e- 003	0.1820	0.0483	1.9600e- 003	0.0503		244.1458	244.1458	0.0131		244.4729
Unmitigated	0.0529	0.4103	0.6096	2.4000e- 003	0.1799	2.0900e- 003	0.1820	0.0483	1.9600e- 003	0.0503		244.1458	244.1458	0.0131	 	244.4729

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	32.00	32.00	32.00	83,976	83,976
Parking Lot	0.00	0.00	0.00		
Total	32.00	32.00	32.00	83,976	83,976

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	10.00	5.00	7.00	46.00	13.00	41.00	86	11	3
Parking Lot	10.00	5.00	7.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929
Parking Lot	0.523474	0.037926	0.194068	0.114815	0.021291	0.005457	0.036110	0.054974	0.001332	0.002002	0.006933	0.000689	0.000929

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitiantal	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637
Unmitigated	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	723.773	7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.8100e- 003	0.0667	0.0284	4.3000e- 004		5.3900e- 003	5.3900e- 003		5.3900e- 003	5.3900e- 003		85.1498	85.1498	1.6300e- 003	1.5600e- 003	85.6558

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Congregate Care (Assisted Living)	0.679056	7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.3200e- 003	0.0626	0.0266	4.0000e- 004		5.0600e- 003	5.0600e- 003		5.0600e- 003	5.0600e- 003		79.8890	79.8890	1.5300e- 003	1.4600e- 003	80.3637

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano AQMD Air District, Winter

Use Low VOC Paint - Residential Interior
Use Low VOC Paint - Residential Exterior
No Hearths Installed
Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693
Unmitigated	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6

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/d	day							lb/d	day		
Architectural Coating	0.0582					0.0000	0.0000	i i	0.0000	0.0000			0.0000		 	0.0000
Consumer Products	0.3628		 			0.0000	0.0000	i i	0.0000	0.0000			0.0000		 	0.0000
Hearth	72.5238	1.2792	89.6646	0.1620		12.5737	12.5737	i i	12.5737	12.5737	1,321.002 1	372.7059	1,693.708 0	1.2346	0.1002	1,754.439 3
Landscaping	0.0799	0.0305	2.6433	1.4000e- 004		0.0146	0.0146	i i	0.0146	0.0146		4.7546	4.7546	4.5900e- 003	 	4.8693
Total	73.0248	1.3097	92.3078	0.1621		12.5883	12.5883		12.5883	12.5883	1,321.002 1	377.4604	1,698.462 5	1.2392	0.1002	1,759.308 6

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 29 Date: 2/7/2020 2:57 PM

Paul's Place - Proposed - Yolo/Solano 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/d	day							lb/d	day		
Architectural Coating	0.0582					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3357					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	1 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0799	0.0305	2.6433	1.4000e- 004		0.0146	0.0146	1 	0.0146	0.0146		4.7546	4.7546	4.5900e- 003		4.8693
Total	0.4738	0.0305	2.6433	1.4000e- 004		0.0146	0.0146		0.0146	0.0146	0.0000	4.7546	4.7546	4.5900e- 003	0.0000	4.8693

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Equipment Type	Number	1 louis/Day	Days/Teal	riorse i owei	Load I actor	i dei Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

Paul's Place - Proposed

Yolo/Solano AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
				Percent	Reduction							
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

CalEEMod Version: CalEEMod.2016.3.2

Page 2 of 11

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	2	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Scrapers	Diesel	No Change	0	1	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Page 3 of 11

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
		Ur	nmitigated tons/yr				Unmitigated mt/yr						
Air Compressors	1.09000E-003	7.63000E-003	9.09000E-003	1.00000E-005	4.70000E-004	4.70000E-004	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000	
Cement and Mortar Mixers	2.90000E-004	1.84000E-003	1.54000E-003	0.00000E+000	7.00000E-005	7.00000E-005	0.00000E+000	2.29140E-001	2.29140E-001	2.00000E-005	0.00000E+000	2.29730E-001	
Concrete/Industria I Saws	4.18000E-003	3.29900E-002	3.68700E-002	6.00000E-005	1.98000E-003	1.98000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38508E+000	
Cranes	4.96300E-002	5.89810E-001	2.31890E-001	6.30000E-004	2.43000E-002	2.23500E-002	0.00000E+000	5.57615E+001	5.57615E+001	1.80300E-002	0.00000E+000	5.62124E+001	
Forklifts	2.75700E-002	2.48530E-001	2.27070E-001	2.90000E-004	1.84700E-002	1.69900E-002	0.00000E+000	2.58511E+001	2.58511E+001	8.36000E-003	0.00000E+000	2.60601E+001	
Generator Sets	4.36500E-002	3.80770E-001	4.07480E-001	7.20000E-004	2.14200E-002	2.14200E-002	0.00000E+000	6.21728E+001	6.21728E+001	3.48000E-003	0.00000E+000	6.22599E+001	
Graders	2.14000E-003	2.84600E-002	8.17000E-003	3.00000E-005	9.10000E-004	8.40000E-004	0.00000E+000	2.62379E+000	2.62379E+000	8.50000E-004	0.00000E+000	2.64501E+000	
Pavers	1.23000E-003	1.29800E-002	1.45200E-002	2.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	2.06412E+000	2.06412E+000	6.70000E-004	0.00000E+000	2.08081E+000	
Paving Equipment	9.60000E-004	9.70000E-003	1.27100E-002	2.00000E-005	4.80000E-004	4.40000E-004	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000	
Rollers	1.89000E-003	1.92400E-002	1.88000E-002	3.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	2.30506E+000	2.30506E+000	7.50000E-004	0.00000E+000	2.32369E+000	
Rubber Tired Dozers	1.40300E-002	1.47320E-001	5.37100E-002	1.10000E-004	7.21000E-003	6.64000E-003	0.00000E+000	9.75718E+000	9.75718E+000	3.16000E-003	0.00000E+000	9.83607E+000	
Scrapers	1.49000E-003	1.76300E-002	1.11900E-002	2.00000E-005	6.90000E-004	6.30000E-004	0.00000E+000	1.99628E+000	1.99628E+000	6.50000E-004	0.00000E+000	2.01242E+000	
Tractors/Loaders/ Backhoes	2.57800E-002	2.59180E-001	2.82640E-001	3.90000E-004	1.63100E-002	1.50100E-002	0.00000E+000	3.38519E+001	3.38519E+001	1.09500E-002	0.00000E+000	3.41256E+001	
Welders	1.12180E-001	5.17410E-001	5.82250E-001	8.40000E-004	2.84400E-002	2.84400E-002	0.00000E+000	6.21128E+001	6.21128E+001	9.12000E-003	0.00000E+000	6.23408E+001	

Page 4 of 11

						1		1	1		1	1	
Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
		М	itigated tons/yr				Mitigated mt/yr						
Air Compressors	1.09000E-003	7.63000E-003	9.09000E-003	1.00000E-005	4.70000E-004	4.70000E-004	0.00000E+000	1.27663E+000	1.27663E+000	9.00000E-005	0.00000E+000	1.27882E+000	
Cement and Mortar Mixers	2.90000E-004	1.84000E-003	1.54000E-003	0.00000E+000	7.00000E-005	7.00000E-005	0.00000E+000	2.29140E-001	2.29140E-001	2.00000E-005	0.00000E+000	2.29730E-001	
Concrete/Industrial Saws	4.18000E-003	3.29900E-002	3.68700E-002	6.00000E-005	1.98000E-003	1.98000E-003	0.00000E+000	5.37656E+000	5.37656E+000	3.40000E-004	0.00000E+000	5.38507E+000	
Cranes	4.96300E-002	5.89810E-001	2.31890E-001	6.30000E-004	2.43000E-002	2.23500E-002	0.00000E+000	5.57615E+001	5.57615E+001	1.80300E-002	0.00000E+000	5.62123E+001	
Forklifts	2.75700E-002	2.48530E-001	2.27070E-001	2.90000E-004	1.84700E-002	1.69900E-002	0.00000E+000	2.58511E+001	2.58511E+001	8.36000E-003	0.00000E+000	2.60601E+001	
Generator Sets	4.36500E-002	3.80770E-001	4.07480E-001	7.20000E-004	2.14200E-002	2.14200E-002	0.00000E+000	6.21728E+001	6.21728E+001	3.48000E-003	0.00000E+000	6.22598E+001	
Graders	2.14000E-003	2.84600E-002	8.17000E-003	3.00000E-005	9.10000E-004	8.40000E-004	0.00000E+000	2.62379E+000	2.62379E+000	8.50000E-004	0.00000E+000	2.64500E+000	
Pavers	1.23000E-003	1.29800E-002	1.45200E-002	2.00000E-005	6.30000E-004	5.80000E-004	0.00000E+000	2.06412E+000	2.06412E+000	6.70000E-004	0.00000E+000	2.08081E+000	
Paving Equipment	9.60000E-004	9.70000E-003	1.27100E-002	2.00000E-005	4.80000E-004	4.40000E-004	0.00000E+000	1.78922E+000	1.78922E+000	5.80000E-004	0.00000E+000	1.80369E+000	
Rollers	1.89000E-003	1.92400E-002	1.88000E-002	3.00000E-005	1.18000E-003	1.08000E-003	0.00000E+000	2.30505E+000	2.30505E+000	7.50000E-004	0.00000E+000	2.32369E+000	
Rubber Tired Dozers	1.40300E-002	1.47320E-001	5.37100E-002	1.10000E-004	7.21000E-003	6.64000E-003	0.00000E+000	9.75717E+000	9.75717E+000	3.16000E-003	0.00000E+000	9.83606E+000	
Scrapers	1.49000E-003	1.76300E-002	1.11900E-002	2.00000E-005	6.90000E-004	6.30000E-004	0.00000E+000	1.99628E+000	1.99628E+000	6.50000E-004	0.00000E+000	2.01242E+000	
Tractors/Loaders/Ba ckhoes	2.57800E-002	2.59180E-001	2.82640E-001	3.90000E-004	1.63100E-002	1.50100E-002	0.00000E+000	3.38519E+001	3.38519E+001	1.09500E-002	0.00000E+000	3.41256E+001	
Welders	1.12180E-001	5.17410E-001	5.82250E-001	8.40000E-004	2.84400E-002	2.84400E-002	0.00000E+000	6.21127E+001	6.21127E+001	9.12000E-003	0.00000E+000	6.23408E+001	

CalEEMod Version: CalEEMod.2016.3.2

Page 5 of 11

Date: 2/7/2020 2:58 PM

Equipment Type	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
					Pe	rcent Reduction						
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.85698E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25535E-006	1.25535E-006	0.00000E+000	0.00000E+000	1.24528E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16049E-006	1.16049E-006	0.00000E+000	0.00000E+000	1.15119E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12589E-006	1.12589E-006	0.00000E+000	0.00000E+000	1.12432E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.78070E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.33828E-006	4.33828E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.02489E-006	1.02489E-006	0.00000E+000	0.00000E+000	1.01667E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Ba ckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18162E-006	1.18162E-006	0.00000E+000	0.00000E+000	1.17214E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28798E-006	1.28798E-006	0.00000E+000	0.00000E+000	1.28327E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	 PM2.5 Reduction	 	
No	:Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)	

CalEEMod Version: CalEEMod.2016.3.2	Page 6 of 11	Date: 2/7/2020 2:58 PM
-------------------------------------	--------------	------------------------

No	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	40.00	
No	Clean Paved Road	% PM Reduction	0.00			

		Unmitigated Mitigated			Percent	Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.02	0.01	0.02	0.01	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

CalEEMod Version: CalEEMod.2016.3.2

Page 7 of 11

Date: 2/7/2020 2:58 PM

Category	ROG	NOx	СО	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
			Percent	Reduction								
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.15	80.15	80.46	80.56	80.15
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	5.63	6.16	6.18	12.50	6.12	6.12	0.00	6.18	6.18	7.41	7.69	6.18
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	14.21	15.68	19.99	20.00	17.63
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	 		
No	Land Use	Increase Diversity	0.01	0.17		
No	Land Use	Improve Walkability Design	0.00	;		
No	Land Use	Improve Destination Accessibility	0.00	;		
No	Land Use	Increase Transit Accessibility	0.25	;		
No	Land Use	Integrate Below Market Rate Housing	0.00	j		
	Land Use	Land Use SubTotal	0.00			

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 11 Date: 2/7/2020 2:58 PM

		3		Date. 2/1/2020 2.30 F W	
No	Neighborhood Enhancements	Improve Pedestrian Network	II		
No	; Neighborhood Enhancements	Provide Traffic Calming Measures	"		
No	Neighborhood Enhancements	-I	0.00		
	Neighborhood Enhancements	 ;Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	-! ;Limit Parking Supply	0.00	-	-
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		-
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		-
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00	<u>-</u>	-
No	Transit Improvements	Increase Transit Frequency	0.00	<u>-</u>	-
	Transit Improvements	Transit Improvements Subtotal	0.00		
	· · · · · · · · · · · · · · · · · · ·	Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program		<u>-</u>	
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"		<u>-</u>	
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00	 	2.00
No	Commute	Provide Ride Sharing Program		-	
	Commute	Commute Subtotal	0.00		

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 11 Date: 2/7/2020 2:58 PM

No	School Trip	Implement School Bus Program	0.00		
· · · · · · · · · · · · · · · · · · ·		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	10.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	80.00

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 11 Date: 2/7/2020 2:58 PM

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

CalEEMod Version: CalEEMod.2016.3.2	Р	age 11 of 11
Institute Recycling and Composting Services Percent Reduction in Waste Disposed		30.00