

CITY OF CLEARLAKE

DRAFT MITIGATED NEGATIVE DECLARATION

ENVIRONMENTAL ANALYSIS (CEQA)

INITIAL STUDY

BURNS VALLEY PARK AND PUBLIC WORKS YARD MASTER PLAN

June 16, 2022

CALIFORNIA ENVIRONMENTAL QUALITY ACT ENVIRONMENTAL CHECKLIST FORM INITIAL STUDY

1. Project Title: Burns Valley Park and Public Works Yard Master Plan

2. Permit Numbers: Initial Study, IS 2022-05

Conditional Use Permit, CUP 2022-16

3. Lead Agency Name/Address: City of Clearlake 14050 Olympic Drive

Clearlake, CA 95422

4. Contact Person: Mark Roberts – Senior Planner

Phone: (707) 994-8201

Email: mroberts@clearlake.ca.us

5. Project Location(s): 14885 Burns Valley Road

Clearlake, CA 95422

6. Parcel Numbers(s): 010-026-40

7. Project Sponsor's Name/Address: City of Clearlake 14050 Olympic Drive

Clearlake, CA 95422

8. Property Owner(s) Name/Address: City of Clearlake 14050 Olympic Drive

Clearlake, CA 95422

9. Zoning Designations: Mix Use

10. General Plan Designation: Mixed Use

11. Supervisor District: District Two (2)

12. Average Cross Slope: Less than 10% cross slope

13. Earthquake Fault Zone: Not within a fault zone

14. Dam Failure Inundation Area: Not within a Dam Failure Inundation Zone

15. Flood Zone: Partially located within Flood Zone AO

16. Waste Management: Clearlake Waste Solutions

17. Water Access: Highlands Mutual Water Company

18. Fire Department: Lake County Fire Protection District

19. School District:

20. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project and any secondary, support, or off-site features necessary for its implementation. Attach additional pages if necessary.)

Development of a public park (sports complex), community center, public works yard with public works building facility and combined police department office and maintenance facilities, vehicle and equipment storage areas, public access and parking facilities on approximately 26 acres.

The project is proposed to be located in the Burns Valley Area, north of Olympic Drive and South of Burns Valley Drive, behind the Safeway Shopping Center, Clearlake, CA (Accessors Parcel No. 010-026-40). Also, see Figures 1, 2, and 3 (location maps).

The park would include one full size baseball field, two smaller little league baseball fields, two small Tee-Ball Fields, a full-size soccer field (see Figure 6, Site and Preliminary Grading Plan). The project would include development of an approximately 15,000 to 20,000 square foot recreation center building for use for public events and activities (see Figure 7-concept building elevations). This building would contain sports features, such as basketball and volleyball courts. Being located next to the baseball area, a concession building/stand would be constructed next to or as part of this larger building. These combined facilities would be located on the east side of the project site.

On the west side is proposed an approximate 12,000 square foot public works building, including a Police Department investigation facility (see Figure 8). This building would include a vehicle wash station, and sections for equipment repair. This public works yard would be used to store and maintain city public vehicles, including public works and police department cars, trucks, and heavy equipment.

Access to the project would be from a number of driveways/streets including access from Olympic Drive and Burns Valley Road. Approximately 365 parking spaces would be developed along access roads through the park (including 20 for the public works/police facility). Other related improvements would include sidewalks, fencing (see Figure 11), lighting features (see figures 12. 13. And 14), baseball field protective netting (see Figure 10) and restroom facilities. All play fields will include lighting to allow for night operations.

Project development is envisioned to be constructed in two development phasing depending on funding availability and City priority. The first phase, as shown in Figure 6, is to develop the sports complex components, with the recreation center building and public works hop building to come later.

21. Environmental Setting:

The project area is relatively flat with gently rolling terrain situated at an elevational range of approximately 1,350 to 1,365 feet above mean sea level (MSL) in the Inner North Coast Ranges District of the California floristic province (Baldwin et al. 2012). Please refer to site photos (Figure 5). The parcel is an irregularly shaped 25.46-acre parcel generally composed of open landscape, existing tree orchard and grasses. A drainage channel transects the eastern portion of the parcel in the southwest direction.

- 22. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:
 - The parcels to the North Library and senior residential care center, vacant ag land
 - The parcels to the **South** Commercial Retail
 - The parcels to the **West** Vacant land
 - The parcels to the **East** Rural residential
- **20. Other Public Agencies Whose Approval is Required**: Local Agencies: City of Clearlake Community Development (Planning, Building, Public Works); Clearlake Police Department, Lake County Fire Protection, Lake County Department of Environmental Health, Lake County Air Quality Management District, Lake County Special Districts, Highlands Water Districts, Local Tribal Organizations.
- **21. Federal and State Agencies:** Central Valley Regional Water Quality Control Board, CA Department of Fish and Wildlife, California Department of Transportation (Caltrans); California Department of Public Health.
- 22. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.

Notification of the project was sent to local tribes for "AB 52" Notification, which allows interested Tribes to request tribal consultation within 30 days of receipt of notice. The Cultural Study documents all consultation conducted.

- 23. Impact Categories defined by CEQA: The following documents are referenced information sources and are incorporated by reference into this document and are available for review upon request of the Community Development Department if they have not already been incorporated by reference into this report:
 - City of Clearlake General Plan
 - City of Clearlake Zoning Code
 - U.S.D.A. Lake County Soil Survey
 - Important Farmland Map https://maps.conservation.ca.gov/agriculture/
 - Lake County Serpentine Soil Mapping
 - California Natural Diversity Database (https://www.wildlife.ca.gov/Data/CNDDB)
 - U.S. Fish and Wildlife Service National Wetlands Inventory
 - U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanic, Northern California, Miscellaneous Investigation Series, 1995
 - Official Alquist-Priolo Earthquake Fault Zone maps for Lake County

- Landslide Hazards in the Eastern Clear Lake Area, Lake County, California, Landslide Hazard Identification Map No. 16, California Department of Conservation, Division of Mines and Geology, DMG Open –File Report 89-27, 1990
- Hazardous Waste and Substances Sites List: www.envirostor.dtsc.ca.gov/public
- California Department of Forestry and Fire Protection Fire Hazard Mapping
- National Pollution Discharge Elimination System (NPDES)
- Cal Recycle Solid Waste Information System http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx
- Written comments received from public agencies.
- Site visits

Figures

- Figure 1 Regional Map
- Figure 2 Vicinity Map
- Figure 3 USGS Map
- Figure 4 Zoning Map
- Figure 5 Site Photos
- Figure 6 Master Site and Preliminary Grading Plan
- Figure 7– Burns Valley Sports Complex Park Project 15,000 square foot Community Center Building Concept and Example of Buildings
- Figure 8 City Public Works Yard, Building Design Concepts/Example
- Figure 10 Baseball Field Protective Netting Concept/Example
- Figure 11 Perimeter Fencing Concept/Example
- Figure 12 Exterior Lighting Concept/Example
- Figure 13 Typical Street Lighting Design
- Figure 14 Baseball Field Lighting Example

Attachments

- Attachment A Lighting Analysis
- Attachment B Air Quality Impact Analysis
- Attachment C Biological Impact Report
- Attachment D Geotechnical Report
- Attachment E Traffic Impact Study
- Attachment F Noise Study for Oak Valley Villas Apartments
- Attachment G Flood Hazards Map

24. Figures



Figure 2: Vicinity Map

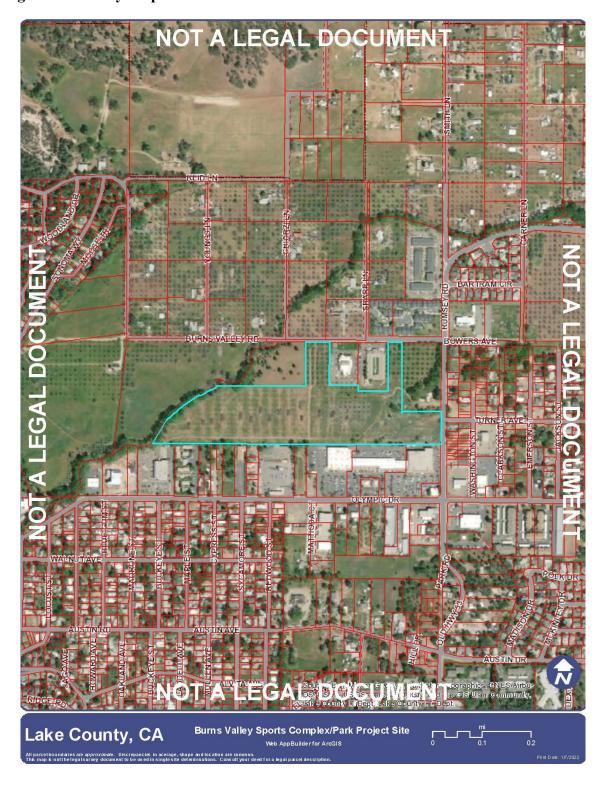


Figure 3: USGS Map

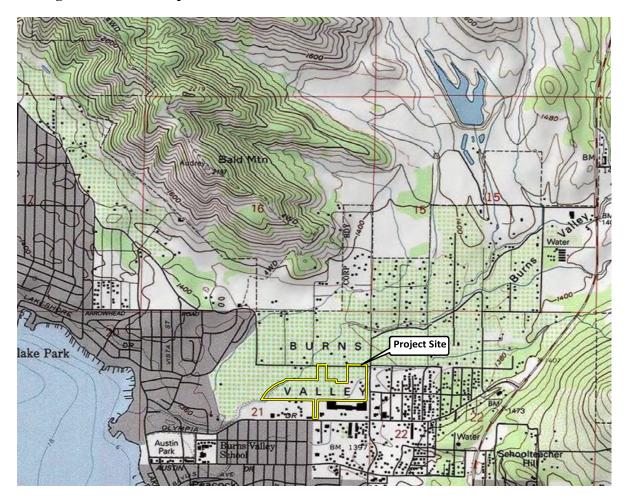
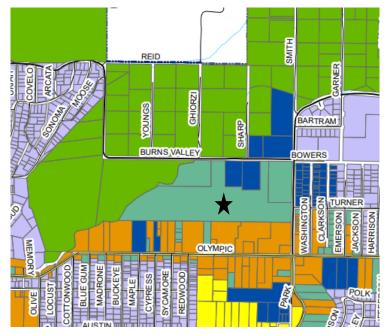


Figure 4: Zoning Map (MUX – Mix Use)



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Figure 5: Site Photos



Easterly view from south side and central on site



Southerly view from north center of site



Easterly view from center of site



Westerly view from north side of site

Figure 6: Master Site and Preliminary Grading Plan (larger plan available by request of the City)

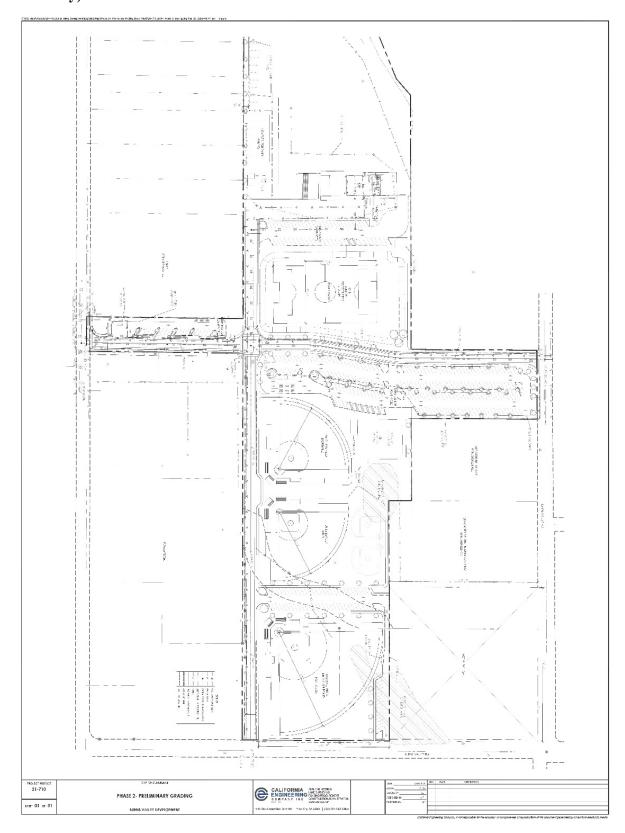


Figure 7: Burns Valley Sports Complex Park Project 15,000 square foot Community Center Building Concept and Example of Buildings





Figure 8: City Public Works Yard, Building Design Concepts/Example



Figure 9: Baseball Field Protective Netting Concept/Example



Figure 10: Perimeter Fencing Concept/Example



Figure 11: Exterior Lighting Concept/Example



Figure 12: Typical Street Lighting Design

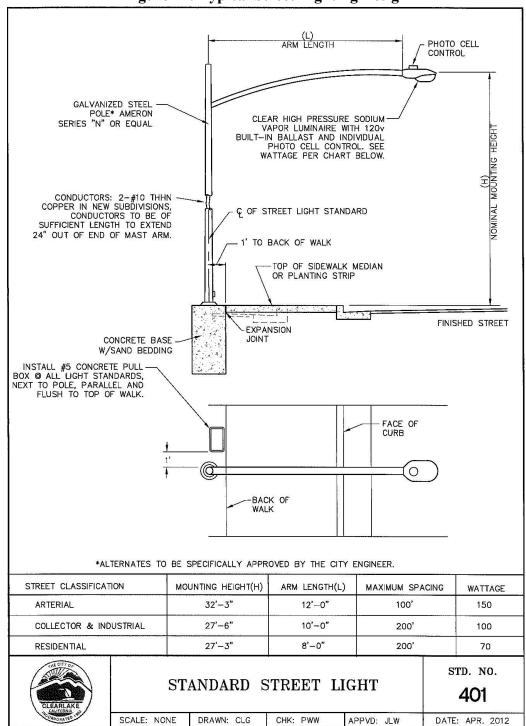


Figure 13: Baseball Field Lighting Example



31.	Environmental Factors Effected: The environmental sections checked below would be
	potentially affected by this project in an adverse manner, including at least one environmental
	issue/significance criteria that is "potentially significant impacts" as indicated by the analysis
	in the following evaluation of environmental impacts.

\boxtimes	Aesthetics		Greenhouse Gas Emissions		Public Services								
	Agriculture & Forestry Resources	\boxtimes	Hazards & Hazardous Materials		Recreation								
\boxtimes	Air Quality		Hydrology / Water Quality	\boxtimes	Transportation								
\boxtimes	Biological Resources		Land Use / Planning	\boxtimes	Tribal Cultural Resources								
	Cultural Resources		Mineral Resources		Utilities / Service Systems								
	Energy	\boxtimes	Noise & Vibration		Wildfire								
	Geology / Soils		Population / Housing	\boxtimes	Mandatory Findings of Significance								
	TERMINATION: (To be come he basis of this initial evaluation)	_	ed by the lead Agency)										
		I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.											
	I find that the proposed pro ENVIRONMENTAL IMPA		MAY have a significant effective REPORT is required.	ect of	n the environment, and an								
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.												
	because all potentially signi or NEGATIVE DECLAR avoided or mitigated pure	ficar ATI suan	d project could have a significant effects (a) have been analyz ON pursuant to applicable to that earlier EIR or Non measures that are impose	ed a stand EGA	dequately in an earlier EIR dards and (b) have been ATIVE DECLARATION,								

nothing further is required.

Prepared By: Mark Roberts Title: Senior Planner

Signature: ______ Date: July 19, 2022

Alan Flora – City Manager City of Clearlake, California

SECTION 1 - EVALUATION OF ENVIRONMENTAL IMPACTS:

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

IMACT CATEGORIES KEY:

- 1 = Potentially Significant Impact
- 2 = Less Than Significant with Mitigation Incorporation
- 3 = Analyzed in Prior EIR
- 4 = Substantially Mitigated by Uniformly Applicable Development Policies/Standards
- 5 = Less Than Significant Impact
- 6 = No Impact

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.								
	SECTION I. AESTHETICS Except as provided in Public Resources Code Section 21099, would the project:														
a) Have a substantial adverse effect on a scenic vista that is visible from a City scenic corridor?						×	The project parcel(s) are not located within and/or near scenic vistas. Therefore, the project will not have a substantial adverse effect one a scenic vista that is visible from a city scenic corridor. No Impact.								
b) Substantially damage scenic resources that is visible from a City Corridor, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?						×	The project will not substantially damage scenic resources that may be visible from a City Corridor, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. There are no known rock outcroppings, historic buildings, and/or scenic highways on the project site and no scenic highways with views of the project site. No Impact.								
c) Conflict with applicable General Plan policies or zoning regulations governing scenic quality.						×	The project will not conflict with applicable any General Plan policies and/or zoning regulations governing scenic quality within the City of Clearlake. No impact.								
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		×					The proposed lighting for the project will increase lighting levels in the area that may impact nighttime views and may result in substantial light glare, particularly from the new sport field lighting (see Figures 12, 13, and 14). The sport field lighting would consist of a series of maximum 70-foot-tall poles with LED glare resistant lighting fixtures directed/shielded downward. Lighting height and design may change as a result of final design plans, but will not exceed parameters in this analysis/document. A								

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							lighting analysis was conducted to determine the extent of glare impacts on adjoining properties/uses (see Attachment A). It shows lighting levels of about 15-foot candles at the property line of a proposed apartment project; Oak Valley Villas. One building in particular would be impacted by lighting during nighttime use of the sport field. The City does not have a threshold of significance for lighting levels. However, major efforts have been made to address lighting glare levels with the use of this type of lighting. Several mitigation measures have been developed to lessen the significant of lighting impacts from the project to a level of less than significant.
							AES-1 All outdoor lighting shall be directed downwards and shielded onto the project site and not onto adjacent properties. All lighting shall comply and adhere to all federal, state and local agency requirements, including all requirements in darksky.org. (Refer to the City's Design Standards).
							AES-2. A final lighting design plan shall be submitted for review and approval by the Community Development Department. Lighting levels shall not exceed lighting levels beyond those referenced in Attachment A, Lighting Analysis for this project. Lighting shall be installed in accordance with the final approved lighting plan.
							AES-2 All nighttime ball field lighting shall be operated no later than 10 pm.
SE	CT	Oľ	NI	I. A	GF	RIC	ULTURE AND FORESTRY RESOURCES
							ources are significant environmental effects, lead agencies may refer to the
							essment Model (1997) prepared by the California Dept. of Conservation as an
							culture and farmland. In determining whether impacts to forest resources,
							l effects, lead agencies may refer to information compiled by the California
							the state's inventory of forest land, including the Forest and Range Assessment
							forest carbon measurement methodology provided in Forest protocols adopted
					by	the C	California Air Resources Board.
							Would the project
a) Convert Prime Farmland, Unique						×	There is no Prime Farmland, Unique Farmland, and/or Farmland of Statewide Importance on or adjacent to the proposed project; therefore , there will be no impact .
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?		 					The manifest is a second for a simple man 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
b) Conflict with existing zoning for agricultural						×	The project site is not zoned for agricultural use and is not under contract for agricultural land use therefore, there will be no impact.
use, or a Williamson Act contract?							

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IMPACT							All determinations need explanation.
CATEGORIES*	1	2	3	4	5	6	Reference to documentation, sources, notes and correspondence.
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))?							The project will not conflict with existing zoning for, or cause the 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)). No Impact
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?						×	The project will not 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. Refer to 2a and 2b, above. No Impact
				SE	$\overline{\mathbf{CT}}$		N III. AIR QUALITY
Where available, the si	gnific	ance	e crite	eria est	stablisi	hed by	y the applicable air quality management district or air pollution control district on to make the following determinations. Would the project:
a) Conflict with or obstruct implementation of the applicable air quality plan?							The project is located in the Lake County Air Basin (LCAB). The State and Federal Clean Air Acts mandate the reduction and control of certain air pollutants. Under these Acts, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for certain "criteria pollutants." As shown in Table 1, the LCAB is in attainment status for each criteria pollutant, meaning that the LCAB is in compliance with the established ambient air quality standards for the criteria pollutants. Lake County Air Basin is one of only nine regions in California to have never exceeded the maximum ozone standard, and the only air basin to meet the standard for visibility reducing particles. Clearlake, located in LCAB, is currently in attainment of all State and Federal Ambient Air Quality Standards. The project will not result in air quality impacts that exceed the Bay Area Air Quality Management District (BAAQMD. In 2008, the California Air Resource Board released a summary of the estimated annual average emissions rates in the Lake County Air Basin, including stationary, area wide, and mobile source emissions. The main stationary source of total organic gas (TOG) emissions is electric fuel combustion. Carbon Monoxide (CO) is mostly coming from mobile emissions sources. Motorized boats and light duty passenger vehicles and trucks make up two-thirds of the mobile source CO emissions, and one half of the total CO emissions in the Air Basin. Finally, unpaved roads were the largest source of particulate matter (PM) in the County. According to the report, the main stationary source of total organic gas (TOG) emissions is electric fuel combustion. The main mobile source was recreational boats, and the main area-wide source was solvent evaporation from
							consumer products. More than half of area wide PM emissions come from travel on unpaved roads within the City (General Plan Background report, 2013). Table 1 presents Federal and State Air Quality Attainment Status, 2011 Pollutant State Standard Federal Standards for criteria air quality pollutants.

IMPACT CATEGORIES*	1	2	3	4	5	6	Reference to	All determinations documentation, sou		espondence.
							Table 1. Clearlake Fede	ral and State Air Qual	ity Attainment Status,	2011
							Pollutant	State Sta	ndard Fed	eral Standard
							PM 2.5	Attainn		ssified/ Attainment
							Carbon Monoxide	Attainn	nent Uncla	ssified/ Attainment
							Nitrogen Monoxide	Attainn	nent Uncla	ssified/ Attainment
							Sulfur Dioxide	Attainn	nent Uncla	ssified/ Attainment
							Sulfates	Attainn		
							Lead	Attainn		ssified/ Attainment
							Hydrogen Sulfide	Attainn		
							Visibility Reducing Parti	cles Attainn	nent	
							Local air districts and standards are met, and LAAQMD regulates air related to criteria air management plan, the District (BAAQMD) guidance It is noted, h area's threshold of sign each local agency for design of the standard sta	if they are not met, requality in the LCAI collutants. While the LCAQMD refers to guidelines to evaluation owever, that the Distificance, and leaves	to develop strategies and is responsible for LCAQMD does not the Bay Area Air atte thresholds of significant has not formally	to meet the standards. or attainment planning of have an air quality Quality Management nificance for general adopted these as the
							Table 2. BAAQMD Guid	delines for Evaluating A	r Quality Impacts.	
							Pollutant	Construction Phase	Operation Phase lbs./	Operation Phase
								lb./ day	day	tons/yr.
							ROG	54	54	10
							NOx PM-10 (Exhaust	54 82	54 82	10 15
							PM-2.5 (Exhaust	54	54	10
							GHG	None	None	1,100 MTCO2 (e) or 4.6 MTCO 2 (e)/ SP/ Yr.
							Air quality impacts from related activities (refer the generation of dust, road haul trucks and of temporary and occurs of lifetime of the propose with all applicable LCA are a function of both where the higher the originates are particularly and BAAQMD Guidelines. The analysis of air qualities are proposed project and quantified using the 2020.40) and are summinputs and results are proposed project and are summinputs are project and	to Attachment B). C Toxic Air Contamin ff-road equipment ex- over a relatively should project. Project con AQMD rules and reging the concentration of concentration and/or lity impacts conforming therefore, construct are analyzed separated and arrized in Tables 3 and rovided in Attachmen riteria pollutant volution holds of significance categories listed about the content of the categories and c	onstruction-related action ants (TAC) and other haust emissions. How the duration in comparison struction will also be allations. Health risks of emissions and the the longer the period is to the methodologies to the methodologies ion and operational enterty. Project air poll is Estimator Model d 4. CalEEMod work and the structure of the methodologies in the BAZ disclosed in the BAZ ove.	tivities could result in er emissions from on- wever, construction is son to the operational or required to comply associated with TACs duration of exposure, of time can result in a recommended in the missions generated by utant emissions were (CalEEMod, Version sheets showing model a project construction AQMD Guidelines
							Pollutant	Proposed Projec Emissions	t Threshold of Significance	Exceeds Threshold?
							ROG	3.65	54	NO
							NO_X	20.00	54	NO
							PM ₁₀	0.71	82	NO NO
							PM _{2.5} Source: CalEEMod	3.89 Version 2020 40 Emission i	54 results in the model are in ton	NO s and then converted to
							pounds for the purp		in the model are in lon	, and men converted to
	1								-	

IMPACT CATEGORIES*	1	2	3	4	5	6		determinations ne umentation, source		espondence.
							Table 4. Maximum Operation	onal-Related Emission	ns (lbs./day)	
							Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
							ROG	0.93	54	NO
							NO _X	0.16	54	NO
							PM ₁₀	17.86 36.21	82	NO NO
							PM _{2.5} Source: CalEEMod Version pounds for the purpose of	on 2020.40. Emission resul	54 ts in the model are in ton	NO as and then converted to
							Once fully operational, the pollutants which may exceed Guidelines for any of the pollutants of the air mode. Air Quality Management Dipollutants. Although the C	ed thresholds of sign ollutant categories li- deling conducted, the istrict (BAAQMD)	nificance disclosed isted above. ne project will not air quality impact	d in the BAAQMD t exceed the Bay Area thresholds the criteria
							significance, using the BAA significant adverse air qual are less than significa implemented.	AQMD criteria and ity impact. To ensu	threshold, the pro ire impacts relat	ject will not result in a ed to the Air Quality
							Mitigation measures: AIR 1: Construction active methods, including watering generation of fugitive dust Quality Management Disconstruction purposes, the gallons of water per square	ng during grading st or other method strict. Prior to in e applicant shall p	and construction Is approved by to initiating soil rea re-wet affected a	activities to limit the the Lake County Air noving activities for reas with at least 0.5
							AIR 2: Driveways, access so as to minimize dust. permits for any work with applicable federal, State a	The applicant sha nin the right-of-wa	ll obtain all neco y. All improveme	essary encroachment
							AIR 3: Any disposal of vlawfully disposed of, prefethe Lake County Air Querotection District.	erably by chipping	and composting	, or as authorized by
							AIR-4. During constru accumulation of mud and			
							AIR-5. Grading permit Community Developmen shall adhere to all grad Practices. All areas distu minimize dust, landscaped and maintained for lifer of	t Department, Bu ding permit cond urbed by grading s d or hydro seeded.	ilding Division. itions, including shall be either su	Applicable activities g Best Management urfaced in manner to
							AIR-6 All refuse gendisposal/storage container on a weekly basis so as to a remain covered at all time odor control plan shall laccordance with the Zonacceptable level at all time	rs, and appropriate avoid excess waste. les to prevent fugi- be submitted for ning Code. Odor	ely covered. Rem All trash recept tive odors and re review and appi	oval of waste shall be acles/containers shall odent infestation. An coval by the City In
							AIR-7 Construction ac grading, and other activi conducted with adequate mitigation plan may be r dust controls. Page 23 of 83	ties that could pro dust controls to	oduce airborne p minimize airbori	ne emissions. A dust

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							- 24 01 03
IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							AIR-8 If construction or site activities are conducted within Serpentine soils, a Serpentine Control Plan may be required. Any parcel with Serpentine soils must obtain proper approvals from LCAQMD prior to beginning any construction activities. Contact LCAQMD for more details.
							AIR-9. All engines must notify LCAQMD prior to beginning construction activities and prior to engine Use. Mobile diesel equipment used for construction and/or maintenance must be in compliance with State registration requirements. All equipment units must meet Federal, State and local requirements. All equipment units must meet RICE NESHAP/ NSPS requirements including proper maintenance to minimize airborne emissions and proper record-keeping of all activities, all units must meet the State Air Toxic Control Measures for CI engines and must meet local regulations.
							AIR-10. Site development, vegetation disposal, and site operation shall not create nuisance odors or dust. During the site preparation phase, the District recommends that any removed vegetation be chipped and spread for ground cover and erosion control. Burning of debris/construction material is not allowed on commercial property, materials generated from the commercial operation, and waste material from construction debris, must not be burned as a means of disposal.
							AIR-11. Significant dust may be generated from increase vehicle traffic if driveways and parking areas are not adequately surfaced. Surfacing standards should be included as a requirement in the use permit to minimize dust impacts to the public, visitors, and road traffic. At a minimum, the district recommends chip seal as a temporary measure for primary access roads and parking. Paving with asphaltic concrete is preferred and should be required for long term occupancy. All areas subject to semi-truck/trailer traffic should require asphaltic concrete paving or equivalent to prevent fugitive dust generation. Gravel surfacing may be adequate for low use driveways and overflow parking areas; however, gravel surfaces require more maintenance to achieve dust control, and permit conditions should require regular palliative treatment if gravel is utilized. White rock is not suitable for surfacing (and should be prohibited in the permit) because of its tendency to break down and create excessive dust. Grading and re-graveling roads should utilizing water trucks, if necessary, reduce travel times through efficient time management and consolidating solid waste removal/supply deliveries, and speed limits.
b) Result in a cumulatively considerable net increase of ROC and/or NOx emissions??		×					See Response to Section III(a). Therefore, all potential impacts have been reduced to less than Significant Impacts with the incorporated Mitigation Measures AIR-1 through AIR-11.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
c) Expose sensitive receptors to substantial pollutant oncentrations? d) Result in other emissions that create							Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Operation of the proposed project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the project; nor would the project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. Another potential air quality issue associated with construction-related activities is the airborne entrainment of asbestos due to the disturbance of naturally-occurring asbestos-containing soils. The proposed project is not located within an area designated by the State of California as likely to contain naturally-occurring asbestos (Department of Conservation [DOC] 2000). As a result, construction-related activities would not be anticipated to result in increased exposure of sensitive land uses to asbestos. A carbon monoxide (CO) "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. Based on the project's anticipated generation of 1,332 daily trips on average, localized air quality impacts related to mobile source emissions would not be a concern as there is there is no likelihood of the project traffic exceeding CO significant threshold values. See Response to Section III(a). Therefore, all potential impacts have been reduced to less than Significant Impacts with the incorporated Mitigation Measures AIR-1 through AIR-11.
objectionable odors adversely affecting a substantial number of people?							However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Given that there are no natural topographic features (e.g., canyon walls) or manmade structures (e.g., tall buildings) that would potentially trap such emissions, construction-related odors would occur at magnitudes that would not affect substantial numbers of people. The project could produce some odors from outdoor trash containment. However, if properly managed, these odors should not result in significant adverse odors, however, most trash and recycling activities will be conducted within the buildings so odors are not expected to result, or create any objectionable concerns from nearby residences. See Response to Section III(a). Therefore, all potential impacts have been reduced to less than Significant Impacts with the incorporated Mitigation Measures AIR-1 through AIR-11.
	S	SE (CTI	ON	IV	•	BIOLOGICAL RESOURCES Would the project:
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 Game or U.S. Fish and Wildlife Service?							According to the Biological Assessment prepared for the project by ECORP Consulting dated March 11. 2021 (Attachment C) no federal or State listed species have potential to occur within the Study Area. However, 21 non-listed special-status plants, one special-status turtle, three special-status birds, various birds protected under the MBTA and the California Fish and Game Code, and two special-status bats have potential or low potential to occur within the Study Area. One drainage channel located within the Study Area may be considered a Water of the U.S. and State. Individual oak trees within the Study Area are protected under City ordinance are located within the Study Area, and the oak woodlands onsite may be considered a sensitive natural community by CDFW. To ensure impacts related to the Biological Resources are less than significant, the following mitigation measures have been implemented.

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IMPACT							All determinations need explanation.
CATEGORIES*	1	2	3	4	5	6	Reference to documentation, sources, notes and correspondence.
							1
							BIO-1: The project should implement erosion control measures and BMPs to
							reduce the potential for sediment or pollutants at the Project site.
							BIO-2: A qualified biologist shall conduct a mandatory Worker Environmental
							Awareness Program for all contractors, work crews, and any onsite personnel to
							aid workers in recognizing special status species and sensitive biological resources
							that may occur on-site. The program shall include identification of the special
							status species and their habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of
							construction and Mitigation Measures required to reduce impacts to biological
							resources within the work area.
							BIO-3: Conduct a pre-construction northwestern pond turtle survey in Project
							impact and staging areas within 48 hours prior to construction activities. Any
							northwestern pond turtle individuals discovered in the Project work area
							immediately prior to or during Project activities shall be allowed to move out of
							the work area of their own volition. If this is not feasible, they shall be captured by
							a qualified biologist and relocated out of harm's way to the nearest suitable habitat
							at least 100 feet from the Project work area where they were found.
							,
							BIO-4: If construction is to occur during the nesting season (generally February 1
							- August 31), conduct a pre-construction nesting bird survey of all suitable nesting
							habitat on the Project within 14 days of the commencement of construction. The
							survey shall be conducted within a 500-foot radius of Project work areas for
							raptors and within a 100-foot radius for other nesting birds. If any active nests are
							observed, these nests shall be designated a sensitive area and protected by an
							avoidance buffer established in coordination with CDFW until the breeding season
							has ended or until a qualified biologist has determined that the young have fledged
							and are no longer reliant upon the nest or parental care for survival. Pre-
							construction nesting surveys are not required for construction activity outside the
							nesting season.
							BIO-5: Within 14 days prior to Project activities that may impact bat roosting
							habitat (e.g., removal of manmade structures or trees), a qualified biologist will
							survey for all suitable roosting habitat within the Project impact limits. If suitable
							roosting habitat is not identified, no further measures are necessary. If suitable
							roosting habitat is identified, a qualified biologist will conduct an evening bat
							emergence survey that may include acoustic monitoring to determine whether or
							not bats are present. If roosting bats are determined to be present within the
							Project site, consultation with CDFW prior to initiation of construction activities
							and/or preparation of a Bat Management Plan outlining avoidance and
1) 11		_					minimization measures specific to the roost(s) potentially affected may be required
b) Have a substantial					×		The Study Area supports a small amount of valley oak woodland, which may be
adverse effect on any							considered a sensitive natural community. The project will require the removal of a
riparian habitat or other							several trees on the site, but most of these were identified in the Biological Report as
sensitive natural							being English Walnut trees. However, there is some potential oak trees on the site, such
community identified in							as along the Burns Valley Creek area. Prior to vegetation/tree removal, the applicant
local or regional plans,							shall obtain a Tree Removal Permit from the City of Clearlake and if Oak Trees are to
policies, and regulations							be removed, they shall be replaced in accordance with Section 18-40.050 of the City
or by the California							Code (see Mitigation Measure BIO-6 regarding tree removal). The Biological Study
Department of Fish and							also identified the potential for wetlands. The Project does not propose impacts to
Game or U.S. Fish and							riparian habitat or valley oak woodland that is adjacent to Burns Valley Creek.
Wildlife Service?							Less than Significant impact.
The state of the s		1	<u> </u>	1			

IMPACT CATECODIES*	1	2	3	4	5	6	All determinations need explanation.
CATEGORIES*			3	-	3	U	Reference to documentation, sources, notes and correspondence.
c) Have a substantial adverse effect on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X					As discussed in Response a), the Biological Assessment identified a narrow (one to three-feet in width) drainage channel that occurs along the western property line which may or may not be a Waters of the U.S./Streambed. Compliance with Mitigation Measure outlined in Response a) above along with City ordinances and state water quality permit requirements for construction and post-construction scenarios would entail the installation of construction and post-development BMPs to prevent erosion and siltation within the drainage channel. As recommended in the Biological Assessment Mitigation Measure BIO-6 will reduce potential impacts to wetlands to a level of non-significance. Less than Significant Impact with Mitigation Measures. BIO-6: To minimize potential impacts to the ephemeral drainage on the project site during construction activity, a qualified biologist shall map the extent of the
							riparian habitat on the project site. Avoidance buffers for riparian habitat shall be applied in compliance with City of Clearlake requirements. The riparian habitat and avoidance buffer shall be demarcated prior to construction and shall be maintained until the completion of construction. A qualified biologist/biological monitor shall be present if work must occur within the avoidance buffer to ensure riparian habitat is not impacted by the construction activity.
d) 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					×		The Study Area provides limited migratory opportunities for terrestrial wildlife. Project construction is likely to temporarily disturb and displace most wildlife from the Study Area. Some wildlife such as birds or nocturnal species are likely to continue to use the habitats opportunistically for the duration of construction. Once construction is complete, wildlife movements are expected to resume but will likely be more limited through the developed areas of the Study Area. The Project is not expected to substantially interfere with wildlife movement.
impede the use of native wildlife nursery sites?							There are no documented nursery sites and no nursey sites were observed within the Study Area during the site reconnaissance. Therefore, the Project is not expected to impact wildlife nursery sites. Less than Significant
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X					The project will have minimal to no conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. However, the project will require the removal of a several trees on the site, several which are Oak trees. Prior to vegetation/tree removal, the applicant shall obtain a Tree Removal Permit from the City of Clearlake and if Oak Trees are to be removed, they shall be replaced in accordance with Section 18-40.050 of the City Code. To ensure impacts related to the Tree Preservation are less than significant, the following mitigation measure have been implemented.
							BIO-7: A native tree protection and removal permit, waiver, or similar approval shall be secured prior to impacting trees protected under the City ordinance. Avoidance buffers for protected trees shall be consistent with the City requirements, shall be clearly demarcated prior to construction, and should be maintained until the completion of construction. A qualified biologist/biological monitor should be present if work must occur within the avoidance buffer to ensure avoided protected trees are not impacted by the work.
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?					⊠		The project will not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. However, the project may require the removal of Oak Trees. Less Than Significant Impact
		SI	ECT	ГΙО	N	<i>V</i> .	CULTURAL RESOURCES
							Would the project:
a) Cause a substantial adverse change in the significance of a		X					An evaluation of the potential for historical, cultural, tribal, or paleontological resources on the project site and in the vicinity of the project a cultural resource investigation was conducted by Gregory G. White, PhD, RPA of Sub Terra Heritage Resource

IMPACT			_				All determinations need explanation.
CATEGORIES*	1	2	3	4	5	6	Reference to documentation, sources, notes and correspondence.
historical resource pursuant to §15064.5?							Investigations. This investigation included records searches, consultation with Native American tribes, and a site reconnaissance.
							The investigation resulted in the discovery of two intact, buried, archaeological sites CCL-21-01 and CCL-21-02. Both sites can be considered significant cultural resources:
							Site CCL-21-01. CCL-21-01 is a prehistoric Native American non-midden lithic site encountered in five trenches located in the east-center of the Project area. Closely spaced trench probes established well-defined site limits indicating that the site occupies an area of 3,046 square yards (2,547 square meters). The site continues to the east outside the Project area and across Burns Valley Road. The archaeological deposit is not evident on the surface and throughout its extent was found buried at depths of 16–32 inches below surface. The archaeological deposit was contained in non-midden Cole Bt1 soils and characterized by low-diversity, moderate-density (50–250 items per cubic meter) artifact assemblages. Associated artifacts were dominated by Borax Lake obsidian including many large and medium-sized flakes indicative of early-stage biface production. In addition to an evident tool production function, the presence of possible fire-cracked rock and a few basalt spalls probably derived from basalt cores and coretools suggests that the site also served a temporary residential function.
							Site CCL-21-02. CCL-21-02 is a prehistoric Native American non-midden lithic site encountered in two trenches located in the center of the Project area immediately south of the Redbud Library Annex boundary fence. Dispersed trench probes established well-defined east-west site limits indicating that the site occupies an area of 2,190 square yards. The archaeological deposit is not evident on the surface and in both trenches was found buried at a depth of 20–28 inches below surface. Similar to site CCL-21-01, the archaeological deposit was contained in non-midden Cole Bt1 soils and characterized by low-diversity, low- to moderate-density (20–150 items per cubic meter) artifact assemblages. Associated artifacts were dominated by Borax Lake obsidian including many large and medium-sized flakes indicative of early-stage biface production.
							Obsidian artifacts were found in association with the remote fill dumped in the southeast quadrant and south-center of the Project area. These re-deposits do not constitute cultural resources and no further management measures are necessary.
							Intact, Buried Archaeological Sites. The investigation resulted in the discovery of two intact, buried, archaeological sites, CCL-21-01 and CCL-21-02 (Figure 7, yellow polygons), both of the sites can be considered significant cultural resources. Both of the sites occupy relatively small areas and are buried at depths of 16–32 inches below grade. No further management measures will be necessary if potential impacts to these sites can be eliminated by means of avoidance or placement of fill.
							To ensure impacts related to the Cultural Resources are minimized, the following mitigation measures have been implemented.
							Mitigation Measures: CUL-1 During construction activities, if any subsurface archaeological remains are uncovered, all work shall be halted within 100 feet of the find and the applicant shall retain a qualified cultural resources consultant from the City's approved list of consultants to identify and investigate any subsurface historic remains and define their physical extent and the nature of any built features or artifact-bearing deposits. Significant historic cultural materials may include finds from the late 19th and early 20th centuries including structural remains, trash pits, isolated artifacts, etc.
							CUL-2 The cultural resource consultant's investigation shall proceed into formal evaluation to determine their eligibility for the California Register of Historical Resources. This 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 features and artifacts 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., there is an intact Page 28 of 83

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							feature with a large and varied artifact assemblage – it will be necessary to mitigate any Project impacts. Mitigation of impacts might include avoidance of further disturbance to the resources through Project redesign. If avoidance is determined to be infeasible, 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 historical 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. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during Project excavation or testing, curation may be an appropriate mitigation. This language of this mitigation measure shall be included on any future grading plans and utility plans approved by the City for the Project. CUL-3 If human remains are encountered, no further disturbance shall occur within 100 feet of the vicinity of the find(s) until the Lake 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 Lake County Coroner determines the remains to be Native American, the Native American Heritage Commission must then identify the "most likely descendant(s)", which parties agree will likely be the Koi Nation based upon the Tribe's ancestral ties to the area and previous designation as MLD on projects in the geographic vicinity. The landowner shall engage in consultations with the most likely descendant (MLD). The MLD will make recommendations concerning the treatment of the remains within 48 hours as provided in Public Resources Co
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?							See Response to Section V(a): Less than Significant Impact with the incorporated mitigation measure CUL-1 through CUL-3.
c) Disturb any human remains, including those interred outside of formal cemeteries?		×					See Response to Section V(a): Less than Significant Impact with the incorporated mitigation measure CUL-1 through CUL-3.
					SE	CTI	ON VI. ENERGY
							Would the project:
a) Consume energy resources in a wasteful, inefficient, or unnecessary amount during project construction and/or operation?					×		The project would not result in wasteful, inefficient, or unnecessary consumption of energy, given project installation of outdoor lighting and public systems are compliant with State of California energy conservation regulations. Therefore, this impact would be less than significant.
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?					×		The California State Building Standards Commission adopted updates to the California Green Building Standards Code (CALGreen). CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation. CALGreen is intended to (1) reduce GHG emissions; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption. The project would-be built in

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							accord with CALGreen standards and reduce water use by the installation of artificial turf athletic fields. Therefore, this impact would be less than significant.
		S	EC	TIC)N	VII	. GEOLOGY AND SOILS Would the project:
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					×		Topography on the project site is generally flat (<10%) and the site is situated at an elevation of approximately 1,350 feet above mean sea level. The site is located in an aera that was historically used for agricultural and residential purposes. The Geotechnical Engineering Investigation Report prepared for the Proposed Burns Valley Development project, prepared by NV5, February 26, 2021, includes the following recommendations (Refer to Attachment D):
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 or based on other substantial evidence of a							 The existing foundation remnants and exterior slab-on-grade within the proposed building areas should be razed and disposed off-site. It may be possible to use some of this demolition material to construct engineered fills provided they meet the gradation requirements specified for "testable fill" materials presented in this report. The project geotechnical engineer should approve the use of both asphalt concrete (AC) and aggregate base (AB) rock demolition materials for use on constructing engineering fills. All foundations, underground utilities and other existing site improvements that are encountered during construction with the proposed building area should be demolished and removed from the site, these demolition materials should be disposed off site in compliance with applicable regulatory requirements
known fault? Refer to Division of Mines and Geology Special Publication 42.							i) Earthquake Faults There are no mapped earthquake faults on or adjacent to the subject site. ii-iii) Seismic Ground Shaking and Seismic-Related Ground Failure, including liquefaction.
ii) Strong seismic ground shaking?iii) Seismic-related ground failure,							The mapping of the site's soil indicates that the soil is stable and not prone to liquifaction. iv) Landslides According to the Landslide Hazard Identification Map prepared by the California Department of Conservation, Division of Mines and Geology, the project parcel soil is considered "generally stable" and not located within and/or adjacent to an existing known "landslide area".
including liquefaction? iv) Landslides?							Project design shall incorporate Best Management Practices (BMPs) to the maximum extent practicable to prevent or reduce discharge of all construction or post construction pollutants into the County storm drainage system. BMPs include scheduling of activities, erosion and sediment control, operation and maintenance procedures and other measures in accordance City of Clearlake Municipal Code(s). Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?							The project is not anticipated to result in substantial soil erosion or the loss of topsoil. All disturbance will occur onsite, and no soil will be exported and/or imported. The applicant shall incorporate Best Management Practices (BMPs) consistent with the City Code and the State Storm Water Drainage Regulations to the maximum extent practicable to prevent and/or reduce discharge of all construction or post-construction pollutants into the local storm drainage system. All grading measure shall adhere to all Federal, State and local agency requirements. The project shall adhere to all Federal, State, and local agencies requirements. Therefore, to ensure impacts related to the Geology and Soils are minimized, the following mitigation measures have been implemented.
							Mitigation Measures: GEO-1: Prior to any ground disturbance and/or operation, the applicant shall submit Erosion Control and Sediment Plans to the Community Development Department for review and approval. • The project shall incorporate Best Management Practices (BMPs) consistent with the City Code and the State Storm Water Drainage Regulations to the maximum extent practicable to prevent and/or reduce

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							discharge of all construction or post-construction pollutants into the local storm drainage system.
							GEO-2: Prior to any ground disturbance, (if applicable), the applicant shall submit and obtain a Grading Permit from the Community Development in accordance with the City of Clearlake Municipal code(s).
							GEO-3: The applicant shall monitor the site during the rainy season including post-installation, application of BMPs, erosion control maintenance, and other improvements as needed. Said measures shall be maintained for life of the project and replace/repaired when necessary.
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a					×		According to the Geotechnical Report prepared for the project, undocumented fills were observed on site and are not considered suitable for support of the proposed structural improvements without the following recommendations (refer to Attachment D).
result of the project, and potentially result in on- site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?							According to the soil survey of Lake County, prepared by the U.S.D.A., the soil at the site is considered "generally stable" and there is little to no potential for landslide, subsidence, debris flows, liquefaction or collapse. The project shall incorporate Best Management Practices (BMPs) consistent with the City Code and the State Storm Water Drainage Regulations to the maximum extent practicable to prevent and/or reduce discharge of all construction or post-construction pollutants into the local storm drainage system. Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?							The Geotechnical Report did not identify any expansive soils on the site. The project will adhere to all Federal, State and local agency requirements, including all requirements in the City of Clearlake's Municipal Code(s). Less Than Significant Impact
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?							The project parcel is currently vacant, when development occurs, the project shall adhere to all applicable Federal, State and local agency requirements regarding wastewater disposal systems, (i.e connecting to public/private sewer facilities and/or onsite waste management systems (septic). Less Than Significant Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?							Disturbance of paleontological resources or unique geologic features is not anticipated, but mitigation measures are in place to assure that in the event any artifacts are found. All potential impacts have been reduced to less than significant levels with the incorporated mitigation measures CUL-1 and CUL-5.
S	EC	TI	ON	VI	II.	G	GREENHOUSE GAS EMISSIONS
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					×		Would the project: Air quality impacts, including Carbon Dioxide emissions from the project, which contribute to global warming, need to be analyzed using the current guidelines or procedures specified by the local air district or the Air Resources Board. Calculations of CO2, CH4, and N2O emissions are provided to identify the magnitude of potential project effects. This analysis focuses on CO2, CH4, and N2O since these comprise 98.9 percent of all GHG emissions by volume (IPCC 2007) and are the GHG emissions that the project would emit in the greatest quantities. Fluorinated gases, such as HFC, PFCs, and SF6 were not used in this analysis, as they are primarily associated with industrial processes and the proposed project involves retail development and does not include an industrial component. Emissions of all GHGs are converted into metric tons of carbon dioxide equivalent (MT of CO2e), which presents the volume of GHGs equivalent to the global warming effect of CO2. While minimal amounts of other GHGs, such as chlorofluorocarbons (CFC), would be emitted, they would not substantially add to the calculated CO2e quantities. Calculations are based on the California Air Pollution Control Officers Association (CAPCOA) CEQA & Climate Change white paper (CAPCOA 2008).

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.				
							The Lake County Air Quality Management District does not have an air quality management plan. However, the LCAQMD refers to the Bay Area Air Quality Management District (BAAQMD) guidelines to evaluate thresholds of significance for general guidance (refer excerpts from this document in Attachment B). It is noted, however, that the LCAQMD has not formally adopted these as the area's threshold of significance and leaves the determination of level of significance to each local agency for determination.				
							Air impact modeling was conducted using CalEEMod.2020.40 Modeling which indicates that the project's construction will result in about 52 metric tons of CO2e during construction (2 years) and about 34 metric tons of CO2e annually during operation. Construction and operational estimates fall below the BAAQMD levels of significance of GHG which is 1,100 metric tons annually (see Attachment B). Therefore, the impact is less than significant.				
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					×		This project will not conflict with any adopted plans or policies for the reduction of greenhouse gas emissions. The City of Clearlake is within an 'air attainment' basin. In accordance with the requirements of the Lake County Air Quality Management District, an air permit will be required as a condition of the use permit, prior to issuance of a building permit for the project. Refer to response in Section VIII(a). Less Than Significant Impact				
SECT	SECTION IX. HAZARDS AND HAZARDOUS MATERIALS Would the project:										
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?							Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the construction contractor would be required to implement a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities. In addition, the proposed project would not be a large-quantity user of hazardous materials. Small quantities of hazardous materials would likely routinely be used on site, primarily fertilizers, herbicides, and pesticides. The potential risks posed by the use and storage of these hazardous materials are limited primarily to the immediate vicinity of the materials. Any transport of these materials would be required to comply with various federal and state laws regarding hazardous materials transportation. In summary, the proposed project would not create a significant hazard to the public or the environment from routine transport, use, or disposal of hazardous materials and impacts would be less than significant.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?					X		The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. All chemicals, pesticides, fertilizer, and other materials associated with the operation shall adhere to all Federal, State, and local agency requirements. Less than Significant.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?						×	The proposed project is not located within one-quarter mile of an existing or proposed school. No Impact				

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
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?						X	The project site is not located on or within 2,000 feet of an NPL ("Superfund") site or a CERCLIS site (CA DTSC, 2022). The project site is not listed as a site containing hazardous materials in the databases maintained by the Environmental Protection Agency (EPA), California Department of Toxic Substance, and Control State Resources Water Control Board. No Impact
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?						X	The project is not located within two (2) miles of an airport and/or within an Airport Land Use Plan. No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?					×		The project would not impair or interfere with an adopted emergency response or evacuation plan. The project has been reviewed by the Lake County Department of Environmental Health, Lake County Special Districts, City of Clearlake Police Department, City of Clearlake's Community Development Department (Building, Public Works, Planning), and the Local Fire Protection District/CalFire for consistency with access and safety standards. The City of Clearlake did not receive any adverse comments. Less Than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					×		The project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires as it is located in a "Low to Moderate" Fire Hazard Severity Zone and within the Lake County Fire Protection District. The project was circulated for review to various agencies, include but not limited to City Engineer, City of Clearlake Police Department, City of Clearlake Building Official/Inspection, Lake County Fire Protection District and the California Department of Transportation (Caltrans). During the project review, no adverse comments were received. The application shall adhere to all current Federal, State and local agency requirements, including all mitigation measures and conditions of approval imposed on such use. Less Than Significant Impact
SE	CT.	IO	NX	\.	HY	YDI	ROLOGY AND WATER QUALITY
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?							Would the project: The North Coast Regional Water Quality Control Board (RWQCB) administers the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program for construction activities. Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity. Since the project site involves more than one acre in size the City, as the applicant is required to submit a NOI to the RWQCB that covers the General Construction Permit (GCP) prior to the beginning of construction. The GCP requires the preparation and implementation of a Water Quality Management Plan (WQMP) and a Storm Water Pollution Prevention Plan (SWPPP) both of which must be prepared before construction can begin. The SWPPP outlines all activities to prevent stormwater contamination, control sedimentation and erosion, and compliance with Clean Water Act (CWA) requirements during construction. Implementation of the SWPPP starts with the commencement of construction and continues through to the completion of the project. The WQMP outlines the project site design, source control and treatment control of BMPs utilized throughout the life of the project. Upon completion of project construction, the City, as the applicant must submit a Notice of Termination (NOT) to the RWQCB to indicate that construction is completed.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							Therefore, with implementation of NPDES and the SWPPP in compliance with the RWQCB, impacts to water quality and discharge requirements will be a less than significant impact.
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?					×		The operation would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Less than significant impact.
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) result in substantial erosion or siltation on-		X					The project would not substantially alter the existing drainage pattern of the site or area, or add impervious surfaces, in a manner which would (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; (iii) 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 (iv) impede or redirect flows. Therefore, impacts would be less than significant.
site or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off; or iv) impede or redirect flood flows?							
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?						X	Based on the 2005 Flood Insurance Rate Map (Panel 06033C0684D, eff. 9/30/2005), the project site is shown as being in a special flood hazard area (Zone AE and AO) associated with the ephemeral drainage on the eastern boundary of the site (FEMA, 2005). Refer to Attachment G. As determined by the City Engineer, who is also the City's Floodplain Administrator, the FEMA mapping for this area of the City has a datum problem, as stated in a letter from the City Engineer (dated 1/5/22) It appears that the 1929 datum was assumed, however the elevations shown on the flood mapping, seem to align with the 1988 vertical datum. The City Engineer has outlined this with the FEMA representative and submitted a request for map revision. "Based on my research of the historical characterization of the flows in this area, coupled with the potential datum matter, I believe that the project would be able to reasonably file a Letter of Map Revision with FEMA at the end of the project and would meet the criteria to receive approval." As required by the Chapter XVII (Floodplain Management) of the City's Municipal Code, flood elevation certificates have been prepared for the proposed project based on the 1929 vertical datum, which demonstrates that the finished floor elevations of the

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							proposed structures would be located a minimum of 1-foot above the base flood elevation. Less than Significant.
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?					×		The project would not conflict with or obstruct any water quality or management plans. Additionally, to control runoff, the operation will incorporate appropriate Best Management Practices (BMPs) consistent with City code and State Storm Water Drainage Regulations to the maximum extent practicable to prevent or reduce discharge of all construction or post-construction pollutants into the local storm drainage system. All grading measure shall adhere to all Federal, State and local agency requirements. Less than Significant.
	S	E(CTI	ON	XI	•	LAND USE AND PLANNING
							Would the project:
a) Physically divide an established community?						X	The project is intended to attract and accommodate residents from around the city to participate in athletic events including the +/- 15,000 square foot indoor sports facility, soccer fields, and baseball/softball fields. Therefore, the project will not divide an established community. No impact.
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?							The project site is designated for Medium Density Residential in the General Plan with a Land Use Designation of MUX, Mixed Use. Section 18-02.040 of the Zoning Code references that MUX Zoning is consistent with the Medium Density Residential General Plan Land Use Designation. The Mixed-Use Zoning District is intended to allow a mixture of residential and commercial uses which can be made compatible with each other. This District provides a balanced mix of residential and employment opportunities to create focal points of activity in the form of mixed-use centers, nodes, or corridors. The Mixed-Use Districts support service commercial, employment, and housing needs of a growing community. The maximum allowed density in the MUX Zone is 25 units per acre. The project proposes a public park and public works yard. Although these uses will not produce residential or commercial uses envisioned in the General Plan or Zoning Map, it will create employment and recreational opportunities that would be generally consistent with both the General Plan and Zoning Code. The following uses are identified as requiring a use permit from the planning commission in the MUX Zone: Public Assembly Outdoor and Indoor Recreation Impound Yard Also, Section 18-19.370 of the Zoning Code indicates that other uses otherwise not identified in the use table would be subject to a use permit, such as public and quasipublic uses of an administrative, public services or cultural type including special
		CI	 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	ΓIO	N	ZTT	district, City, County, State or Federal facilities. Less than Significant. MINERAL RESOURCES
		Ŋ.		110	1 ₹ 2	X11 .	Would the project:
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?						×	The operation would not result is the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. No Impact
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?						×	The operations would not 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. No Impact

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
		SI	ECI	ГΙО	N X	XII	I. NOISE & VIBRATIONS Would the project:
a) Generate construction noise levels that exceed the Noise Ordinance exterior or interior noise standards at residential properties during the hours that are specified in the City's General Plan Noise Element?							Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit that expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Community Noise Equivalent Level Community Noise Equivalent Level (CNEL) is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise occurrences during certain sensitive time periods are penalized. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nightime (10 p.m. or 3 m.n.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of 60 dB(A)," "60 dBA CNEL," or simply "60 CNEL." Short-term increases in ambient noise levels to uncomfortable levels may be expected during project construction. There will be vehicles entering and exiting the project premises primarily from Burns Valley Road. Construction shall adhere to all Federal, State and local agency requirements regarding noise standards. Activities in the park, such as nighttime baseball games could impact adjoining residential uses. The Oak Valley Villas project, no an autivity of the project (refer to Attachment F). The study identifies three types of noise impacts from surrounding residential uses. The Oak Valley Villas project, noise from

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							NOI-4: Park operations, including baseball at the northeasterly ball park shall be shall be restricted to not later than 10 pm.
b) Generate a substantial temporary (non-construction) or permanent increase in noise levels at existing sensitive receptors in the vicinity of the project site?						×	The project is not expected to create unusual groundborne vibration due to site development or operation. The low-level truck traffic would create a minimal amount of groundborne vibration. No Impact
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 and generate excessive ground borne vibration?							The project is not located within an airport land use plan or within two (2) miles of a public airport. No Impact
	SE	CT	Oľ	N X	IV.	•	POPULATION AND HOUSING
a) Induce substantial unplanned population growth in an area, either directly or indirectly?						⊠	Would the project: The proposed project is for a public park (sports complex), community center, public works yard with public works building facility and combined police department office and maintenance facilities, vehicle and equipment storage areas, public access and parking facilities on approximately 26 acres and will not create population growth in the area. No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?						⊠	The operation will not displace a substantial number(s) of existing people or housing, necessitating the construction of replacement housing elsewhere. No Impact

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
			SE	CT	Oľ	N X	V. PUBLIC SERVICES Would the project:
Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: a) Fire Protection? b) Police Protection? c) Schools? d) Parks? e) Other public facility?							a) - e) The project does not propose housing or other uses that would necessitate the need for new or altered government facilities. There will not be a need to increase fire or police protection, schools, parks or other public facilities as a result of the project's implementation. Less Than Significant Impact
			,	SE(CTI	ON	XVI. RECREATION Would the project:
a) 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?						×	The project site is of non-residential development that will provide a variety of recreational activities to serve the City residents. Therefore, the project will not cause a population increase that will impact existing parks or recreational facilities.

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IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
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? • Fire Protection • Police Protection • Schools • Parks • Other Public Services						X	The project would not require the construction or expansion of other recreational facilities. Because the project does not include features that would result in additional adverse impacts to recreational facilities beyond that addressed herein, no impacts would occur that are not already addressed elsewhere in this IS.
		S	SEC	TI	ON	XV	II. TRANSPORTATION Would the project:
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?					X		A traffic impact study was prepared for the project by W-Trans, Traffic Engineers (see Attachment F). It indicates that this project would result in an increase in 1,332 average daily vehicle trips, with a peak hour increase in 182 trips. This study also references coincidental development of an 80-unit apartment project located at the southeast corner on Burns Valley Road and Bowers Avenue, adjacent and to the north and east of the project. The study concludes that the project (including this apartment project) would not result in a significant traffic impact, nor conflict with ordinances or policies addressing the City's circulation system. The project will obtain all the necessary Federal, State, and local agency permits for any works that occurs with the right-of-way and will be subject to the City's traffic impact fee program. Participation in this program will mitigate any cumulative impacts on the City's transportation system. Less Than Significant Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?							Regarding CEQA Section 15064.3, Vehicles Miles Traveled (VMT), the traffic study indicates that the project, would have a less than significant impacts based on the California Governor's Office of Planning and Research (OPR) in the publication Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory, 2018 as well as information contained within Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study (RBS). Less Than Significant Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?						×	The traffic study included a comprehensive analysis of safety hazards in relation to geometric design and concluded that as long as proper sight distance is maintained at intersection corners (vision triangles), the it would not result in a significant circulation safety impact. The study recommended that these intersections be maintained with minimal obstructions, such as signs and shrubs. Less Than Significant Impact
d) Result in inadequate emergency access?							The traffic study concludes that emergency access and circulation are anticipated to function acceptably with incorporation of applicable design standards into the site layout and traffic from the proposed development would be expected to have a less-than-significant impact on emergency response times. Less Than Significant Impact

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
CF	CT	IO	NV		TT	T	RIBAL CULTURAL RESOURCES
Would the project co Code section 21074 a the lands	ause a s eith	subs er a s	stantio site, fe	al adv eature	erse c , plac	hange e, cul	e in the significance of a tribal cultural resource, defined in Public Resources tural landscape that is geographically defined in terms of the size and scope of a cultural value to a California Native American tribe, and that is:
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), or		⊠					See Response to Section V(a): Less than Significant Impact with the incorporated mitigation measure CUL-1 through CUL-3.
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 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.							See Response to Section V(a): Less than Significant Impact with the incorporated mitigation measure CUL-1 through CUL-3.
SI	ECI	ΓIC	N	XIX	Χ.	U	FILITIES AND SERVICE SYSTEMS Would the project:
a) Require the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, or natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?					⊠		The project would not require or result in the relocation or construction of new or expanded water or, wastewater treatment facilities or expansion of existing storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocations of which could cause significant environmental effects. The project would be served by the Highlands Mutual Water Company The project will require compliance with all rules, regulations, policies, resolutions, costs and specifications that are in effect at the time service is requested. Therefore, less than significant impact related to these utilities and service systems would occur.
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?						×	The project would have sufficient water supplies available to serve the project and reasonably foreseeable future. Therefore, no impact related to these utilities and service systems would occur.

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							41 01 05						
IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.						
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?							The project site is located next to sewer lines and would be served by Lake County Special Districts which has sufficient wastewater treatment capacity to serve the project. Less than significant impact.						
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?					×		The project would generate a minimal amount of construction waste. Additionally, the project would not 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. The project would be served by Clearlake Waste Solutions which has sufficient capacity to accommodate the project's solid waste disposal needs. In addition, the proposed project would comply with federal, state, and local regulations regarding solid waste. Impacts would be less than significant .						
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?					×		The project would comply with Federal, State, and local management and reduction statutes and regulations related to solid waste. The proposed project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other local, state, and federal waste disposal standards. Impacts would be less than significant .						
	ON XX. WILDFIRE												
solid waste?													
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?					X		The property is located within the State Responsibility Area (SRA) and is in a 'Moderate to High' Fire Hazard Severity Zone. The site has an average cross slope of less than 10% and has a low fuel load, additionally, the cultivation area has been previously disturbed and is relatively clear of vegetation. The SRA regulations (if applicable) will ensure adequate fire access to and on the property. SRA regulations will also ensure that measures are in place to help prevent fire and the spread of fire should one occur. The property shall maintain fire breaks around all structures, shall adhere to all necessary Federal, State, and local agency requirements. Less Than Significant Impact						
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?					⊠		The project will not exacerbate wildfire risks and/or expose persons to pollutant concentrations in the event of a wildfire in the area. Additionally, the applicant will adhere to all Federal, State, and local fire requirements/regulations, including all mitigation measure and/or conditions of approval imposed on such use. Less than Significant Impact						
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?					⊠		All infrastructure will be routinely maintained to ensure all Federal, State, and local agency requirements are being satisfied, including all necessary City Codes and/or regulations. Additionally, prior to operation the applicant(s) will make all necessary improvements to the project site, such as access/roadways, fuels breaks, and emergency water source/water tanks. Less than Significant Impact						

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							42 01 05
IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
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?					X		The project area to be developed is not located within the vicinity of known waterways nor is it located within a designated flood zone. Therefore, the risk of flooding/runoff, landslides, slope instability, or drainage changes would not be increased due to this project. Less Than Significant Impact
SECTIO	ON	XX	XI.	M	AN	DA	TORY FINDINGS OF SIGNIFICANCE
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 rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X					This project is not anticipated to significantly impact habitat of fish and/or wildlife species or cultural/tribal resources with the incorporated mitigation measures described above. Therefore, there is minimal risk of degradation, and mitigation measures are proposed that would alleviate most or all of the project-related impacts. The implementation of and compliance with all mitigation measures identified in each section as project conditions of approval would avoid or reduce all potential impacts to less than significant levels and would not result in cumulatively considerable environmental impacts on habitat of fish and/or wildlife species or cultural resources, nor will the project contribute to factors that would harm the environment or add to any wildfire risk.
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.)		Δ					All potentially significant impacts have been identified related to, Aesthetics, Air Quality, Biological Resources; Cultural/Tribal Resources; Geology & Soil; Noise & Vibration; and Hazards & Hazardous Materials. These impacts in combination with the impacts of other past, present, and reasonably foreseeable future projects in the vicinity could cumulatively contribute to significant effects on the environment if proper mitigation measures are not put in place. The implementation of and compliance with all mitigation measures identified in each section as project conditions of approval would avoid or reduce all potential impacts to less than significant levels and would not result in cumulatively considerable environmental impacts.
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		⊠					The proposed project has potential to result in adverse indirect or direct effects on human beings. In particular, risks associated with, Aesthetics, Air Quality, Biological Resources; Cultural/Tribal Resources; Geology & Soil; Noise & Vibration; Hazards & Hazardous Materials and have the potential to impact human beings. Implementation of and compliance with mitigation measures identified in each section would reduce adverse indirect or direct effects on human beings and impacts to less than significant impact levels.

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INITIAL STUDY SUMMARY: Based on the review of the proposed project site and surrounding area, appropriate mitigation measures were identified to mitigate potentially significant impacts to a level below adversity for Air Quality, Cultural Resources, Hazards & Hazardous Materials, Hydrology/ Water Quality, Traffic Circulation, and Tribal Cultural Resources. Assuming implementation of the identified measures and standard conditions of project approval of the City of Clearlake and other pertinent agencies, no adverse impacts are anticipated.

Attachment A Lighting Impact Analysis

Maximum 70' tall poles Max spill and glare control (30/20 Light levels)

SPILL HORIZONTAL	0.11	0.4	0.0	N.A.	145	30	N.A.	0.75	N.A.
LL	20.80	28.7	11.4	2.52	40	20	20	0.23	1.61
SOCCER	31.96	44.6	18.0	2.48	60	30	30	0.20	1.72
SPILL VERTICAL EAST	0.40	0.6	0.1	6.00	22	30	N.A.	0.35	N.A.
SPILL VERTICAL NORTH	0.41	0.8	0.1	8.00	48	30	N.A.	0.56	N.A.
SPILL VERTICAL SOUTH	0.37	0.7	0.1	7.00	55	30	N.A.	0.49	N.A.
SPILL VERTICAL WEST	0.29	0.5	0.1	5.00	20	30	N.A.	0.58	N.A.

Photo-Metric Diagram

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Attachment B

Air Impact Analysis

Burns Valley City Recreation and Public Works Complex

Lake County Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land U	ses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Pa	ırk	26.00	Acre	26.00	1,132,560.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 **Precipitation Freq** 67 (Days) Climate Zone 1 **Operational Year** 2024 **Utility Company** Pacific Gas and Electric Company **CO2** Intensity 203.98 **CH4 Intensity** 0.033 **N2O** Intensity 0.004 (lb/MWhr) (lb/MWhr) (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Grading -

Demolition -

Table Name	Column Name	Default Value	New Value
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Year					tons			MT/y	r'r							
2022	0.494 9	3.501 4	3.644 3	8.6800e -003	0.7073	0.1298	0.837 1	0.2656	0.1209	0.386 5	0.000	787.9748	787.9748	0.110 8	0.044	803.9563
2023	0.652 3	3.648 0	4.963 1	0.0134	0.6462	0.1036	0.749 8	0.1756	0.0975	0.273 1	0.000 0	1,226.779 0	1,226.779 0	0.095 2	0.091 8	1,256.524 1
2024	0.487 3	1.005 7	1.457 1	3.6800e -003	0.1668	0.0309	0.197 7	0.0452	0.0290	0.074 2	0.000 0	335.5406	335.5406	0.033 9	0.021 5	342.7819
Maximu m	0.652	3.648	4.963	0.0134	0.7073	0.1298	0.837	0.2656	0.1209	0.386 5	0.000	1,226.779 0	1,226.779 0	0.110 8	0.091 8	1,256.524

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Year					tons	s/yr	MT/yr									
2022	0.494 9	3.501 4	3.644 3	8.6800e -003	0.7073	0.1298	0.837 1	0.2656	0.1209	0.386 5	0.000	787.9744	787.9744	0.110 8	0.044	803.9559
2023	0.652 3	3.648 0	4.963 1	0.0134	0.6462	0.1036	0.749 8	0.1756	0.0975	0.273 1	0.000 0	1,226.778 7	1,226.778 7	0.095 2	0.091 8	1,256.523 7
2024	0.487 3	1.005 7	1.457 1	3.6800e -003	0.1668	0.0309	0.197 7	0.0452	0.0290	0.074 2	0.000 0	335.5404	335.5404	0.033 9	0.021 5	342.7818
Maximu m	0.652	3.648	4.963 1	0.0134	0.7073	0.1298	0.837	0.2656	0.1209	0.386 5	0.000	1,226.778 7	1,226.778 7	0.110 8	0.091 8	1,256.523 7

	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	СН4	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-8-2022	6-7-2022	1.1295	1.1295
2	6-8-2022	9-7-2022	1.3022	1.3022

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3	9-8-2022	12-7-2022	1.2304	1.2304
4	12-8-2022	3-7-2023	1.1172	1.1172
5	3-8-2023	6-7-2023	1.0809	1.0809
6	6-8-2023	9-7-2023	1.0734	1.0734
7	9-8-2023	12-7-2023	1.0830	1.0830
8	12-8-2023	3-7-2024	1.0458	1.0458
9	3-8-2024	6-7-2024	0.5705	0.5705
10	6-8-2024	9-7-2024	0.1730	0.1730
		Highest	1.3022	1.3022

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							М	T/yr		
Area	0.147 2	0.000 0	2.4000 e-004	0.0000		0.0000	0.000 0		0.0000	0.0000	0.000 0	4.6000 e-004	4.6000 e-004	0.0000	0.0000	4.9000 e-004
Energy	0.000 0	0.000 0	0.0000	0.0000		0.0000	0.000 0		0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.024 1	0.029 6	0.1751	2.6000 e-004	0.0236	3.1000 e-004	0.023 9	6.3200 e-003	2.9000 e-004	6.6100 e-003	0.000 0	23.632 0	23.632 0	2.1900 e-003	1.4900 e-003	24.130 0
Waste						0.0000	0.000 0		0.0000	0.0000	0.454 7	0.0000	0.4547	0.0269	0.0000	1.1265
Water						0.0000	0.000 0		0.0000	0.0000	0.000 0	10.031 9	10.031 9	1.6200 e-003	2.0000 e-004	10.131 1
Total	0.171	0.029 6	0.1753	2.6000 e-004	0.0236	3.1000 e-004	0.023 9	6.3200 e-003	2.9000 e-004	6.6100 e-003	0.454 7	33.664	34.119	0.0307	1.6900 e-003	35.388

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							М	T/yr		
Area	0.147 2	0.000	2.4000 e-004	0.0000		0.0000	0.000 0		0.0000	0.0000	0.000 0	4.6000 e-004	4.6000 e-004	0.0000	0.0000	4.9000 e-004
Energy	0.000 0	0.000 0	0.0000	0.0000		0.0000	0.000 0		0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.024 1	0.029 6	0.1751	2.6000 e-004	0.0236	3.1000 e-004	0.023 9	6.3200 e-003	2.9000 e-004	6.6100 e-003	0.000 0	23.632 0	23.632 0	2.1900 e-003	1.4900 e-003	24.130 0
Waste						0.0000	0.000 0		0.0000	0.0000	0.454 7	0.0000	0.4547	0.0269	0.0000	1.1265
Water						0.0000	0.000 0		0.0000	0.0000	0.000 0	10.031 9	10.031 9	1.6200 e-003	2.0000 e-004	10.131 1
Total	0.171	0.029 6	0.1753	2.6000 e-004	0.0236	3.1000 e-004	0.023 9	6.3200 e-003	2.9000 e-004	6.6100 e-003	0.454 7	33.664	34.119	0.0307	1.6900 e-003	35.388 1

	ROG	NOx	СО	SO2	Fugitive PM10			Fugitive PM2.5						СН4	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

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	3/8/2022	4/18/2022	5	30	
2	Site Preparation	Site Preparation	4/19/2022	5/16/2022	5	20	
3	Grading	Grading	5/17/2022	7/18/2022	5	45	
		Building Construction	7/19/2022	3/25/2024	5	440	
5	Paving	Paving	3/26/2024	5/13/2024	5	35	
-		Architectural Coating	5/14/2024	7/1/2024	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,500; Non-Residential Outdoor: 13,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	•	Vendor Trip Number	Hauling Trip Number	Trip	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	10.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building	9	476.00	186.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

¥		••••••••	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	······	·····	·····	·····	
Architectural	1	95.00	0.00	0.00	10.80	7.30	20.00 LD	Mix HD	Γ Mix HHDT
Contina								-	-

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Categor y													MT	/yr		
Fugitiv e Dust					1.0700 e-003	0.0000	1.0700 e-003		0.0000	1.6000 e-004	0.000 0	0.0000	0.0000	0.000	0.000	0.0000
	0.039 6	0.385 8	0.308 9	5.8000 e-004		0.0186	0.0186		0.0173	0.0173	0.000 0	50.985 3	50.985 3	0.014 3	0.000 0	51.343 4
Total	0.039 6	0.385 8	0.308 9	5.8000 e-004	1.0700 e-003	0.0186	0.0197	1.6000 e-004	0.0173	0.0175	0.000	50.985	50.985	0.014	0.000	51.343 4

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		Fugitiv e PM2.5	t	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego					tons	/yr							N	IT/yr		
Haulin g		1.2100 e-003				1.0000 e-005		2.0000 e-005		3.0000 e-005	0.000	0.324 4	0.324 4	0.0000	5.0000 e-005	0.339 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	1.5600 e-003	1.0400 e-003				1.0000 e-005					0.000 0	1.564 9	1.564 9	9.0000 e-005		1.588 1
Total	1.5900 e-003	2.2500 e-003	0.0102	2.0000 e-005	1.8500 e-003	2.0000 e-005	1.8800 e-003	4.9000 e-004	2.0000 e-005	5.2000 e-004	0.000	1.889	1.889	9.0000 e-005	1.2000 e-004	1.927 8

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y													MT	/yr		
Fugitiv e Dust					1.0700 e-003	0.0000	1.0700 e-003	1.6000 e-004	0.0000	1.6000 e-004	0.000 0	0.0000	0.0000	0.000	0.000 0	0.0000
Off- Road	0.039 6	0.385 8	0.308 9	5.8000 e-004		0.0186	0.0186		0.0173	0.0173	0.000 0	50.985 3	50.985 3	0.014 3	0.000 0	51.343 3
Total	0.039 6	0.385 8	0.308 9	5.8000 e-004	1.0700 e-003	0.0186	0.0197	1.6000 e-004	0.0173	0.0175	0.000	50.985	50.985	0.014	0.000	51.343

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	/yr							N	IT/yr		
Haulin g	3.0000 e-005	1.2100 e-003		0.0000	8.0000 e-005	1.0000 e-005	9.0000 e-005	2.0000 e-005	1.0000 e-005	3.0000 e-005	0.000	0.324 4	0.324 4	0.0000	5.0000 e-005	0.339 7
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000
Worker	1.5600 e-003	1.0400 e-003	0.0100	2.0000 e-005	1.7700 e-003	1.0000 e-005		4.7000 e-004	1.0000 e-005	4.9000 e-004	0.000 0	1.564 9	1.564 9	9.0000 e-005	7.0000 e-005	1.588 1
Total	1.5900 e-003	2.2500 e-003	0.0102	2.0000 e-005	1.8500 e-003	2.0000 e-005	1.8800 e-003	4.9000 e-004	2.0000 e-005	5.2000 e-004	0.000	1.889	1.889	9.0000 e-005	1.2000 e-004	1.927 8

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	/yr				MT	/yr					
Fugitive Dust					0.1966	0.0000	0.196 6	0.1010	0.0000	0.101 0	0.000	0.0000	0.0000	0.000	0.000 0	0.0000
Off- Road	0.031 7	0.330 8	0.197 0	3.8000e -004		0.0161	0.016 1		0.0148	0.014 8	0.000 0	33.439 4	33.439 4	0.010 8	0.000 0	33.709 8
Total	0.031 7	0.330 8	0.197 0	3.8000e -004	0.1966	0.0161	0.212 7	0.1010	0.0148	0.115 9	0.000	33.439	33.439	0.010 8	0.000	33.709

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	/yr							N	IT/yr		
Haulin g	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	1.2500 e-003	8.3000 e-004		1.0000 e-005			1.4300 e-003	3.8000 e-004	1.0000 e-005		0.000 0	1.251 9	1.251 9	7.0000 e-005	6.0000 e-005	1.270 5
Total	1.2500 e-003	8.3000 e-004	8.0000 e-003	1.0000 e-005	1.4200 e-003	1.0000 e-005	1.4300 e-003	3.8000 e-004	1.0000 e-005	3.9000 e-004	0.000	1.251 9	1.251 9	7.0000 e-005	6.0000 e-005	1.270 5

Mitigated Construction On-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT	/yr		
Fugitive Dust					0.1966	0.0000	0.196 6	0.1010	0.0000	0.101 0	0.000 0	0.0000	0.0000	0.000	0.000 0	0.0000
Off- Road	0.031 7	0.330 8	0.197 0	3.8000e -004		0.0161	0.016 1		0.0148	0.014 8	0.000 0	33.439 4	33.439 4	0.010 8	0.000 0	33.709 7
Total	0.031 7	0.330	0.197 0	3.8000e -004	0.1966	0.0161	0.212 7	0.1010	0.0148	0.115 9	0.000	33.439	33.439	0.010 8	0.000	33.709

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	/yr							N	IT/yr		
Haulin g	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	1.2500 e-003	8.3000 e-004		1.0000 e-005			1.4300 e-003	3.8000 e-004	1.0000 e-005		0.000 0	1.251 9	1.251 9	7.0000 e-005	6.0000 e-005	1.270 5
Total	1.2500 e-003	8.3000 e-004	8.0000 e-003	1.0000 e-005	1.4200 e-003	1.0000 e-005	1.4300 e-003	3.8000 e-004	1.0000 e-005	3.9000 e-004	0.000	1.251 9	1.251 9	7.0000 e-005	6.0000 e-005	1.270 5

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT/	'yr		
Fugitiv e Dust					0.2071	0.0000	0.207 1	0.0822	0.0000	0.082 2	0.000	0.0000	0.0000	0.000 0	0.000 0	0.0000
Off- Road	0.081 6	0.874 0	0.653 4	1.4000 e-003		0.0368	0.036 8		0.0338	0.033 8	0.000 0	122.702 9	122.702 9	0.039 7	0.000 0	123.695 0
Total	0.081 6	0.874 0	0.653 4	1.4000 e-003	0.2071	0.0368	0.243 9	0.0822	0.0338	0.116 1	0.000	122.702 9	122.702 9	0.039 7	0.000	123.695 0

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					ton	s/yr							N	IT/yr		
Haulin g	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000	0.000 0	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	3.1200 e-003	2.0900 e-003	0.020 0		3.5500 e-003	3.0000 e-005	3.5800 e-003	9.4000 e-004		9.7000 e-004	0.000 0	3.129 7	3.129 7	1.7000 e-004	1.4000 e-004	3.176 3
Total	3.1200 e-003	2.0900 e-003	0.020	3.0000 e-005	3.5500 e-003	3.0000 e-005	3.5800 e-003	9.4000 e-004	3.0000 e-005	9.7000 e-004	0.000	3.129 7	3.129 7	1.7000 e-004	1.4000 e-004	3.176

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	/yr							MT	/yr		
Fugitiv e Dust	: :				0.2071	0.0000	0.207 1	0.0822	0.0000	0.082 2	0.000 0	0.0000	0.0000	0.000 0	0.000 0	0.0000
Off- Road	0.081 6	0.874 0	0.653 4	1.4000 e-003		0.0368	0.036 8		0.0338	0.033 8	0.000 0	122.702 7	122.702 7	0.039 7	0.000 0	123.694 8
Total	0.081 6	0.874	0.653 4	1.4000 e-003	0.2071	0.0368	0.243	0.0822	0.0338	0.116	0.000	122.702 7	122.702 7	0.039 7	0.000	123.694 8

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					ton	s/yr							N	IT/yr		
Haulin g	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	3.1200 e-003	2.0900 e-003	0.020 0	3.0000 e-005	3.5500 e-003	3.0000 e-005	3.5800 e-003	9.4000 e-004		9.7000 e-004	0.000 0	3.129 7	3.129 7	1.7000 e-004	1.4000 e-004	3.176 3
Total	3.1200 e-003	2.0900 e-003	0.020	3.0000 e-005	3.5500 e-003	3.0000 e-005	3.5800 e-003	9.4000 e-004	3.0000 e-005	9.7000 e-004	0.000	3.129 7	3.129 7	1.7000 e-004	1.4000 e-004	3.176

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	RO	G NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT/	/yr		
Off- Road	0.10 5	1 0.929 1	0.973 6	1.6000 e-003		0.0481	0.048 1		0.0453	0.045 3	0.000	137.876 5	137.876 5	0.033 0	0.000 0	138.702 3
Total	0.10 5	1 0.929	0.973 6	1.6000 e-003		0.0481	0.048		0.0453	0.045	0.000	137.876 5	137.876 5	0.033	0.000	138.702

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		e	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							M	T/yr		
Haulin g	0.000	0.000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.038 4	0.845 3	0.213 8	2.5100 e-003	0.0724	8.2700 e-003	0.080 7	0.0209	7.9100 e-003	0.028 8	0.000 0	239.721 2	239.721 2	1.6400 e-003	0.0351	250.222 8
Worker	0.196 2	0.131 3	1.259 4	2.1500 e-003	0.2234	1.8000 e-003	0.225 2	0.0594	1.6600 e-003	0.061 1	0.000 0	196.978 5	196.978 5	0.0109	8.9100 e-003	199.908 5
Total	0.234 6	0.976 5	1.473	4.6600 e-003	0.2958	0.0101	0.305 8	0.0804	9.5700 e-003	0.089 9	0.000	436.699 7	436.699 7	0.0126	0.0440	450.131

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT/	/yr		
Off- Road	0.101 5	0.929 1	:	1.6000 e-003		0.0481	0.048 1		0.0453	0.045 3	0.000	137.876 4	137.876 4	0.033 0	0.000	138.702 1
Total	0.101 5	0.929	0.973 6	1.6000 e-003		0.0481	0.048		0.0453	0.045	0.000	137.876 4	137.876 4	0.033	0.000	138.702

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		e	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							M	T/yr		
Haulin g	0.000	0.000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.038 4	0.845 3	0.213 8	2.5100 e-003	0.0724	8.2700 e-003	0.080 7	0.0209	7.9100 e-003	0.028 8	0.000 0	239.721 2	239.721 2	1.6400 e-003	0.0351	250.222 8
Worker	0.196 2	0.131 3	1.259 4	2.1500 e-003	0.2234	1.8000 e-003	0.225 2	0.0594	1.6600 e-003	0.061 1	0.000 0	196.978 5	196.978 5	0.0109	8.9100 e-003	199.908 5
Total	0.234 6	0.976 5	1.473	4.6600 e-003	0.2958	0.0101	0.305 8	0.0804	9.5700 e-003	0.089 9	0.000	436.699 7	436.699 7	0.0126	0.0440	450.131

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	/yr				MT/	'yr					
Off- Road	0.204 5	1.870 0	2.111 7	3.5000 e-003		0.0910	0.091 0		0.0856	0.085 6	0.000	301.346 2	301.346 2	0.071 7	0.000	303.138
Total	0.204 5	1.870 0	2.111 7	3.5000 e-003		0.0910	0.091		0.0856	0.085 6	0.000	301.346	301.346	0.071 7	0.000	303.138

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	0	Fugitiv e PM2.5	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							МТ	/yr		
Haulin g	0.000	0.000	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000 0	0.0000
Vendor	0.049 1	1.526 0	0.383 8	5.3100 e-003	0.1581	8.9600 e-003	0.167 1	0.0457	8.5700 e-003	0.054 3	0.000 0	507.853 2	507.853 2	2.1100 e-003	0.074 1	529.989 8
Worker	0.398 8	0.252 0	2.467 5	4.5500 e-003	0.4881	3.6300 e-003	0.491 7	0.1299	3.3400 e-003	0.133 2	0.000 0	417.579 7	417.579 7	0.0214	0.017 7	423.395 9
Total	0.447 8	1.778 0	2.851	9.8600 e-003	0.6462	0.0126	0.658 8	0.1756	0.0119	0.187 5	0.000	925.432 9	925.432 9	0.0235	0.091 8	953.385 8

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhau st PM10	PM10 Total	Fugitiv e PM2.5	Exhau st PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT/	/yr		
Off- Road	0.204 5	1.870 0	:	3.5000 e-003		0.0910	0.091 0		0.0856	0.085 6	0.000	301.345 8	301.345 8	0.071 7	0.000	303.138 0
Total	0.204 5	1.870 0	2.111 7	3.5000 e-003		0.0910	0.091		0.0856	0.085 6	0.000	301.345 8	301.345 8	0.071 7	0.000	303.138 0

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	0	Fugitiv e PM2.5	Exhaus t PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							МТ	/yr		
Haulin g	0.000 0	0.000	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000 0	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000
Vendor	0.049 1	1.526 0	0.383 8	5.3100 e-003	0.1581	8.9600 e-003	0.167 1	0.0457	8.5700 e-003	0.054 3	0.000 0	507.853 2	507.853 2	2.1100 e-003	0.074 1	529.989 8
Worker	0.398 8	0.252 0	2.467 5	4.5500 e-003	0.4881	3.6300 e-003	0.491 7	0.1299	3.3400 e-003	0.133 2	0.000 0	417.579 7	417.579 7	0.0214	0.017 7	423.395 9
Total	0.447 8	1.778 0	2.851	9.8600 e-003	0.6462	0.0126	0.658 8	0.1756	0.0119	0.187 5	0.000	925.432 9	925.432 9	0.0235	0.091 8	953.385 8

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2. 5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT	/yr		
	0.044 9	0.410 0	0.493 1	8.2000e -004		0.0187	0.018 7		0.0176	0.017 6	0.000 0	70.714 0	70.714 0	0.016 7	0.000 0	71.132 0
Total	0.044 9	0.410	0.493	8.2000e -004		0.0187	0.018 7		0.0176	0.017 6	0.000	70.714	70.714	0.016 7	0.000	71.132 0

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		e	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							M	T/yr		
Haulin g	0.000	0.000 0	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.010 6	0.348 8	0.085 1	1.2300 e-003	0.0371	2.0200 e-003	0.039 1	0.0107	1.9300 e-003	0.012 7	0.000 0	117.781 9	117.781 9	4.5000 e-004	0.0172	122.908 3
Worker	0.087 0	0.052 0	0.522 1	1.0400 e-003	0.1145	7.8000 e-004	0.115 3	0.0305	7.2000 e-004	0.031 2	0.000 0	94.9414	94.9414	4.5100 e-003	3.7900 e-003	96.1838
Total	0.097 6	0.400 8	0.607	2.2700 e-003	0.1516	2.8000 e-003	0.154 4	0.0412	2.6500 e-003	0.043 9	0.000	212.723	212.723	4.9600 e-003	0.0210	219.092

Mitigated Construction On-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					tons	s/yr							MT	/yr		
Off- Road	0.044 9	0.410 0	0.493 1	8.2000e -004		0.0187	0.018 7		0.0176	0.017 6	0.000 0	70.713 9	70.713 9	0.016 7	0.000 0	71.131 9
Total	0.044 9	0.410	0.493	8.2000e -004		0.0187	0.018 7		0.0176	0.017 6	0.000	70.713 9	70.713 9	0.016 7	0.000	71.131

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	5	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					ton	s/yr							M	T/yr		
Haulin g	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.010 6	0.348 8	0.085 1	1.2300 e-003	0.0371	2.0200 e-003	0.039 1	0.0107	1.9300 e-003	0.012 7	0.000 0	117.781 9	117.781 9	4.5000 e-004	0.0172	122.908 3
Worker	0.087 0	0.052 0	0.522 1	1.0400 e-003	0.1145	7.8000 e-004	0.115 3	0.0305	7.2000 e-004	0.031 2	0.000 0	94.9414	94.9414	4.5100 e-003	3.7900 e-003	96.1838
Total	0.097 6	0.400 8	0.607	2.2700 e-003	0.1516	2.8000 e-003	0.154 4	0.0412	2.6500 e-003	0.043 9	0.000	212.723	212.723	4.9600 e-003	0.0210	219.092

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					to	ons/yr							МТ	/yr		
Off- Road	0.017 3	0.166 7	0.256 0	4.0000 e-004		8.2000 e-003	8.2000 e-003		7.5400 e-003	7.5400 e-003	0.000	35.046 4	35.046 4	0.011 3	0.000 0	35.329 8
Paving	0.000 0					0.0000	0.0000		0.0000	0.0000	0.000 0	0.0000	0.0000	0.000 0	0.000 0	0.0000
Total	0.017	0.166 7	0.256	4.0000 e-004		8.2000 e-003	8.2000 e-003		7.5400 e-003	7.5400 e-003	0.000	35.046 4	35.046 4	0.011	0.000	35.329 8

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	/yr							M	IT/yr		
Haulin g	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000 0	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	1.5700 e-003		9.4400 e-003	2.0000 e-005			2.0800 e-003	5.5000 e-004	1.0000 e-005		0.000 0	1.716 6	1.716 6	8.0000 e-005	7.0000 e-005	1.739 1
Total	1.5700 e-003	9.4000 e-004	9.4400 e-003	2.0000 e-005	2.0700 e-003	1.0000 e-005	2.0800 e-003	5.5000 e-004	1.0000 e-005	5.6000 e-004	0.000	1.716 6	1.716 6	8.0000 e-005	7.0000 e-005	1.739

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Categor y					to	ons/yr							МТ	/yr		
Off- Road	0.017 3	0.166 7	0.256 0	4.0000 e-004		8.2000 e-003	8.2000 e-003		7.5400 e-003	7.5400 e-003	0.000 0	35.046 4	35.046 4	0.011 3	0.000	35.329 8
Paving	0.000 0					0.0000	0.0000		0.0000	0.0000	0.000 0	0.0000	0.0000	0.000 0	0.000 0	0.0000
Total	0.017	0.166 7	0.256	4.0000 e-004		8.2000 e-003	8.2000 e-003		7.5400 e-003	7.5400 e-003	0.000	35.046 4	35.046 4	0.011	0.000	35.329 8

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2		Exhaus t PM10		Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	/yr							N	IT/yr		
Haulin g	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000 0	0.000 0	0.000 0	0.0000	0.0000	0.000 0
Worker	1.5700 e-003	9.4000 e-004		2.0000 e-005	2.0700 e-003		2.0800 e-003	5.5000 e-004	1.0000 e-005	5.6000 e-004	0.000 0	1.716 6	1.716 6	8.0000 e-005	7.0000 e-005	1.739 1
Total	1.5700 e-003	9.4000 e-004	9.4400 e-003	2.0000 e-005	2.0700 e-003	1.0000 e-005	2.0800 e-003	5.5000 e-004	1.0000 e-005	5.6000 e-004	0.000	1.716 6	1.716 6	8.0000 e-005	7.0000 e-005	1.739

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Categor y					tor	ns/yr							M	T/yr		
Archit. Coating	0.3129					0.0000	0.0000		0.0000	0.0000	0.000	0.000	0.000	0.0000	0.000	0.000
	3.1600 e-003	0.021 3	0.031 7	5.0000 e-005		1.0700 e-003	1.0700 e-003		1.0700 e-003	1.0700 e-003	0.000 0	4.468 2	4.468 2	2.5000 e-004	0.000 0	4.474 5
Total	0.3160	0.021	0.031 7	5.0000 e-005		1.0700 e-003	1.0700 e-003		1.0700 e-003	1.0700 e-003	0.000	4.468	4.468	2.5000 e-004	0.000	4.474 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugiti ve PM10	Exhaus t PM10	0	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	s/yr							М	T/yr		
Haulin g	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9600 e-003	5.9500 e-003	0.059 8	1.2000 e-004	0.0131	9.0000 e-005	0.013 2	3.4900 e-003	8.0000 e-005	3.5700 e-003	0.000 0	10.872 0	10.872 0	5.2000 e-004		11.014 3
Total	9.9600 e-003	5.9500 e-003	0.059 8	1.2000 e-004	0.0131	9.0000 e-005	0.013	3.4900 e-003	8.0000 e-005	3.5700 e-003	0.000	10.872	10.872 0	5.2000 e-004	4.3000 e-004	11.014 3

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaus t PM10	PM10 Total	Fugitiv e PM2.5	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio - CO2	Total CO2	СН4	N2O	CO2e
Categor y					toi	ns/yr							M	T/yr		
Archit. Coating	0.3129					0.0000	0.0000		0.0000	0.0000	0.000	0.000	0.000	0.0000	0.000	0.000
Off- Road	3.1600 e-003	0.021 3	0.031 7	5.0000 e-005			1.0700 e-003		1.0700 e-003	1.0700 e-003	0.000 0	4.468 2	4.468 2	2.5000 e-004	0.000 0	4.474 5
Total	0.3160	0.021	0.031 7	5.0000 e-005		1.0700 e-003	1.0700 e-003		1.0700 e-003	1.0700 e-003	0.000	4.468	4.468	2.5000 e-004	0.000	4.474 5

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugiti ve PM10	Exhaus t PM10		e	Exhaus t PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Catego ry					tons	s/yr							М	T/yr		
Haulin g	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.000 0	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9600 e-003	5.9500 e-003	0.059 8	1.2000 e-004	0.0131	9.0000 e-005	0.013 2	3.4900 e-003	8.0000 e-005	3.5700 e-003	0.000 0	10.872 0	10.872 0	5.2000 e-004	4.3000 e-004	11.014 3
Total	9.9600 e-003	5.9500 e-003	0.059 8	1.2000 e-004	0.0131	9.0000 e-005	0.013	3.4900 e-003	8.0000 e-005	3.5700 e-003	0.000	10.872 0	10.872 0	5.2000 e-004	4.3000 e-004	11.014

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitiv e PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Category		tons/yr MT/yr														
Mitigated	0.024 1	0.029 6	0.175 1	2.6000e -004	0.0236	3.1000e -004	0.023 9	6.3200e -003	2.9000e -004	6.6100e -003	0.000	23.632	23.632 0	2.1900e -003	1.4900e -003	24.130
Unmitigate d	0.024 1	0.029 6	0.175 1	2.6000e -004	0.0236	3.1000e -004	0.023 9	6.3200e -003	2.9000e -004	6.6100e -003	0.000 0	23.632 0	23.632 0	2.1900e -003	1.4900e -003	24.130 0

4.2 Trip Summary Information

	Avera	ge Daily Trip I	Rate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	20.28	50.96	56.94	63,832	63,832
Total	20.28	50.96	56.94	63,832	63,832

4.3 Trip Type Information

		Miles			Trip %		t	Trip Purpose	%
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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
City Park		0.064863	0.191817	0.155973	0.051760	0.009603	0.008536	0.006240	0.000416	0.000000	0.037661	0.001217	0.007255

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Category					ton	s/yr							МТ	∏yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

	NaturalGas 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	СН4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	СН4	N2O	CO2e
Land Use	kBTU/yr					ton	ıs/yr							МТ	ſ/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr		МТ	ſ/yr	
City Park	0		0.0000	0.0000	0.0000	0.0000
Total			0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use		Total CO2	СН4	N2O	CO2e
Land Use	kWh/yr	tons/yr		МТ	7/yr	
City Park	0		0.0000	0.0000	0.0000	0.0000
Total			0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	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	СН4	N2O	CO2e
Category					tons	/yr							MT/	/yr		
Mitigated	0.1472	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004
Unmitigated	0.1472	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004

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	СН4	N2O	CO2e
SubCategory	tons/yr							MT/yr								
Architectural Coating	0.0313					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e- 005	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004
Total	0.1472	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004

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	СН4	N2O	CO2e
SubCategory	tons/yr									MT	/yr					
Architectural Coating	0.0313					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e- 005	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004
Total	0.1472	0.0000	2.4000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e- 004	4.6000e- 004	0.0000	0.0000	4.9000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr		МП	Γ/yr	
Mitigated		10.0319	1.6200e- 003	2.0000e- 004	10.1311
Unmitigated		10.0319	1.6200e- 003	2.0000e- 004	10.1311

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr		МТ	∏yr	
City Park	0 / 30.9785		10.0319	1.6200e- 003	2.0000e- 004	10.1311
Total			10.0319	1.6200e- 003	2.0000e- 004	10.1311

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr		МТ	∏yr	
City Park	0 / 30.9785		10.0319	1.6200e- 003	2.0000e- 004	10.1311
Total			10.0319	1.6200e- 003	2.0000e- 004	10.1311

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	СН4	N2O	CO2e
	tons/yr		МТ	7/yr	
Mitigated		0.4547	0.0269	0.0000	1.1265
Unmitigated		0.4547	0.0269	0.0000	1.1265

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

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr		MT	Г/уг	
City Park	2.24		0.4547	0.0269	0.0000	1.1265
Total			0.4547	0.0269	0.0000	1.1265

Mitigated

	Waste Disposed		Total CO2	СН4	N2O	CO2e
Land Use	tons	tons/yr		MT	Г/уг	
City Park	2.24		0.4547	0.0269	0.0000	1.1265
Total			0.4547	0.0269	0.0000	1.1265

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
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Boilers

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

Equipment Type	Number

11.0 Vegetation

Attachment C Biological Report

Insert March 11, 2022 Biological Resource Assessment document from ECORP here

Attachment D Cultural Report

Insert February 14, 2022 Cultural Resource Investigation by Greg White here

Attachment E Geotechnical Report

Insert February 26, 2021 Geotechnical Report by NV5 here

Traffic Impact Study

Insert Traffic Impact Study for the Burns Valley Development by W-Trans here



Oak Valley Villas Apartments Acoustic Mitigation Summary Report

By Douglas L. Gibson, A.I.A., California Architect C29792

2 March 2022

The Oak Valley Villas Apartment project is located in the northerly portion of the City of Clearlake, in what could best be described as a semi-rural, suburban area of impact. Nearby uses include multifamily residential to the north and west with farmland, orchards and vineyards to the north. To the south of the project is the more urban, developed center of town, for the city, along with commercial uses, and existing residential uses and zoning designations as well. As proposed, Oak Valley Villas Apartments, is to be located at the Southwest Corner of Burns Valley Road and Rumsey Road, a non-signalized intersection with traffic control by use of stop signs. Neither Burns Valley Road nor Rumsey Road are considered arterial or high-speed vehicular thoroughfares, both in width of roadway, posted allowable speeds and profiles of intersection. As these two roads are considered residential collector roads servicing a limited geographic area, the acoustical noise impact to the proposed development will be nominal, and within acceptable limitations per state statute and HUD standards at 24CFR Part 51B, averaging between 38 to 45 dBA (background) but no greater than an anticipated 65 dBA day night average. This assessment is based upon current traffic patterns, adjacent uses and the semi-rural nature of the primary frontage for the project, Burns Valley Road.

Secondary acoustical consideration for the development is specific to the future installation of a municipal sports field directly to the south of the apartment development by the City of Clearlake. The following summary report is based upon a Masterplan Format Document provided by the City of Clearlake to the Architect of Record, Douglas L. Gibson, on or about October 29, 2021. Physical dimensions of the proposed sports complex have been verified with the Owner provided ALTA document and reconciled with the approved site plan for the apartment complex, recorded by the City of Clearlake Planning Department. The architectural site plan used for this assessment was dated February 12, 2022, and noted as "Delta 2 Coordination Revisions" submitted to the city for permitting. All dimensions noted are approximate, but should be within less than 12" in accuracy. Final site plan dimensions for both the proposed apartment complex and the city owned sports facility will not be confirmed, in situ, until such time as a final ALTA is recorded for both properties.

For any sports complex of the proposed design, there are commonly noted or recorded three major sources of noise energy production (*Noise-Con 90, Jack B. Evans, P.E.,* "Community Annoyance with Sports Crowd Noise – A Case Study of the Facts in a Jury Decision"). These three major sources of noise are the following: 1.) Vehicular automobile, private truck and limited commercial truck engine noise; 2.) Amplified Public Announcement sounds including both voice and music energy; and 3.) Spontaneous sound energy created by multiple voices, sound emissions and collective human generated sound energy of random sources, areas, zones and magnitude. Of the three recognized sound energy sources, the third is recognized as the most intrusive and acoustically difficult to address on account of various pitch, sound wave lengths and energy. Recent professional and collegiate football stadiums have had



acoustical energy recordings in excess of 110 dB, for limited durations. Spectator noise is of serious concern for large and small sports venues, however, there is also a significant reduction in the production of sound energy from a group of 100 spectators, compared to 100,000 spectators. It is this smaller group of spectators that are to be addressed in this summary as the primary source of acoustical energy.

However, before addressing spectator noise, the first and second sources of anticipated sound energy will be reviewed, assessed and then noted for any anticipated mitigation measures. The first source of sound energy is proposed as vehicular sound created at the sports complex as participants, fans, officials and ancillary staff park cars, drive around the parking lot looking for a parking spot, or idle, waiting for a spot to clear. Anticipated sound production for the larger of the two parking lots in the sports complex are anticipated to be between 54 dBA and 59 dBA. The larger of the two parking lots, to the west of the proposed sports complex is approximately 500 linear feet from the western wall of Buildings 3 and 4 of Oak Valley Villas. In addition, this direct line of site sound source is buffered from the apartment project development by two existing single story structures, a municipal library that is approximately 25' tall and a single story senior living project which is contiguous to the western property line of Oak Valley Villas. Based upon distance from the two structures on site, physical obstacles that will prevent direct sound acquisition and which will deflect and refract sound energy, it is presumed that any sound energy reaching the interior of the units will be less than 40 to 45 dBA from these sources at the westerly parking lot.

A second parking lot for the sports field, proposed at the easterly portion of the facility is planned to be contiguous to the southern parcel line of the apartment complex. This fifty six (56) parking stall lot is directly adjacent to the primary baseball field at the easterly portion of the sports complex and is approximately 140' from the closest residential structure within the apartment development, Building 4 and approximately 290' from Building 5. Similar to the above calculation, it is anticipated that noise generation of this secondary lot will be in the 54 to 59 dBA range, with bursts associated with diesel engine rev up and bass sound production from vehicular stereo systems in excess of 65 decibels, for limited duration and magnitude. The closest structure to this source of noise, Building 4, has primary deck and patio openings parallel to the source of noise energy, and presents in the general direction of this noise source, a wall consisting of approximately 95% solid surface. There are six individual, fixed windows, facing south on this elevation. For these six windows, elevating the acoustical mitigation or STC rating from the standard STC 30 to STC 33 will result in sound level energy within the respective unit interiors of less than 45 dBA DNL (day night average) on standard days when the parking lot is utilized for sporting events or similar activities.

Similarly, Building 5, the second closest structure to this parking lot has approximately 60 to 65% of the façade designed as an opaque surface with three smaller, fixed windows and three larger bedroom egress windows at this south elevation. In addition, based upon the unit interior floor plans each unit in the three story structure at the south end of the building is provided with an approximately 80 square foot exterior private space, patio or balcony. Access to this patio and balcony is through a full light



French door (swinging) with a side light and window which provide natural daylighting into the interior of the unit. The windows on this portion of the structure will receive the majority of sound energy and will be provided with a higher acoustical rating of STC 33. Based upon the distance from the source of sound energy (parking lot and drive aisles) it is anticipated that maximum sound readings within this unit's living room and the bedrooms with direct exposure to the source of sound energy, would experience internal acoustic readings of approximately 45 to 50 dBA, for short durations as sporting activities occurred on an irregular basis. By providing for a more rigorous acoustical mitigation response in the project's construction document package, as permitted and approved for construction by local authorities having jurisdiction, it can be summarized that the interior of the residential units, upon completion, will have sound levels less than 45 dBA DNL. This analysis is based upon the design and construction of the exterior walls, that is, 2x6 wood construction with wood sheathing, sound absorptive stucco or EIFS siding, R-21 rated batt insulation, and acoustical dampening gypsum drywall within the unit interiors. From time to time resident use of their exterior patio may be compromised by the creation of sound energy at the parking lot, with sound levels in excess of 65 dBA. To fully address this sound source the only acceptable means of addressing mitigation at the exterior patios would be the introduction of solid half walls (currently shown as transparent railing to 44" AFF) and construction of such half walls to a minimum height of approximately 52". Based upon the limited events or occurrences of excessive sound levels generated by the sports complex the architect is of the professional opinion that retaining the current patio design is acceptable without additional mitigation being required.

The next source of noise energy to be addressed is that energy produced by both electrical amplification of voice and musical soundtracks over an energized audio system. At the time of the creation of this report and assessment the City of Clearlake had not sufficiently programmed the site nor provided the author of this report with any specific information on speaker location, mounting height, orientation, nor amplification metrics. Based upon the understanding that the baseball diamond anticipated to be built directly to the south of the proposed apartment complex, Oak Valley Villas, will be the largest of the five baseball diamonds, the other two being little league fields and T-ball fields, this diamond will be the only one to potentially contain an amplified sound system. Based upon the Master Plan Format document provided to the design team, the closest bleacher section to Building 4 is approximately 420' from the south face of that structure, and from Building 5 to this bleacher seating is approximately 440'. Based upon the prior cited source, Noise-Con 90 proceedings, Jack B. Evans, P.E., the anticipated noise energy production from these amplifications can range from 75 to 80 dBA, with high loads of over 85 dBA, when sound amplification energy is overlaid with organic noise production from spectators and players. This level of energy production (highest yield of 85 dBA) would occur approximately less than 15% of the time of total play or participant attendance of a baseball event. Anticipated noise levels of the combined amplified and crowd noise could be estimated to be between 60 to 65 dBA, for more than half of the time of attendance, but more generally within the 55 to 60 dBA for more than seventy percent of the time, when both physically active participants, spectators, and amplification are used.

As noted previously, the sound 'face' of the two closest buildings to this source of energy are Buildings 4 and 5, and by design, both structures present their smallest profile to the south, or that direction



specifically facing the proposed sports complex. By providing upgraded STC ratings for the fixed windows, Building 4 primarily, and the three fixed windows, six operable windows and three French patio doors, it will be possible to reduce the sound energy reception within these spaces to less than 52 dBA during peak energy events. Construction documents will note the installation of acoustical sealant or caulking at these two structures south elevations, upgraded STC ratings for vinyl windows from industry standard 30 to an upgraded STC 33 minimum, as all as the utilization of acoustic dampening gypsum wall board on these south facing unit interior walls. Combining the sound mitigation effects of these built components, and considering the distance from the source of sound energy, it is proposed that ambient sound energy within these residential units will remain less than 45 dBA, on average, and would be estimated in the 57 to 59 dBA range during most times when active sporting events are occurring. Based upon the anticipated duration of sporting events, e.g. summer weekends and evenings, and shoulder season (March through May) high school level sporting events, it can safely be stated that when averaged over a twenty four (24) hour period, the noise levels within these units would safely remain below HUD's required 45 dBA DNL standard.

Attachment G Flood Hazards Map

