CITY OF CLEARLAKE

FINAL

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

IS 2022-08
SCH No. 2023110007

DANCO SUBDIVISION DEVELOPMENT
SD 2022-01

LOCATED AT:2890 OLD HIGHWAY 53

APN: 010-048-008-000

Draft: October 31th, 2023
Final Draft: December 6, 2023

FINAL ENVIRONMENTAL INITIAL STUDY PUBLIC REVIEW

On November 1st, 2023, the notice of intent and the draft environmental analysis/initial study and supporting documentation was uploaded to the CA State Clearinghouse and circulated via email to various Federal, State and local agencies, including community groups for review. The document was also uploaded onto the City's Website and made available upon request. Additionally, a Notice of Intent (NOI) was mailed (via USPS) to the surrounding parcels owners within 300 feet of the subject property informing them of the City's decision to adopt a Mitigated Negative Declaration for the proposed project. The draft Initial Study for this project was circulated for public review between November 4th, 2023, and December 6th, 2023. Below is Table 1 that summarizes the comments received from circulation and review of the draft Initial Study followed by the actual comments. The Draft Initial Study and related mitigation measures were not substantially amended in this Final Initial Study. Therefore, the City, as lead agency for this project, has determined that the Initial Study does not need to be recirculated and has been determined to adequately address the concerns referenced by all agencies. Therefore, this document is formalized as the Final Initial Study and the City may issue a mitigated negative declaration with the incorporated mitigations measures/conditions of approval.

SUMMARY LIST OF RESPONSES: Summary of Public Comments and City Responses (refer to all written correspondence following this Table)

TABLE 1

Commenting Agency or Entity	Date	Summary of Comments	City Response
Public Agency Comments *Note: Tribal Agency Comments at End of this Table*			
Highlands Water Company	December 19, 2022	No specific comments at this time	
Email from Autunm Lancaster, Lake County Fire Protection District	December 20, 2022	We received the request for review Old Hwy 53 Development of 22 Subdivision lots- Our only comment at this time, is that they follow all current applicable California Fire Codes and Standards.	Comments noted and will be addressed either during final map or building permit review.
E-mail from Lori A. Baca, Customer Service Supervisor Lake County Special Districts	December 20, 2022	Parcel 010-048-080 is outside of any Special Districts service area, no impact.	

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E-Mail Memo from Tina Rubin, Environmental Health Aide, Lake County Environmental Health Department	December 21, 2022	Lake County Division of Environmental Health (EH) has on file for the subject parcel: APN: 010-048-08 - On October 17, 2022, our office received applications for 14 site evaluations (soils test) in which field inspections are still pending; 8 site evaluations (soils test) were performed in 2005 for a proposed subdivision; a 1991 site evaluation (soils test); a 1991 well permit (WE 589) for a domestic well; a 1991 well pem1it (WE 593A) for a well abandonment for an improperly equipped well. The applicant must meet the EH requirements regarding Onsite Wastewater Treatment System (OWTS) and potable water. Environmental Health will require a site evaluation (soils test) to be completed on each of the proposed parcels to ensure an Onsite Wastewater	Comments noted and will be addressed either during final map or building permit review.
Email to Mark Robers from Ryan Lewelling, Cadastral Mapping Specialist, Lake County Assessor's Office.	January 4, 2023	· No Tax Rate Area conflicts identified · No property taxes due or assessed; coded as non-taxable · Ownership confirmed per doc #1999004156 · Draft subdivision map reviewed. Please provide GIS shapefile or CAD dataset following City approval of project · Development located adjacent to Old Hwy 53; two 50-foot roadways with 50ft cul-de-sac noted for access to lots. Proposed sewage leach fields noted as being located 50ft from creek that drains to Clear Lake, 30ft from building pads	Revised plans have been submitted by the applicant to address specific locations of building pads and leach fields. A minimum 50-foot setback from the creek is on the revised plans. Mitigation Measure BIO-4 has been created to maintain this setback as follows: BIO-5: A 50-foot setback shall be established from the intermittent drainage for all building development and septic system development as part of the site plan. Said setback design and establishment, shall be determined by a qualified biologist (approved by the City Planning Department) and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.
Cameron Vella, Analyst, California	December 21, 2022	Review project with local tribes.	

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Native American Heritage Commission			
E- from Ben Huffer, Environmental Scientist, California Department of Fish and Wildlife	January 6, 2023	Thank you for providing the Biological Resources Assessment (BRA). After reviewing the BRA. I would suggest including in any future environmental documents at a minimum a habitat assessment to determine if Western Bumble Bee (WBB) habitat is present. If habitat for WBB is present within the project footprint, a WBB survey should be conducted to determine if the species is present and establish the project impacts to WBB. This is essential to incorporate adequate avoidance, minimization, and/or mitigation measures in the future CEQA document. As previously stated WBB is a candidate species and has the same protections as any other listed species under the California Endangered Species Act. If it is determined WBB habitat is present appropriate surveys should be conducted to ensure there is no take of WBB during project activities. Thank you for the opportunity to provide comments, and I look forward to reviewing any future documents.	The Biological Resources Assessment has been revised to address the Western Bumble Bee.(WBB) Mitigation Measure BIO-3 has been created to ensure that a biological survey will be conducted for the WBB as follows: BIO-3: Prior to final subdivision map approval or within one year of project implementation (securing grading and/or subdivision improvements) at least one follow-up survey Bumble Bee Survey shall be conducted by a qualified biologist (approved by the City Planning Department) the western bumble bee active season to focus on foraging habitat and suitable underground refuge areas identified during the habitat assessment. For each survey event, the surveyor shall spend at least one hour per 3-acre area surveying suitable habitat, based on survey protocols for the rusty patched bumble bee (B. affinis) (USFWS 2019). Surveyors shall note other species of bumble bee, approximate number of each species and photographs of bumble bees shall be taken to properly identify species of bumble bee present onsite (USFWS 2019). If western bumble bee is not identified in or immediately adjacent to the Study Area (within 25 feet), no further surveys or actions would be required. Results from the habitat assessment and follow-up surveys shall be provided to the California Department of Fish and Wildlife. If a western bumble bee individual or colony is identified in the Study Area or within 25 feet, then a 25-foot setback shall be implemented around the colony and consultation with CDFW may be

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			necessary if the project activities will impact an active western bumble bee colony. Since the western bumble bee is a candidate species under California Endangered Species Act, incidental take coverage may be required for project-related impacts that will result in take of WBB.
Email and Letter from Deb Sally, Chair, Sierra Club Lake Group P.O. Box 415, Lower Lake, CA 95457	January 6, 2023	Concerns regarding habitat conservation, tree removal, flooding, septic and leach field contamination, and consistency with community plan.	This responds to all four of the comment email/letters received from the Sierra Club and the Audubon Society: The project site is designated Low Density (0-4 units per acre). The project is consistently zoned RR Zone which is intended primarily to provide housing opportunities for lower density residential development, such as single-family homes on larger sized lots with a density not to exceed 1 unit to the acre. This zone shall be applied to areas designated "low density residential" on the Clearlake General Plan Zoning Map. The project is consistent with the General Plan for a very low-density development of less than one dwelling unit per acre of land. The General Plan Environmental Impact Report contemplates development of the site at 1-4 dwellings per acre so the project is being developed at the lower density level of 1 dwelling unit per acre. The City recognizes the environmental constraints of the project site with significant tree coverage and a creek traveling along the north side of the site. However, the project does address these environmental constraints by providing a 50-foot creek no disturbance buffer. A minimum 50-foot setback from the creek is shown. Mitigation Measure BIO-5_ has been created to maintain this setback as follows:
Letter from Deb Sally Chair, Sierra Club Lake Group	January 12, 2023	The Sierra Club Lake Group has some concerns about this project that we believe need to be addressed before this project goes further. I have addressed the issues in the order of importance of impacts. The seasonal creek (intermittent drainage area) located in and along the north side of the property carries a fair amount of water during rain events. There was water running it during the most recent storms. It is a tributary to Burn's Valley Creek which is the main waterway that enters the lake within the city boundaries. It fits the description of Natural Surface Water as given in 14-1.3 a.18 of the Storm Water Management Ordinance. The Ordinance states that "discharge of pollutants to storm water will be reduced to the maximum extent practicable through the implementation of BMPs designed to protect water quality and requirements of the Municipal Storm Water Permit". Having septic system leach fields on each of the northern lots (# 1-7) that extend to within seventy-five (75) feet of the waterway does not conform to county recommendations and is likely to result in increased amounts of nitrogenous waste entering the creek as Non-Storm Water Discharge. Contaminants are likely to eventually enter the lake next to Austin Park. This would add to the sediment as well as algal blooms and	

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		unwanted vegetation that would then lead to obstacles and odors that deter people from using Austin Park. This park is the focal point of the area's cultural events and therefore should not be degraded. The water quality in our area has a huge impact on its viability as a tourist destination. Unless the developer can relocate the leach fields to give at least a 75 foot setback from the creek, possibly by decreasing the number of lots, they must be required to use engineered septic systems. The application states that no loss of stream side vegetation is expected at this time. Because the creek and its riparian zone is part of each of the lots, 1-7, along the northern border of the project, it is likely that stream side vegetation will be impacted when the lots are developed and occupied, unless there is a restriction imposed on the buyer of each lot that can be enforced. Loss of vegetation along the creek will result in increased sediment entering the waterway and ultimately Clear Lake. There should be a deed restriction on each of the seven properties that requires that that space be maintained as open space by the owners. Alternatively, the lot size could be decreased or plan altered to eliminate the seasonal creek and its riparian area from the lots. Furthermore, the City of Clearlake General Plan, Chapter 6: Open Space, Policy OS 6.1.1, states that " The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces." The Special-Status Wildlife section of the Biological Resources Assessment states that there is Indian Milkweed located along portions of the intermittent drainage area. Because Monarch Butterfly caterpillars feed on this plant, the project design should incorporate a 25 foot setback around milkweed habitat. The BRA also	BIO-5: A 50-foot setback shall be established from the intermittent drainage for all building development and septic system development as part of the site plan. Said setback design and establishment, shall be determined by a qualified biologist (approved by the City Planning Department) and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023. The Biological Resources Assessment (BRA) was revised to address concerns noted including increased survey time to 14 days prior to disturbance for biological surveys. The applicant has considered the Sierra Club's request to cluster development to reduce impacts on the overall site biologic and hydrologic impacts. In response to comments regarding aesthetic impact, the General Plan and related Environmental Impact Report established a baseline development scenario for rural residential on the site. Section 18-20.120 Night sky preservation was established to 1) curtail and reverse any degradation of the nighttime visual environment and the night sky, 2) minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive or unnecessary, and help protect the natural environment from the damaging effects of night lighting. Lighting design for all project development mush meet the City's Night Sky Preservation regulations which will avoid noted concerns of excessive light glare.

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		states that pre-construction surveys should be conducted by a qualified biologist within one week prior to the onset of construction. Protecting this area is in line with the City of Clearlake General Plan, Objective CO 4.1: Protect all state and federally listed endangered and threatened species. This is one more reason to remove the drainage area/seasonal creek from lots 1-7. Additionally, Burns Valley Creek is a historic spawning area for the Clear Lake Hitch, also known as chi, the name used by the local indigenous people. Protecting a potential site for this and other indigenous fish to be re-introduced could add to the area's potential for ecotourism and bring back a culturally important fish to the Pomo tribes in our area. There is also concern about flooding along Burns Valley Road in heavier rain events. Degradation of the water holding capacity of the soil by vegetation removal could result in increased runoff to the creek and into the drainage ditch along the west side of the project which is along the east side of Old Highway 53. There is already a history of water overflowing this drainage ditch and entering the roadway. The curb and gutter to be put in would have to be designed to handle large amounts of flow. The Tree Ordinance adopted by the City of Clearlake in Municipal Code 18-40 suggests that mature trees that belong to any of six varieties of oak tree or any designated heritage tree "enhance the aesthetic qualities of the community" and thereby are valuable. There are many trees that fit this description on the project site. Removal of these trees should be kept to an absolute minimum by requiring a biological survey to identify trees that should be saved. Oversight to ensure compliance to only permitted removal and specified mitigation is also necessary. The Special-Status Wildlife section of the BRA states that all ground disturbing activity should be	The City's Tree Native Tree Preservation regulations, Section 18-40 of the Zoning Code was established to ensure the preservation and protection of resources that cannot be replaced while also balancing the needs of commerce, industry and the human population within the City. Through these regulations, the City recognizes that trees are a valuable asset to making the City healthier and more aesthetically appealing place to live. Under these regulations oak trees, as specified in the regulations, that have a greater diameter of 6" at breast height require replacement at certain ratios. The City recognizes that tree removal for this site will be required. But, the impact from removal will be off-set by contribution into the City's Tree Preservation Fund. In addition, a Mitigation Measure has been created to further mitigate impacts from unnecessary tree removal: BIO-6: Prior to approval of the final subdivision map and/or prior to any tree removal (qualifying trees per Chapter 18-40 of the Municipal Code, Native Tree Protection), a complete tree survey shall be conducted by a qualified arborist (approved by the City Planning Department) that identifies all trees that have a greater diameter of 6" at breast height, type, and health, on the project site. The survey/preservation plan shall also show all trees that will be removed as trees preserved during the initial subdivision improvement stage (construction of roads and infrastructure). The survey/preservation plan shall also include recommended measures to preserve trees on the project site during this initial construction, such as fencing at driplines,

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		completed between September 1st and January 31st to minimize impacts on nesting birds. A pre-construction nesting bird survey should be completed within 14 days of the start of construction by a qualified biologist. We request that this be adhered to. The View and Vista will be changed dramatically for neighbors in the area. Some residents consider the relatively dark sky in the area to be of immense value for their astronomical enjoyment. Fixtures that restrict upward-directed light and have low color temperature bulbs are required. We request that the number be minimized to decrease light pollution. Any houses built there are also required to utilize similar lighting. Enforcement of these regulations is essential. Additionally, the daytime view from the houses across the road from the development will be altered significantly with the removal of trees. The treed areas add to the natural beauty of the area. Mature trees are known to increase residential property values. If a large number of the trees are removed, there will be no visual or sound barrier between the current neighbors and the highway from that direction. This project does not appear to fulfill the Community Development Plan in providing additional low and medium income housing. There is no indication in the document that the developer plans to build out the lots. Building costs may result in an inability to sell the lots leaving a minimally developed subdivision for a long period. This would decrease the rural beauty of the area by removing an essential open space element along what is arguably the most scenic access road and one of the most frequented walking areas in the city. If this project moves forward, the applicant must demonstrate a commitment to build out the lots within a reasonable period of time. January 12, 2023, letter from Roberta Lyons, Redbud Audubon Society Conservation Co-Chair On a whole we do	etc. Prior to grading or site disturbance for subdivision improvements, all tree protection measures shall be completed and certified by the arborist to the City. Prior to any tree removal of trees qualified under the Native Tree Preservation regulations, a tree removal permit shall be obtained from the City. Tree replacement fees, in accordance with the City's most recent fee schedule shall be submitted to the City prior to removal of any tree on the project site. Although Highway 53 through Clearlake is eligible to become a designated scenic highway, it is currently not designated a scenic highway.

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		not oppose the entire development but thoughtful changes to the proposed plan could be made. In looking at the City of Clearlake's General Plan objectives, it appears this project does not comply with the objectives. This project is not preserving wildlife habitat or open space nor does it result in connection corridors for wildlife (Objective CO 4.2). Nor does it comply with Objective CO 4.3 of maintaining diverse and natural landscape to preserve the visual integrity of the landscape and provide habitat conditions for native vegetation and plants (paraphrased.) What is the solution? A redesign of subdivision following a Conservation Design objective. This would include excluding or reducing lots along the "intermittent," waterway; clustering the houses in cul de sac type situations, reducing lot size, and providing a significant pathway through the development and not allowing impassable fencing for wildlife. The intermittent creek flowing along the edge of the property that is being suggested to be included in individual lots is a bad idea. I've enclosed an image of the creek running during our current time of heavy rains, but certainly not the heaviest rains we will possibly be seeing. As the Sierra Club comments point out, septic and leach field contamination is a real probability if houses are placed too close to this waterway. This waterway could be designated as a park for the development. It could be restored with more sloped banks and native wetland vegetation that would reduce erosion and danger of flooding into the adjacent houses. The treed area could also be seen as a wildlife/park area with some removal for fire safety but not clear-cutting to make way for 2 or 3 story mega-houses. I would think developers would be open to the idea of an attractive, nature friendly, community that could be marketed as such. I realize these are broad comments that need to be narrowed down to more specifics, but	

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Roberta Lyons, Redbud Audubon Society Conservation Co-Chair, Redbud Audubon Society PO Box 5780d\, Clearlake, CA 95457	January 17, 2023	As Conservation co-chair for the Redbud Audubon Society of Lake County, I'm commenting on our concerns regarding the subdivision proposed near Old Highway 53 in the City of Clearlake. On a whole we do not oppose the entire development but thoughtful changes to the proposed plan could be made. In looking at the City of Clearlake's General Plan objectives, it appears this project does not comply with the objectives. This project is not preserving wildlife habitat or open space nor does it result in connection corridors for wildlife (Objective CO 4.2). Nor does it comply with Objective CO 4.3 of maintaining diverse and natural landscape to preserve the visual integrity of the landscape and provide habitat conditions for native vegetation and plants (paraphrased.) What is the solution? A redesign of the subdivision following a Conservation Design objective. This would include excluding or reducing lots along the "intermittent," waterway; clustering the houses in cul de sac type situations, reducing lot size, and providing a significant pathway through the development and not allowing impassable fencing for wildlife. The intermittent creek flowing along the edge of the property that is being suggested to be included in individual lots is a bad idea. I've enclosed an image of the creek running during our current time of heavy rains, but certainly not the heaviest rains we will possibly be seeing. As the Sierra Club comments point out, septic and leach field	

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Letter from Deb Sally Chair, Sierra Club Lake Group	January 5, 2023	This project includes a waterway, a blue oak forest woodland and a meadow area that require special consideration as part of the natural beauty experienced by people entering and leaving the City of Clearlake and for the ecosystems they support. There are also a few species of plants and animals that are of special concern that may inhabit in the project area. There are also concerns about how many of the lots will actually be built out. Having another paper subdivision is highly undesirable especially along a scenic corridor. The City's General Plan states that among many goals are those of maintaining its natural beauty. Putting a housing development in this location does not seem consistent with these goals as this is a scenic area that is seen by people entering and leaving the city. The following is just a sampling of what is in the document.	

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		Goal OS-6: A city that preserves and celebrates its environmental resources. Objective OS 6.1: Preserve and maintain forested areas, fields, stream corridors, wetlands, and other open spaces that are within and surround the City. Policy OS 6.1.1: The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces. Goal CO-4: A diverse landscape where plant and wildlife habitats, open space, and natural resources are preserved and protected. Objective CO 4.1: Protect all state and federally listed endangered and threatened species. Objective CO 4.2: Prevent conversion of wildlife habitat into other land uses. This property is a buffer zone between the developed part of the city and the watershed ecosystem that lies to the east of Highway 53. The City also has an Oak Tree Ordinance, Municipal Code 18-40, which states that any Blue, Valley, Interior Live, California Black, Canyon Live, and Oregon White Oak tree that is more than six inches in diameter at breast height cannot be cut down without a permit. There is almost 11.5 acres of blue oak woodland that have many trees fitting this description in this project boundary. Although this is provided for in the project plan, there are challenges to providing mitigation for the removal of native trees within the City. I discovered this when offered the opportunity to help figure out a way to utilize the fees collected from the low-income housing development that is nearing completion on Old Highway 53. Much of those fees have yet to be	

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		used for mitigation. Apparently, there are no city owned places where the planting of oak trees is desired. There needs to be a plan in mind for mitigation of removal of the specified trees, which may include some planting of oak trees in other areas of the project. However, it will ultimately be up to the individuals who purchase the homes to maintain any of these trees. If trees are to be planted elsewhere or the fees used to improve the health and safety of other oak trees already in the city, a plan must be made and executed in a timely fashion and follow-up care provided. Another section of the General Plan states the following goal: Goal CO-1: Clean and safe lake conditions for wildlife, swimming, fishing, and boating. Objective CO 1.1: Protect the quality of surface and groundwater resources. Objective CO 1.2: Prevent sediment erosion and nutrient loading of Clear Lake. The waterway in question is labelled as an intermittent drainage. This tributary to Burns Valley Creek sends water and its contents to Clear Lake. Although the BRA did not conduct a formal aquatic resource delineation, this waterway "is likely considered a water of the U.S. and water of the State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA. The intermittent drainage also falls under the jurisdiction of Section 1600 of the California Fish and GameCode". If these waters, in combination with others in the area, significantly affect the chemical, physical, or biological integrity of waters that have commercial value, such as Clear Lake, they should be protected in order to protect the resource. Although the BRA requires setbacks from this waterway that should protect it during the development phase, there is no way for the City to monitor what happens once the property is sold to a homeowner. Soil disturbance could	

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		increase erosion and therefore sediment and use of chemicals as herbicides, pesticides, and fertilizers would likely increase the quantities of these substances entering Clear Lake and affecting the water quality, especially where Burns Valley Creek enters the lake at Austin Park. Because of this risk, altering the lot lines so that the waterway is not included in any of the lots is in the best interest of the public and is strongly urged by our group. As we proceed into a future that is likely to have climate disruptions that put species that are already threatened by loss of habitat into even more peril, it behooves us to do what we can to preserve those habitats. Even small disruptions, when added together, can have significant impact on stressed species. Adhering to the recommendations of the Biologic Resource Assessment (BRA) by providing appropriate surveys and avoidance and mitigation will minimize the impact of the development. The species of special concern are listed in the Biologic Assessment Report and include Bent- flower Fiddleneck, Western Bumble Bee, Monarch Butterfly, and Cooper's Hawk. The BRA states that a certified botanist should survey the area for plants during their flowering season. It also states that the project manager should provide for marking and avoidance of identified plants, including milkweed that serves as the larval Monarch Butterfly feed source, or provide mitigation for disturbance. The same is true for assessing whether birds and bats are nesting in the forested areas. The BRA's instructions suggest ground disturbance only occur from September 1st to January 31st without surveys being conducted 14 days before disturbance or any lapse in construction activity. The surveys are to extend 500 feet from the project perimeter to account for any impact on local raptor populations. If this project goes forward, it is	

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		important that the City assures that these surveys are completed and that the appropriate avoidance and/or mitigation measures are taken seriously to honor the existing General Plan goals and objectives. These surveys and actions should be made public in a timely manner. Paper subdivisions are highly undesirable in general and unacceptable in this location. The City needs to require that Danco commits to building out at least 50% of the lots before approving this project and granting the building permits. Cutting down trees and laying asphalt in this area will make for an unsightly entrance to the city that will provide no benefits if the houses are not built and inhabited. Management of runoff during heavy rain events could prove to be a problem in this area as standing water is common along the western side of the project area during such events. Drainage in the low areas and along Old Highway 53 will need to be improved substantially to deal with this issue. There may be benefit to the community in providing an area of middle-income housing in this location. However, it should not be at the expense of following our General Plan Goals and maintaining a healthy watershed. If you decide to approve this project, please assure that it has the minimum impact possible by changing the lot lines in the northern area to remove threat to the waterway, upholding the Oak Tree Ordinance, and by following the recommendations in the Biologic Resource Assessment (BRA).	
Robert Geary, Cultural Resources Director/Tribal Historic Preservation Officer Habematolel Pomo of Upper Lake, P.O. Box 514 Lower Lake, CA 95457	January 9, 2023	Requests consultation on project referring to the Koi Nation as both having cultural interest in the project. Recommends that cultural monitors on-site during all ground disturbance activities.	This letter includes a request for tribal consultation. On March 15, 2023, the City received an cultural resources evaluation of the project to address tribal resources and provided a copy to the Koi Nation. City representatives met with project applicants and tribal representatives of Koi Nation of Northern California and Habematolel Pomo of Upper Lake on April 6th, 2023, and on July

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			11th, 2023, and subsequently exchanged ideas, comments, and information through other means. Through this consultation, the City better understands that: 1. The Koi Nation is culturally affiliated with, and has a cultural interest in, the proposed project area; 2. Archaeological data and tribal cultural resources need not necessarily align, as they represent two different, although related, areas of expertise and must be addressed separately in the CEQA document; 3. Avoidance and preservation in place of sensitive areas must be incorporated into the project design where feasible; 4. Decisions about tribal cultural resources prior to, during, and following project construction must take into consideration information provided by tribal experts; and; 5. Developing a robust plan for addressing unanticipated discoveries during construction is critically important. Greg White of Sub-Terra Heritage Resource Investigations helped address tribal representatives concerns of Koi Nation of Northern California and Habematolel Pomo of Upper Lake discussed during Tribal Consultation Meetings and in their letters dated January 9th, 2023, June 27th, 2023, and July 13th, 2023. An amended archaeological assessment/report (dated April 1, 2023 & amended on July 18th, 2023) was released addressing their concerns. This report includes confidential information that is restricted from public distribution under state law; however, the

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			findings of the study were assessed by the City as part of this environmental review On October 16th, 2023, City representatives sent a letter to Koi Nation of Northern California and Robert Geary of Habematolel Pomo of Upper Lake concluding formal Tribal Consultation without agreement, and acknowledging that the coordination with the Tribe does not end with project approval; rather, the implementation of the mitigation measures and conditions of approval will involve tribal representatives through project development."
Jesse Robertson Transportation Planning Caltrans District 1, P.O. Box 3700 | Eureka,, CA 95502–3700	January 12, 2023	The Lake County/City Area Planning Council (Lake APC) Senate Bill 743 Vehicle Miles Traveled (VMT) Regional Baseline Study defines the screening threshold for small projects as up to 22 residential units. Recent legislation to streamline the approvals and development of Accessory Dwelling Units, such as AB 2299 and SB 1069, put into question the allowable number of residences that could be constructed on a 22-lot subdivision. Lacking other constraints on development, the subdivision could result in 44 new residences, which would exceed the small project threshold. We request that the city consider requiring the project assessment to include further VMT analysis. While VMT is focused on vehicle travel, the goal of reducing VMT growth focuses on changing development patterns (e.g., land use mix and density) together with providing more pedestrian, bicycle, and transit infrastructure. The subdivision is consistent with the low-density residential designation in the City of Clearlake's General Plan 2040, so to reduce VMT, the subdivision will need to promote an increase in walking and bicycling trips. The General Plan policies support new multi-modal facilities along Old Highway 53 with the following language:	As lead agency for the project, the City's methodology for reviewing environmental impacts is 22 dwelling units; the number of primary residential dwelling units proposed for development. State Accessory Dwelling Unit (ADU) regulations exempt accessory units from environmental review. City staff concurs with the conclusions of the traffic study that indicates that" "ADUs are exempt from CEQA considerations so it would be unreasonable to consider them in the VMT analysis or analysis of any other CEQA topic areas. Further, no ADUs are proposed to be constructed as part of the project so it would be speculative to estimate whether or not any homeowners may decide to build an ADU on their properties in the future. For these reasons, ADUs were not analyzed as part of the proposed project." The Traffic Study concludes that the project, as a 22 unit subdivision would have less than significant impacts on VMT. Comments and recommendations noted regarding connectivity, walkability, and alternative transportation modes. The

Commenting Agency or Entity	Date	Summary of Comments	City Response
		Page 2 of 194 of the Clearlake General Plan 2040 states: Connectivity and Universal Access desire of the community to improve its multi-modal connectivity. The near downtown grid pattern should be continued and reinforced (which will also facilitate transit). Sidewalks should be designed for universal access and installed along all streets. Page 29 of 194 of the Clearlake General Plan 2040 states: Among the considerations in the design of new neighborhoods and infill of existing neighborhoods is the following: • Their location relative to existing development. This relates to the continuity of the street and pedestrian system as a means for achieving a walkable community, as well as the character transition and the means of compatibility within and between developments. Page 66 of 194 of the Clearlake General Plan 2040 states: "Complete streets" are those designed to support safe, attractive, and comfortable access and travel for all users, whether in motor vehicles, on foot, on bicycle, or using the public transit. The City will require complete streets in all new neighborhoods and will improve existing streets to be more complete in accommodating bicycle and pedestrian movements, as funding is available. Improvements required for complete streets depend on the type of street. While all streets will be required to have sidewalks for pedestrians, the required bicycle improvements will vary.	General Plan standards are directed towards higher density residential projects that are located closer to urban services and facilities. No sidewalks are available for access to these urban areas so it would seem to have a limited impact to require sidewalks and connectivity for a project that has a density of one acre per dwelling. Due to lack of resources, the City has not had the opportunity to update the City's subdivision regulations which would have resulted in a more clear articulation and implementation of these general goals and policies and how they apply to different land use designations. However, recommendations from Caltrans will be forwarded to the Planning Commission for further consideration.

Commenting Agency or Entity	Date	Summary of Comments	City Response
		The following General Plan policies also support the incorporation of non-motorized facilities into the scope of the project: Policy LU 1.1.4 - Walkability and good connectivity should be promoted through continuity of the street and pedestrian system, together with a compact community form Program CI 1.1.1.1 In accordance with the Complete Streets Act, new development shall construct and dedicate streets that accommodate the full range of locally available travel modes. Policy CI 4.1.1 - The City shall require sidewalks in new developments. Program CI 4.1.1.1 New development shall construct and dedicate and/or contribute to a connected bicycle/pedestrian network that is designed to promote travel to schools, parks, and other major destinations. We request that the City consider requiring the addition of new sidewalks and bicycle lanes to the project frontage along Old Highway 53 as a condition of project approval. The improvements would provide non-motorized access from the subdivision to transit stops and commercial retail districts in the City, including the shopping center approximately 1.5 miles away, on Olympic Drive. Adding nonmotorized facilities as a condition of project approval may help to mitigate for any VMT impacts.	
Letter from Minkel Engineering Geologist, Central Valley Regional Water Control Board,	December 5, 2023	Summary of State and Federal Permit requirements for the project.	All identified permits and clearances will be obtained in accordance with those items cited in the letter.

Commenting Agency or Entity	Date	Summary of Comments	City Response
Email from David Gooksbee, 15618 Brunetto Lane, Clearlake, CA	December 6, 2023	Concerns of inadequate traffic capacity for the Old Highway 53 Bridge and traffic safety, site drainage impacts on area flooding, and several suggesting subdivision design and infrastructure changes.	Traffic study indicates the project would result in non-significant traffic impacts, including traffic safety. Drainage studies for the project indicate no significant drainage impacts (see attached reports)
Tribal & Cultural Comments and Concerns			
Bryan Much, Coordinator, California Historical Information System	January 13, 2023	The proposed project area has the possibility of containing unrecorded archaeological sites. Recommend contacting local tribes to review.	
Robert Geary, Cultural Resources Director/Tribal Historic Preservation Officer Habematolel Pomo of Upper Lake, P.O. Box 514 Lower Lake, CA 95457	January 9, 2023	Requests consultation on project referring to the Koi Nation as both having cultural interest in the project. Recommends that cultural monitors on-site during all ground disturbance activities.	This responds to both letters received from the Habematolel Pomo of Upper Lake and the KOI Nation of Northern CA. On March 15, 2023, the City received an cultural resources evaluation of the project to address tribal resources and provided a copy to the Koi Nation. City representatives met with project applicants and tribal representatives of Koi Nation of Northern California and Habematolel Pomo of Upper Lake on April 6th, 2023, and on July 11th, 2023, and subsequently exchanged ideas, comments, and information through other means. Through this consultation, the City better understands that: 1. The Koi Nation is culturally affiliated with, and has a cultural interest in, the proposed project area; 2. Archaeological data and tribal cultural resources need not necessarily align, as they represent two different, although related, areas of expertise and must be addressed separately in the CEQA document; 3. Avoidance and preservation in place of sensitive areas must be incorporated into the project design where feasible;
Robert Geary Koi Nation of Northern California Tribal Historic Preservation Officer Designee	July 13, 2023	Koi Nation Cultural Resources Department has reviewed the project with your agency and concluded that it is within the Aboriginal territories of the Koi Nation. Therefore, we have a cultural interest and authority in the proposed project area. Based on the information provided at the above-scheduled consultation, the tribe has concerns that the project will impact known Tribal Cultural Resources. Due to the high sensitivity of the project site and the significant evidence the Tribe has provided to the City of Clearlake in consultation. The Koi Nation requests cultural monitoring during all ground disturbance activities throughout the project site or suggests a supplemental archaeological report for site sensitivity clarification. The Koi Nation also requests the proposed mitigation measures reflect the changes discussed in consultation meetings.	

Commenting Agency or Entity	Date	Summary of Comments	City Response
			4. Decisions about tribal cultural resources prior to, during, and following project construction must take into consideration information provided by tribal experts; and; 5. Developing a robust plan for addressing unanticipated discoveries during construction is critically important. Greg White of Sub-Terra Heritage Resource Investigations helped address tribal representatives concerns of Koi Nation of Northern California and Habematolel Pomo of Upper Lake discussed during Tribal Consultation Meetings and in their letters dated January 9th, 2023, June 27th, 2023, and July 13th, 2023. An amended archaeological assessment/report (dated April 1, 2023 & amended on July 18th, 2023) was released addressing their concerns. This report includes confidential information that is restricted from public distribution under state law; however, the findings of the study were assessed by the City as part of this environmental review On October 16th, 2023, City representatives sent a letter to Koi Nation of Northern California and Robert Geary of Habematolel Pomo of Upper Lake concluding formal Tribal Consultation without agreement, and acknowledging that the coordination with the Tribe does not end with project approval; rather, the implementation of the mitigation measures and conditions of approval will involve tribal representatives through project development."
Letter from Darin Beltran, Chaiman, Koi Nation of Northern California	December 5, 2023		

The following are the formal comments received by the City during the draft initial study circulation between November 4 and December 6, 2023. These letters/comments are listed by date received.

See Next Page

COUNTY OF LAKE
Health Services Department
Environmental Health Division
922 Bevins Court
Lakeport, California 95453-9739
Telephone 707/263-1164
FAX 707/263-1681

Jonathan Portney
Health Services Director

Craig Wetherbee
Environmental Health Director

MEMORANDUM

DATE: December 21, 2022

TO: Mark Roberts Senior Planner

FROM: Tina Dawn-Rubin, Environmental Health Aide

RE: SD 2022-01; CEQA IS 2022-08
Subdivision Map Application

APN: 010-048-08 2890 Old Highway 53, Clearlake

Lake County Division of Environmental Health (EH) has on file for the subject parcel:
APN: 010-048-08 – On October 17, 2022, our office received applications for 14 site evaluations (soils test) in which field inspections are still pending; 8 site evaluations (soils test) were performed in 2005 for a proposed subdivision; a 1991 site evaluation (soils test**);** a 1991 well permit (WE 589) for a domestic well; a 1991 well permit (WE 593A) for a well abandonment for an improperly equipped well.

The applicant must meet the EH requirements regarding Onsite Wastewater Treatment System (OWTS) and potable water.

Environmental Health will require a site evaluation (soils test) to be completed on each of the proposed parcels to ensure an Onsite Wastewater Treatment System (OWTS) can be installed on each parcel before final subdivision map is approved.

Promoting an Optimal State of Wellness in Lake County

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 21, 2022

Mark Roberts
City of Clearlake

Via Email to: *mroberts@clearlake.ca.us*

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Danco Subdivision Map Project, Lake County

Dear Mr. Roberts:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code § 21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was positive. Please contact the Tribes on the attached list for more information.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

SIERRA CLUB
Lake Group

Attention:Mark Roberts
Planner, City of Clearlake

Re: Subdivision Map Application, SD 2022-01 & Environmental Analysis, CEQA IS 2022-08
Date: January 6, 2023

Dear Mr. Roberts,

The Sierra Club Lake Group has some concerns about this project that we believe need to be addressed before this project goes further. I have addressed the issues in the order of importance of impacts.

The seasonal creek (intermittent drainage area) located in and along the north side of the property carries a fair amount of water during rain events. There was water running it during the most recent storms. It is a tributary to Burn's Valley Creek which is the main waterway that enters the lake within the city boundaries. It fits the description of Natural Surface Water as given in 14-1.3 a.18 of the Storm Water Management Ordinance. The Ordinance states that "discharge of pollutants to storm water will be reduced to the maximum extent practicable through the implementation of BMPs designed to protect water quality and requirements of the Municipal Storm Water Permit".

Having septic system leach fields on each of the northern lots (# 1-7) that extend to within seventy-five (75) feet of the waterway does not conform to county recommendations and is likely to result in increased amounts of nitrogenous waste entering the creek as Non-Storm Water Discharge. Contaminants are likely to eventually enter the lake next to Austin Park. This would add to the sediment as well as algal blooms and unwanted vegetation that would then lead to obstacles and odors that deter people from using Austin Park. This park is the focal point of the area's cultural events and therefore should not be degraded. The water quality in our area has a huge impact on its viability as a tourist destination. Unless the developer can relocate the leach fields to give at least a 75 foot setback from the creek, possibly by decreasing the number of lots, they must be required to use engineered septic systems.

The application states that no loss of stream side vegetation is expected at this time. Because the creek and its riparian zone is part of each of the lots, 1-7, along the northern border of the project, it is likely that stream side vegetation will be impacted when the lots are developed and occupied, unless there is a restriction imposed on the buyer of each lot that can be enforced. Loss of vegetation along the creek will result in increased sediment entering the waterway and ultimately Clear Lake. There should be a deed restriction on each of the seven properties that requires that that space be maintained as open space by the owners. Alternatively, the lot size could be decreased or plan altered to eliminate the seasonal creek and its riparian area from the lots. Furthermore, the City of Clearlake General Plan, Chapter 6: Open Space, Policy OS 6.1.1, states that " The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces."

SIERRA CLUB
Lake Group

The Special-Status Wildlife section of the Biological Resources Assessment states that there is Indian Milkweed located along portions of the intermittent drainage area. Because Monarch Butterfly caterpillars feed on this plant, the project design should incorporate a 25 foot setback around milkweed habitat. The BRA also states that pre-construction surveys should be conducted by a qualified biologist within one week prior to the onset of construction. Protecting this area is in line with the City of Clearlake General Plan, Objective CO 4.1: Protect all state and federally listed endangered and threatened species. This is one more reason to remove the drainage area/seasonal creek from lots 1-7.

Additionally, Burns Valley Creek is a historic spawning area for the Clear Lake Hitch, also known as chi, the name used by the local indigenous people. Protecting a potential site for this and other indigenous fish to be re-introduced could add to the area's potential for ecotourism and bring back a culturally important fish to the Pomo tribes in our area.

There is also concern about flooding along Burns Valley Road in heavier rain events. Degradation of the water holding capacity of the soil by vegetation removal could result in increased runoff to the creek and into the drainage ditch along the west side of the project which is along the east side of Old Highway 53. There is already a history of water overflowing this drainage ditch and entering the roadway. The curb and gutter to be put in would have to be designed to handle large amounts of flow.

The Tree Ordinance adopted by the City of Clearlake in Municipal Code 18-40 suggests that mature trees that belong to any of six varieties of oak tree or any designated heritage tree "enhance the aesthetic qualities of the community" and thereby are valuable. There are many trees that fit this description on the project site. Removal of these trees should be kept to an absolute minimum by requiring a biological survey to identify trees that should be saved. Oversight to ensure compliance to only permitted removal and specified mitigation is also necessary.

The Special-Status Wildlife section of the BRA states that all ground disturbing activity should be completed between September 1st and January 31st to minimize impacts on nesting birds. A pre-construction nesting bird survey should be completed within 14 days of the start of construction by a qualified biologist. We request that this be adhered to.

The View and Vista will be changed dramatically for neighbors in the area. Some residents consider the relatively dark sky in the area to be of immense value for their astronomical enjoyment. Fixtures that restrict upward-directed light and have low color temperature bulbs are required. We request that the number be minimized to decrease light pollution. Any houses built there are also required to utilize similar lighting. Enforcement of these regulations is essential.

Additionally, the daytime view from the houses across the road from the development will be altered significantly with the removal of trees. The treed areas add to the natural beauty of the area. Mature trees are known to increase residential property values. If a large number of the trees are removed, there will be no visual or sound barrier between the current neighbors and the highway from that direction.

SIERRA CLUB
Lake Group

This project does not appear to fulfill the Community Development Plan in providing additional low and medium income housing. There is no indication in the document that the developer plans to build out the lots. Building costs may result in an inability to sell the lots leaving a minimally developed subdivision for a long period. This would decrease the rural beauty of the area by removing an essential open space element along what is arguably the most scenic access road and one of the most frequented walking areas in the city. If this project moves forward, the applicant must demonstrate a commitment to build out the lots within a reasonable period of time.

Respectfully,
Deb Sally
Chair, Sierra Club Lake Group

California Department of Transportation

DISTRICT 1
P.O. BOX 3700 | EUREKA, CA 95502–3700
(707) 445-6600 | FAX (707) 441-6314 TTY 711
www.dot.ca.gov

January 12, 2023

1-LAK-53-3.92
SD 2022-01
APN: 010-048-08

Mr. Mark Roberts
Planning Department
City of Clearlake
14050 Olympic Drive
Clearlake, CA 95422

Dear Mr. Mark Roberts:

Thank you for giving Caltrans the opportunity to review and comment on the Initial Study for the Subdivision Map to create a 22-parcel lot. The lots would range in size from 1.25 acres to 2.75 acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53. The subdivision is located north of the intersection of Olympic Drive and State Route 53, at 2890 Old Highway 53, in the City of Clearlake. We have the following input:

The Lake County/City Area Planning Council (Lake APC) Senate Bill 743 Vehicle Miles Traveled (VMT) Regional Baseline Study defines the screening threshold for small projects as up to 22 residential units. Recent legislation to streamline the approvals and development of Accessory Dwelling Units, such as AB 2299 and SB 1069, put into question the allowable number of residences that could be constructed on a 22-lot subdivision. Lacking other constraints on development, the subdivision could result in 44 new residences, which would exceed the small project threshold. We request that the city consider requiring the project assessment to include further VMT analysis.

While VMT is focused on vehicle travel, the goal of reducing VMT growth focuses on changing development patterns (e.g., land use mix and density) together with providing more pedestrian, bicycle, and transit infrastructure. The subdivision is consistent with the low-density residential designation in the City of Clearlake's General Plan 2040, so to reduce VMT, the subdivision will need to promote an increase in walking and bicycling trips. The General Plan policies support new multimodal facilities along Old Highway 53 with the following language:

Page 2 of 194 of the Clearlake General Plan 2040 states:

Connectivity and Universal Access

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Closely related to the vision of steady, incremental, sustainable growth is the desire of the community to improve its multi-modal connectivity. The near-downtown grid pattern should be continued and reinforced (which will also facilitate transit). Sidewalks should be designed for universal access and installed along all streets.

Page 29 of 194 of the Clearlake General Plan 2040 states:

Among the considerations in the design of new neighborhoods and infill of existing neighborhoods is the following:

• Their location relative to existing development. This relates to the continuity of the street and pedestrian system as a means for achieving a walkable community, as well as the character transition and the means of compatibility within and between developments.

Page 66 of 194 of the Clearlake General Plan 2040 states:

"Complete streets" are those designed to support safe, attractive, and comfortable access and travel for all users, whether in motor vehicles, on foot, on bicycle, or using the public transit. The City will require complete streets in all new neighborhoods and will improve existing streets to be more complete in accommodating bicycle and pedestrian movements, as funding is available. Improvements required for complete streets depend on the type of street. While all streets will be required to have sidewalks for pedestrians, the required bicycle improvements will vary.

The following General Plan policies also support the incorporation of non-motorized facilities into the scope of the project:

Policy LU 1.1.4
Walkability and good connectivity should be promoted through continuity of the street and pedestrian system, together with a compact community form.

Program CI 1.1.1.1
In accordance with the Complete Streets Act, new development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

Policy CI 4.1.1
The City shall require sidewalks in new developments.

Program CI 4.1.1.1
New development shall construct and dedicate and/or contribute to a connected

bicycle/pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

We request that the City consider requiring the addition of new sidewalks and bicycle lanes to the project frontage along Old Highway 53 as a condition of project approval. The improvements would provide non-motorized access from the subdivision to transit stops and commercial retail districts in the City, including the shopping center approximately 1.5 miles away, on Olympic Drive. Adding non-motorized facilities as a condition of project approval may help to mitigate for any VMT impacts.

Please contact me with questions or for further assistance with the comments provided at (707) 684-6879 or by email at: <jesse.robertson@dot.ca.gov>.

Sincerely,

Jesse Robertson
Transportation Planning
Caltrans District 1

From:	Roberta Lyons
To:	Alan Flora; Mark Roberts
Cc:	Donna Mackiewicz; Deb Sally
Subject:	Comments on prosed subdivision
Date:	Thursday, January 12, 2023 12:31:40 PM
Attachments:	Comments re Clearlake Subdivision proposal.docx

Hi Mark,
I've attached my comments on the proposed subdivision on Old Highway 53. I've also attached an image of the flowing intermittent creek that flows into Burns Valley Creek that I took a couple of days ago. Then, I've attached images from 1983 when Burns Valley Creek flooded. The pictures are near where Austin's resort once stood along with some other buildings that have since been torn down. They are across the street (sort of) from City Hall. I was surprised Alan when you said there weren't any records from the floods in Clearlake. I have numerous images of that 1983 flood as we owned the Clearlake Observer at that time and covered the flood. It was really something. I don't have any of the intermittent creek but I would wager it was over-flowing it's banks. As you will see, any areas near the smaller creeks were inundated. Molesworth flooded many parts of the area between Olympic and Austin. I know this was a long time ago, but I think as the recent rains have indicated - we don't know what we are going to be facing. I'm copying Deb on this as she is commenting for the Sierra Club, and Donna Mackiewicz who is my co-conservation chair for Redbud Audubon.

Thank you!
Roberta

Comments re: Subdivision Map Application, SD 2022-01 and Environmental Analysis, CEQA IS 2022-08

Submitted by:
Redbud Audubon Society
PO Box 5780
Clearlake, CA 95457
To Mark Roberts, Planner City of Clearlake

Dear Mr. Roberts,
As Conservation co-chair for the Redbud Audubon Society of Lake County, I'm commenting on our concerns regarding the subdivision proposed near Old Highway 53 in the City of Clearlake.

On a whole we do not oppose the entire development but thoughtful changes to the proposed plan could be made. In looking at the City of Clearlake's General Plan objectives, it appears this project does not comply with the objectives. This project is not preserving wildlife habitat or open space nor does it result in connection corridors for wildlife (Objective CO 4.2).

Nor does it comply with Objective CO 4.3 of maintaining diverse and natural landscape to preserve the visual integrity of the landscape and provide habitat conditions for native vegetation and plants (paraphrased.)

What is the solution? A redesign of the subdivision following a Conservation Design objective. This would include excluding or reducing lots along the "intermittent," waterway; clustering the houses in cul de sac type situations, reducing lot size, and providing a significant pathway through the development and not allowing impassable fencing for wildlife.

The intermittent creek flowing along the edge of the property that is being suggested to be included in individual lots is a bad idea. I've enclosed an image of the creek running during our current time of heavy rains, but certainly not the heaviest rains we will possibly be seeing. As the Sierra Club comments point out, septic and leach field contamination is a real probability if houses are placed too close to this waterway. This waterway could be designated as a park for the development. It could be restored with more sloped banks and native wetland vegetation that would reduce erosion and danger of flooding into the adjacent houses.

The treed area could also be seen as a wildlife/park area with some removal for fire safety but not clear-cutting to make way for 2 or 3 story mega-houses. I would think developers would be open to the idea of an attractive, nature friendly, community that could be marketed as such.

I realize these are broad comments that need to be narrowed down to more specifics, but I have been faced with time constraints (as everyone, I know) and wanted to deliver my initial comments before tomorrow's deadline.

Thank you for considering my concerns
Roberta Lyons, Redbud Audubon Society Conservation Co-Chair


HIGHLANDS
REALTY
707-994-8291

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
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SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

January 13, 2023 File No.: 22-0963

Mark Roberts, Senior Planner
City of Clearlake
14050 Olympic Drive
Clearlake, California 95422

re: SD 2022-01 and IS 2022-08 / APN: 010-048-08 at 6653 and 2890 Old Highway 53 / DANCO Communities

Dear Mark Roberts,

Records at this office were reviewed to determine if this project could adversely affect cultural resources. **Please note that use of the term cultural resources includes both archaeological sites and historical buildings and/or structures. The review for possible historic-era building/structures, however, was limited to references currently in our office and should not be considered comprehensive.**

Project Description:

The applicant is requesting approval of a Subdivision Map with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Subdivision Lot. The lots would range in size from 1.25 acres to 2.75 Acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53.

Previous Studies:

XX Study #13515 (Flaherty 1992) and Study #23490 (Flaherty 1999), which cover the proposed project area, identified no cultural resources within the proposed project area *(see recommendation below)*.

Archaeological and Native American Resources Recommendations:

XX The proposed project area has the possibility of containing unrecorded archaeological sites. Due to the passage of time since the previous surveys and the changes in archaeological theory and method since that time, we recommend a qualified archaeologist conduct further archival and field study for the entire project area to identify any unrecorded archaeological resources, including those that may show no signs or indicators on the surface.

XX We recommend that the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at (916) 373-3710.

___ The proposed project area has a low possibility of containing unrecorded archaeological site(s). Therefore, no further study for archaeological resources is recommended.

Built Environment Recommendations:

XX Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that prior to commencement of project activities, a qualified professional familiar with the architecture and history of Lake County conduct a formal CEQA evaluation.

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

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

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at http://www.chrisinfo.org.

If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely,

Bryan Much
Coordinator

6 December 2023

Mark Roberts
City of Clearlake
14050 Olympic Drive
Clearlake, CA 95422
mroberts@clearlake.ca.us

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, DANCO SUBDIVISION DEVELOPMENT PROJECT, SCH#2023110007, LAKE COUNTY

Pursuant to the State Clearinghouse's 1 November 2023 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Mitigated Negative Declaration* for the Danco Subdivision Development Project, located in Lake County.

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

I. Regulatory Setting

Basin Plan

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

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by

the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations
All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

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

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

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

II. Permitting Requirements

Construction Storm Water General Permit
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

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

Clean Water Act Section 401 Permit – Water Quality Certification

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

Waste Discharge Requirements – Discharges to Waters of the State

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

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

https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

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

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

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

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

SIERRA CLUB
Lake Group

Attn: Mark Roberts, City of Clearlake Senior Planner
Re: Subdivision Map Application, SD 2022-01

Date: December 5, 2023

Dear Planning Department and Commission Members,

I am writing on behalf of the Sierra Club Lake Group today to express concerns about some of the aspects of the Danco Subdivision Development Project located at 2890 Old Highway 53 (APN 010-048-08). This project includes a waterway, a blue oak forest woodland and a meadow area that require special consideration as part of the natural beauty experienced by people entering and leaving the City of Clearlake and for the ecosystems they support. There are also a few species of plants and animals that are of special concern that may inhabit in the project area. There are also concerns about how many of the lots will actually be built out. Having another paper subdivision is highly undesirable especially along a scenic corridor.

The City's General Plan states that among many goals are those of maintaining its natural beauty. Putting a housing development in this location does not seem consistent with these goals as this is a scenic area that is seen by people entering and leaving the city. The following is just a sampling of what is in the document.

Goal OS-6: A city that preserves and celebrates its environmental resources.

Objective OS 6.1: Preserve and maintain forested areas, fields, stream corridors, wetlands, and other open spaces that are within and surround the City.

Policy OS 6.1.1: The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces.

Goal CO-4: A diverse landscape where plant and wildlife habitats, open space, and natural resources are preserved and protected.

Objective CO 4.1: Protect all state and federally listed endangered and threatened species.

Objective CO 4.2: Prevent conversion of wildlife habitat into other land uses.

This property is a buffer zone between the developed part of the city and the watershed ecosystem that lies to the east of Highway 53.

The City also has an Oak Tree Ordinance, Municipal Code 18-40, which states that any Blue, Valley, Interior Live, California Black, Canyon Live, and Oregon White Oak tree that is more than six inches in diameter at breast height cannot be cut down without a permit. There is almost 11.5 acres of blue oak woodland that have many trees fitting this description in this project boundary. Although this is provided for in the project plan, there are challenges to providing mitigation for the removal of native trees within the City. I discovered this when offered the opportunity to help figure out a way to utilize the fees collected from the low income housing

development that is nearing completion on Old Highway 53. Much of those fees have yet to be used for mitigation. Apparently, there are no city owned places where the planting of oak trees is desired.

There needs to be a plan in mind for mitigation of removal of the specified trees, which may include some planting of oak trees in other areas of the project. However, it will ultimately be up to the individuals who purchase the homes to maintain any of these trees. If trees are to be planted elsewhere or the fees used to improve the health and safety of other oak trees already in the city, a plan must be made and executed in a timely fashion and follow-up care provided.

Another section of the General Plan states the following goal:

Goal CO-1: Clean and safe lake conditions for wildlife, swimming, fishing, and boating.
Objective CO 1.1: Protect the quality of surface and groundwater resources.
Objective CO 1.2: Prevent sediment erosion and nutrient loading of Clear Lake.

The waterway in question is labelled as an intermittent drainage. This tributary to Burns Valley Creek sends water and its contents to Clear Lake. Although the BRA did not conduct a formal aquatic resource delineation, this waterway "is likely considered a water of the U.S. and water of the State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA. The intermittent drainage also falls under the jurisdiction of Section 1600 of the California Fish and GameCode". If these waters, in combination with others in the area, significantly affect the chemical, physical, or biological integrity of waters that have commercial value, such as Clear Lake, they should be protected in order to protect the resource.

Although the BRA requires setbacks from this waterway that should protect it during the development phase, there is no way for the City to monitor what happens once the property is sold to a homeowner. Soil disturbance could increase erosion and therefore sediment and use of chemicals as herbicides, pesticides, and fertilizers would likely increase the quantities of these substances entering Clear Lake and affecting the water quality, especially where Burns Valley Creek enters the lake at Austin Park. Because of this risk, altering the lot lines so that the waterway is not included in any of the lots is in the best interest of the public and is strongly urged by our group.

As we proceed into a future that is likely to have climate disruptions that put species that are already threatened by loss of habitat into even more peril, it behooves us to do what we can to preserve those habitats. Even small disruptions, when added together, can have significant impact on stressed species. Adhering to the recommendations of the Biologic Resource Assessment (BRA) by providing appropriate surveys and avoidance and mitigation will minimize the impact of the development.

The species of special concern are listed in the Biologic Assessment Report and include Bent-flower Fiddleneck, Western Bumble Bee, Monarch Butterfly, and Cooper's Hawk. The BRA states that a certified botanist should survey the area for plants during their flowering season. It

also states that the project manager should provide for marking and avoidance of identified plants, including milkweed that serves as the larval Monarch Butterfly feed source, or provide

mitigation for disturbance. The same is true for assessing whether birds and bats are nesting in the forested areas. The BRA's instructions suggest ground disturbance only occur from September 1st to January 31st without surveys being conducted 14 days before disturbance or any lapse in construction activity. The surveys are to extend 500 feet from the project perimeter to account for any impact on local raptor populations. If this project goes forward, it is important that the City assures that these surveys are completed and that the appropriate avoidance and/or mitigation measures are taken seriously to honor the existing General Plan goals and objectives. These surveys and actions should be made public in a timely manner.

Paper subdivisions are highly undesirable in general and unacceptable in this location. The City needs to require that Danco commits to building out at least 50% of the lots before approving this project and granting the building permits. Cutting down trees and laying asphalt in this area will make for an unsightly entrance to the city that will provide no benefits if the houses are not built and inhabited.

Management of runoff during heavy rain events could prove to be a problem in this area as standing water is common along the western side of the project area during such events. Drainage in the low areas and along Old Highway 53 will need to be improved substantially to deal with this issue.

There may be benefit to the community in providing an area of middle income housing in this location. However, it should not be at the expense of following our General Plan Goals and maintaining a healthy watershed. If you decide to approve this project, please assure that it has the minimum impact possible by changing the lot lines in the northern area to remove threat to the waterway, upholding the Oak Tree Ordinance, and by following the recommendations in the Biologic Resource Assessment (BRA).

Respectfully,
Deb Sally
Chair, Sierra Club Lake Group

VIA E-MAIL AND U.S. MAIL

Mark Roberts, City Planner
City of Clearlake
14050 Olympic Drive
Clearlake, CA 95422
E-Mail: mroberts@clearlake.ca.us

December 5, 2023

Re: Danco Subdivision Project - State Clearing House No. 2023110007
(HP-20221227-01)

Dear Mr. Roberts:

The Koi Nation of Northern California ("Koi Nation") thanks the City of Clearlake ("City") for the opportunity to provide comments on the City's Notice of Intent ("NOI") to Adopt a Mitigated Negative Declaration ("MND") for the proposed Danco Subdivision Development Project ("Project"). The Project is within the aboriginal territory of the Koi Nation, and the Koi Nation has a cultural interest and authority in the proposed Project area. The City's Environmental Guidelines also acknowledge the Koi Nation's affiliation with the land now within the City. Similarly, the Koi Nation and the City entered into a Memorandum of Agreement in 2014 acknowledging, in part, "the City of Clearlake ("City") recognizes that the lands in and around the City are culturally significant to the [Koi Nation]." Thus, the City has repeatedly acknowledged the Koi Nation's ancestral ties to the subject lands.

The Koi Nation offers these comments for the City's consideration, and encourages the City to proceed with a more rigorous environmental review process than it has conducted to date rather than adopt the current draft MND. As explained in this letter, the proposed MND is inadequate and does not adequately consider and mitigate the adverse impacts of the Project on the environment. Substantial evidence referenced in this letter and provided to the City by tribal cultural resources expert Robert Geary, the Koi Nation's Tribal Historic Preservation Officer ("THPO"), during consultation between the City and Koi Nation demonstrates that a fair argument exists that the Project will have substantial impacts on the environment by impacting tribal cultural resources, and the mitigation measures proposed in the draft MND fail to mitigate these impacts. Therefore, the City should prepare an Environmental Impact Report (EIR) including a meaningful consideration of project alternatives and adoption of feasible mitigation measures to reduce the impacts of the Project on the environment. (*See Protect Niles v. City of Freemont* (2016) Cal.App.5th 1129 [holding that an EIR is required rather than a MND when substantial evidence supports a fair argument that there will be adverse environmental impacts from a project.].) At a minimum, the City must conduct further environmental analysis and continue tribal consultation

to develop a revised MND with additional analysis and significantly more robust mitigation measures to avoid, preserve in place, or mitigate impacts to tribal cultural resources.

APPLICABLE CEQA STANDARDS

Under the California Environmental Quality Act ("CEQA"), all lead agencies must prepare an EIR for projects "which may have a significant effect on the environment." (Pub. Resources Code § 21151(a).) In *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 392, the California Supreme Court explained the role an EIR plays in the CEQA process, and instructed that: "The [EIR] is the primary means of achieving the Legislature's considered declaration that it is the policy of this state to 'take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.' [Citation.] The EIR is therefore the 'heart of CEQA.' [Citation.]" (*See also Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016) 1 Cal.5th 937, 944 ["At the 'heart of CEQA' [citation] is the requirement that public agencies prepare an EIR for any 'project' that 'may have a significant effect on the environment.' [Citation.]"].) "When the informational requirements of CEQA are not complied with, an agency has failed to proceed in 'a manner required by law' and has therefore abused its discretion." (*Save our Peninsula Committee v. Monterey County Board of Supervisor* (2001) 87 Cal.App.4th 99, 118.)

CEQA "creates a low threshold requirement for preparation of an EIR and reflects a preference for resolving doubts in favor of environmental review when the question is whether any such review is warranted." (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1316-1317.) Accordingly, "'if a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect.'" (*Berkeley Hillside Preservation v. City of Berkeley* (2015) 60 Cal.4th 1086, 1111.) "The fair argument standard thus creates a low threshold for requiring an EIR, reflecting the legislative preference for resolving doubts in favor of environmental review. [Citations.]" (*Covina Residents for Responsible Development v. City of Covina* (2018) 21 Cal.App.5th 712, 723.) To the extent that there is a conflict in the evidence or a conflict amongst expert opinions, the City should not "weigh" the conflicting evidence to determine whether an EIR should be prepared. It should simply prepare an EIR. It is the function of an EIR, not an MND, to resolve conflicting claims as to the environmental effects of a project, and the City is not permitted to choose among differing expert analysis and opinion if it decides to proceed with an MND rather than an EIR. (*See Citizens for Responsible & Open Government v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 1340.)

THE MND FAILS TO FULLY ANALYZE TRIBAL CULTURAL RESOURCES

Based on the proposed MND, it is apparent that the information developed by and relied upon by the City for purposes of analyzing tribal cultural resources does not satisfy the distinct and separate requirements applicable to tribal cultural resource analysis under CEQA. Archaeological information may inform a tribal cultural resources assessment, but it is no substitute for the expert input from the California Native American Tribal government which is traditionally and culturally affiliated with the area, in this case the Koi Nation.

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The City's obligation to consider tribal expertise is specifically acknowledged by the Public Resources Code. According to Public Resources Code section 21080.3.1(a), "[t]he Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources." The Legislature adopted this section as part of AB 52 in which it acknowledged: "tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources" and "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." (AB 52, § 1(b)(4), (9) & 14).)

According to the Governor's Office of Planning and Research's Technical Advisory for AB 52 (2014 Stats, ch. 532), examples of types of substantial evidence of tribal cultural resources include:

> elder testimony, oral history, tribal government archival information, testimony of a qualified archaeologist certified by the relevant tribe, testimony of an expert certified by a tribal government, official tribal government declarations or resolutions, formal statements from a certified Tribal Historic Preservation Officer, or historical/anthropological records.

(Governor's Office of Planning and Research, Technical Advisory, AB 52 and Tribal Cultural Resources, AB 52, at 5, a copy of which is attached hereto at Exhibit A ("Technical Advisory").) The Technical Advisory also cites the federal Native American Grave Protection and Repatriation Act which recognizes relevant evidence including "geographical, kinship, biological, archeological, anthropological, linguistic, folklore, oral tradition, historical, or other relevant information or expert opinion. (*Id.* at 5-6, citing 43 C.F.R. § 10.14(d).) Similarly, federal courts have referenced meeting minutes, anthropological reports, and tribal elder or tribal declarations as relevant evidence. (*See Pueblo of Sandia v. United States* (10th Cir. 1995) 50 F.3d 856.) Thus, traditionally and culturally associated tribes can submit expert information regarding the identity of and impact on tribal cultural resources through a wide range of sources for purposes of supporting the need for an EIR.

The Koi Nation has presented such information to the City, but it appears that the City relied solely on its archaeologist, Dr. Greg White, in determining the presence of tribal cultural resources, the extent of boundaries of tribal cultural resources and impacts thereto. However, Dr. White has previously admitted that he is not the expert when it comes to determining tribal cultural resource impacts. As Dr. White publicly acknowledged during his testimony at the City Council's June 7, 2023, special meeting on a related project:

> As an archeologist I am not in a position to change CEQA or its effect on my conclusions but I also don't speak to the issue of tribal cultural resources which is the province of the Tribe under AB 52. And so I wanted to make that distinction …that I as an archeologist I speak to the archeological issues and as THPO Robert [Geary] speaks to the Tribal issues…AB 52 gives the Tribe agency in defining the nature of tribal cultural resources and I am not in a position to define what those tribal cultural resources are …

Thus, Dr. White, the archaeologist the City relied upon in its MND, admits that tribal experts, like Koi Nation THPO Geary, have the necessary expertise to identify tribal cultural resources and

culturally appropriate mitigation measures for tribal cultural resources. Dr. White acknowledged THPO Geary as an expert in tribal cultural resources. Mr. Geary's professional qualifications are attached to his letter at Exhibit B for your reference.

Tribal expertise presented to the City by Mr. Geary and others confirms the area within and defined by the proposed subdivision both contains distinct tribal cultural resources and is a geographically defined tribal cultural landscape of which those tribal cultural resources are a contributing feature. Through AB 52, the Legislature expressly defined tribal cultural resources and a tribal cultural landscape. As defined in Public Resources Code section 21074:

> (a) "Tribal cultural resources" are either of the following:
>
> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources. (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
>
> (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

Public Resources Code section 5024.1(c), as referenced by Section 21074, lists four distinct alternative criteria for listing historical resources as follows:

> (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
>
> (2) Is associated with the lives of persons important in our past.
>
> (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
>
> (4) Has yielded, or may be likely to yield, information important in prehistory or history.

Tribal cultural resources and the type of tribal cultural resources called a tribal cultural landscape can include Native American human remains, grave associated artifacts, traditional cultural resources, cultural sites, village campsites, gathering areas for food, fiber, and materials to make regalia, baskets, ceremonial items, and other tribal cultural resources, tool manufacturing areas, burial grounds, and religious or spiritual sites. It is also noteworthy that a tribal cultural landscape

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is not identical to archaeological resources or boundaries. Unfortunately, the City through its draft MND, failed to take into account the tribal knowledge and expertise that were provided to it during the consultation process in its determination of the extent of the tribal cultural resources and boundaries present on the Project site.

The Koi Nation's concerns with Dr. White's analysis and its identification of applicable tribal cultural resources and a tribal cultural landscape were explained in detail in Mr. Geary's June 27, 2023, letter to City Planner Mark Roberts. The Koi Nation's letter is incorporated herein by reference, and is part of the administrative record for this Project, but is not attached due to the confidential nature of material it contains within the letter itself and within the letter's attachments. The City should have the original letter within its files, and the Koi Nation can provide an additional confidential copy to the City Council and key staff working on this Project upon request. In summary, the Koi Nation explained to the City that:

1. The findings from two prior surveys dated February 4, 1992, and September 17, 1999, survey report # S-013515 and S-023490, by Jay Flaherty of Archaeological Services, Inc., must be more fully addressed.

2. The discovery of site BVS-CR-02 meets the criteria to be registered as a significant site on the California Register of Historical Resources, and its discovery evidences the likelihood that more tribal cultural resources will be discovered during ground disturbing activities. The MND fails as an informational CEQA document because it must note the significance of site BVS-CR-02 and examine and address the likelihood of additional impacts on tribal cultural resources during construction.

3. Substantial evidence submitted to the City during consultation shows that tribal cultural resources are not limited only to the areas on and immediately adjacent to BVS-CR-02, and that additional tribal cultural resources locations were found outside of the limited designation of the initial site's boundaries. Such information further indicates additional tribal cultural resources will likely be discovered with any ground disturbing activities throughout the Project site. The MND must examine and address this likelihood.

4. The redesign of the Project for protection and preservation of tribal cultural resources and additional mitigation measures that was agreed on in principle by the Koi Nation and Project developer Danco is evidence that Tribes, project applicants, and lead agencies can work together to complete a project and still protect tribal cultural resources when willing. The City should support this plan and incorporate the agreed upon applicable measures in the Project's environmental document. That plan fully addresses the Koi Nation's concerns. Adoption of that plan by the City Council would allow the Project to move forward without further delay.

5. Tribal cultural knowledge and expertise were shared in government-to-government consultation with the City on April 6, 2023. The tribal consultation notes must be incorporated into the Project record, and the issues raised by the Koi

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Nation addressed during that consultation must be shared with the City Council and incorporated into the Project's governing environmental documents.

6. The Koi Nation submitted substantial evidence of a tribal cultural landscape, acorn tracts, Tribal history, traditional and on-going land use of the Project area as part of cultural practices, and the Project's presence within lineal Koi Nation lands including information within the Gifford 1923 archaeological report that explains the tribal cultural landscape acorn tracts and a map provided by the Koi Nation. This information must be incorporated into the Project record, and the issues raised by the Koi Nation addressed and incorporated into the Project's governing environmental documents.

7. An analysis of the importance of protection and preservation to the Koi Nation is missing. AB 52 requires that the City consider the significance of the tribal cultural resources to the Tribe. This is a statutory requirement. The City cannot skip it.

8. It is important to have a reburial area identified in advance of Project construction that will not entail future disturbances in that location, but the MND fails to include necessary protections for the reburial area including a cultural easement, and detailed capping instructions. Mr. Geary can provide examples of these requirements to the City upon request. The proposed tribal cultural resources treatment plan provided by the Koi Nation to the City includes important tribal cultural resources protection measures. It is incorporated herein by reference because it contains sensitive information. An additional copy can be provided to the City upon request.

9. The City must agree not to remove cultural soils from the Project site and then redeposit such culturally sensitive soils on another location since redepositing cultural soils from one project to another creates a legacy issue which is culturally harmful to the Koi Nation, creates an ongoing cumulative impact to tribal cultural resources and significant cultural harm, and which will be very expensive for the City to address. The less harmful and less expensive approach is for the City to agree not to remove cultural soils from any project site and to keep them on site.

The draft MND does not address these concerns about impacts to tribal cultural resources. These concerns were previously shared with the City during consultation. It is imperative that the City prepare a supplemental archaeological study for the entire Project site to address the sensitivity of the area for tribal cultural resources and the presence of culturally sensitive materials that may be impacted by construction of the Project. The supplemental study must also address eligibility for the California Historic Register under each specific criteria of Public Resources Code section 5024.1 since such analysis is entirely lacking from Dr. White's report. The supplement must also acknowledge tribal cultural landscape boundaries based upon tribal expertise and not simply archaeological based criteria. The supplemental report should be conducted with Mr. Geary and include his expertise. The Koi Nation recommends the City retain archeologists Sitha Redy or Lisa Westwood to complete the supplemental report.

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The failure to analyze the Project's impacts on tribal cultural resources and the tribal cultural landscape violates CEQA's mandate to analyze all the Project's impacts. (See CEQA Guidelines §§ 15064(d), 15065(a); Pub. Resources Code § 21065; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109.) Without a doubt, the Koi Nation has raised a fair argument that the Project site constitutes a tribal cultural resources landscape and contains specific tribal cultural resources that will be impacted by the Project. Such a fair argument necessitates preparation of an EIR or at a minimum, it necessitates substantial revisions to and supplemental studies in support of the draft MND. (*See Berkeley Hillside Preservation v. City of Berkeley*, *supra*, 60 Cal.4th at 1111.)

THE MND FAILS TO ANALYZE AND PROVIDE APPROPRIATE MITIGATION MEASURES

While identification of tribal cultural resources and establishing appropriate tribal landscape boundaries are crucial issues, a concurrent vital concern is analyzing and establishing culturally appropriate feasible mitigation measures to address the impacts to tribal cultural resources. According to Public Resources Code section 21082.3(b),

> If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
>
> (1) Whether the proposed project has a significant impact on an identified tribal cultural resource.
>
> (2) Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.

Unfortunately, upon review, the proposed Project's mitigation measures do not fully address the concerns of the Koi Nation regarding adequate identification, avoidance, preservation in place and mitigation of impacts to tribal cultural resources. Because of terrible and traumatic past experiences with projects undertaken by the City, the Koi Nation now has to forcefully advocate for having tribal cultural resources treatment protocols and a tribal monitoring agreement in place for projects on sensitive sites such as this one, to avoid a repeat of the prior actions which caused, and continue to cause, significant negative impacts to tribal cultural resources and significant cultural harm and trauma to the members of the Koi Nation. Thus, the City needs to continue the AB 52 consultation process and include the Koi Nation's recommendations to fully address tribal cultural resources including: (1) inclusion of a Koi Nation Tribal Monitor for all ground disturbance activities based upon a signed monitoring agreement; and (2) incorporation of the Tribe's Treatment Protocols into Project Mitigation Measures.

Tribal monitoring as a mitigation measure is important since the construction personnel are not trained in how to identify or handle tribal cultural resources uncovered during ground disturbing activities. These construction workers are skilled at, and must focus upon, safely operating equipment and completing excavation based upon the necessary Project specifications. The Koi Nation does advocate for and appreciates provisions providing for on-site cultural sensitivity training of such workers as a necessary and appropriate part of the monitoring process. However,

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such training is only for an hour, and is a part of the entire process. The brief hour long cultural sensitivity training on-site typically offered can only impart basic information regarding cultural sensitivity so that workers in this tribal cultural resources landscape will be respectful. The tribal monitors provided by the Koi Nation undergo extensive training in both identifying and handling of tribal cultural resources. The two roles are distinct, require different expertise, and are not interchangeable. Given the tribal cultural resources discovered during ground disturbing activities at the identified site within the Project, it is highly likely that additional tribal cultural resources will be discovered elsewhere on the site once locations not yet fully analyzed are disturbed. It is crucial to have fully trained tribal monitoring personnel on-site to identify and determine the proper handling of such items. Further, the cost of such monitoring to the City should be nominal since the developer had indicated it will cover such costs and in any event the Koi Nation has agreed to provide such monitoring at a discounted rate without administrative management fees based upon the importance to the Koi Nation of protecting its tribal cultural resources and in consideration of this Project's goal to provide more affordable housing to the community.

Any ground disturbing activity on site must also be subject to an executed tribal cultural resources protocol governing the handling of any tribal cultural resources. The Koi Nation has presented proposed protocol provisions to the City, and can provide other examples if needed during renewed consultation. For example, the treatment protocol would require that the City not remove cultural soils from the Project site, which is a standard practice throughout the state but which the City ignores in the proposed draft MND measures. It will also provide specificity as to reburial procedures and appropriate specified locations which are measures that the draft MND lacks. It will also specifically provide for the Koi Nation's involvement in decisions related to handling of its tribal cultural resources given that the Project site is within the cultural territory of the Koi Nation. It is imperative that such measures be addressed and agreed upon in advance given the likelihood of further tribal cultural resources once ground disturbing activities commence. Given the likelihood of discovery, these are not measures that can simply be deferred to another day under CEQA.

Any development in culturally sensitive areas, such as the Project site, must be done in a way that is respectful of tribal cultural resources and seeks to avoid, protect, preserve in place, or mitigate impacts to those resources as required by CEQA and AB 52. The Koi Nation is willing to consult and collaborate with the City to implement these legal requirements. The tribal cultural heritage of Lake County is rich and diverse. Impacting and damaging these important tribal cultural resources impacts the Koi Nation's cultural practices and its religious practices, and causing great and ongoing trauma, as well as the cultural, archaeological, and historic heritage of the Koi Nation and California. Such impacts and damages can and must be avoided and mitigated beyond the cursory treatment provided by the pending draft MND.

THE MND MUST ALSO ANALYZE CUMULATIVE IMPACTS ON TRIBAL CULTURAL RESOURCES

In enacting AB 52, the Legislature acknowledged that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment," and consequently it sought to "[r]ecognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to [CEQA]." (AB 52, § 1(b).) The substantial change to

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tribal cultural resources and need for tribal participation in the environmental review process for projects involving artifacts, remains and ancestral lands is significant as to one project and this significance is amplified when numerous projects within the relatively small municipal boundaries of the City involve the same or similar tribal cultural resources impacts. As courts recognize, "[c]umulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact." (*Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114, disapproved on other grounds.) Impacts are cumulatively considerable if the effects of a project are significant when viewed in connection with the effect of past projects, other current projects and probable future projects. (Pub. Resources Code § 21083(b).) An EIR is required if a Project will involve cumulatively significant impacts.

The City is located within the aboriginal territory of the Koi Nation, and it contains numerous documented and undocumented sites used and inhabited by Ancestors of Tribal members. Some of these sites are the oldest in California. Lake County in general, and the City of Clearlake area in particular, are incredibly archaeologically, historically, culturally, and tribal culturally significant. Many of these sites have been, are currently, or will be subject to City projects including the present Project. These projects have resulted in, and will likely continue to result in, the discovery of Native American human remains and a significant number of artifacts associated with the Tribe such as occurred at the recent Austin Park Splash Pad project and will occur at the Burns Valley Sports Complex and 18th Avenue Extension and Airport Hotel Projects. The City's pattern and practice of engaging in development projects without meaningful good faith tribal consultation, without adequate identification and analysis of tribal cultural resources, without acknowledgment and analysis of tribal expertise and without adoption of adequate mitigation measures is creating a cumulative impact to tribal cultural resources which violates CEQA, and which is unethical and disrespectful to the Ancestors of people who are part of the Clearlake community. Thus, the City must fully examine such cumulatively considerable cultural impacts within the context of an EIR for this Project including, but not limited to, impacts resulting from the Mullin Storm Drain Project involving the discovery and inappropriate relocation of Native American Human Remains, the 18th Avenue Extension and Airport Hotel Project involving potential impacts to tribal cultural resources, the Burns Valley Sports Complex Project involving unmitigated impacts to known Ancestral village sites, and the Austin Park Splash Pad and Skate Park Projects. The Austin Park Splash Pad Project involved the discovery of multiple tribal cultural resources during the first few days of construction, even though the City's archeologist, Dr. White, said that there would be no impacts to tribal cultural resources. The draft MND does not address any of these other projects when discussing cumulative impacts, and merely includes a brief summary conclusion that any such impacts of the subject project will not be significant. This fails to provide the meaningful analysis of cumulative impacts required by CEQA.

THE CITY MUST ENGAGE IN CONTINUED CONSULTATION WITH THE KOI NATION

In enacting AB 52, the Legislature acknowledged the importance of on-going consultation between a lead agency and impacted Tribe regarding the identification and preservation of tribal cultural

resources. CEQA and AB 52 require tribal consultation to identify tribal cultural resources, inform the choice of environmental document, and help develop culturally appropriate mitigation measures. (Pub. Resources Code § 21080.3.1(b).) For purposes of defining the required consultation, section 21080.3.1(b) references Government Code section 65352.4 which explains:

> "[C]onsultation" means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

The leading statewide guidance on AB 52 instructs, "consultation can continue throughout the CEQA process." (*See* Technical Advisory, at 6, fn. 6.) The City appears to acknowledge the importance of consultation by citing to its Tribal Consultation Interim Standard Operating Procedures Manual within the MND. These, however, are interim guidelines, and the final status of such guidelines is unknown. The Koi Nation has continually expressed its willingness to work with the City to finalize these guidelines, but the City has failed to respond.

The Koi Nation acknowledges and appreciates the City's initial consultation efforts for the Project. Unfortunately, the City prematurely declared the consultation complete without adequately considering the Koi Nation's expertise and without working in good faith with the Koi Nation to develop appropriate mitigation measures. As noted, the Legislature intended consultation to be a process of seeking, discussing, and considering carefully the views of others, and such consultation should continue throughout the CEQA process. As also noted, much work remains to be done by the City in supplementing its analysis, defining appropriate tribal cultural landscape boundaries based upon tribal expertise and in developing appropriate mitigation measures. Continued good faith consultation with the Koi Nation which holds ancestral ties to the Project site and holds acknowledged expertise as to impacted tribal cultural resources and the surrounding tribal cultural landscape is key to a successful CEQA process. Thus, it is imperative that the City rescind its premature notice of cessation of consultation.

CONCLUSION

Although the present draft MND is woefully inadequate, the City can avoid the mistake that other public entities have made by taking these public comments from the Koi Nation seriously, reaching out to tribal governments, including the Koi Nation, again for information, and properly analyzing the cultural and archaeological sites as tribal cultural resources and developing necessary and feasible mitigation measure to address Project impacts to tribal cultural resources and the tribal cultural landscape. Such analysis must be based upon and consider tribal expertise and not simply rely upon an archaeological assessment. Fully utilizing the government-to-government consultation process with the Koi Nation which is traditionally and culturally affiliated with the area will be an important step in allowing the City to obtain relevant information about the impacts of the Project on tribal cultural resources and allow the City to determine culturally appropriate mitigation measures for those impacts. The proposed draft MND is inappropriate without further

analysis. (*See Save the Agoura Cornell Knoll v. City of Agoura Hills* (2020) 46 Cal.App.5th 665 ("*Agoura Hills*").

In *Agoura Hills*, the City of Agoura Hills failed to identify and analyze a prehistoric archaeological site as a tribal cultural resource, despite being notified by public comments that fairly apprised the Agoura Hills of the concern that it had failed to adequately address project alternatives or mitigation measures that could preserve tribal cultural resources. As a result, the City was sued, and it lost. After considerable expense and delay of the project, the City was required by the Court of Appeal to prepare an EIR. The City can and must avoid a similar outcome.

The Koi Nation looks forward to consulting and working with the City to address the draft MND's serious deficiencies as noted in this letter, in order to help make sure the Project is protective of the Koi Nation, its Ancestors and its tribal cultural resources and tribal cultural landscape. Please contact the Koi Nation's Tribal Historic Preservation Officer for further information or if you have questions:

Robert Geary, Tribal Historic Preservation Officer
Office: (707) 900-6931
Email: Rgeary@hpultribe-msn.gov.

Please refer to HP-20221227-01 in any correspondence concerning this Project. Please also provide Mr. Geary with notice of the circulation of any supplemental, revised or amended MND or EIR, and notice of any Planning Commission or City Council meetings or workshops concerning the Project and its environmental documents. Finally, please include this letter including its attachments and incorporated documents within the record for this Project.

Thank you for your consideration of these matters.

Respectfully,

Chairman Darin Beltran
Koi Nation of Northern California

Attachments

cc: Koi Nation Tribal Council
Robert Geary, Koi Nation THPO
Holly Roberson, Tribal Cultural Resources Counsel
City of Clearlake City Council (c/o Melisa Swanson, City Clerk)
City of Clearlake City Manager

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Proposed Old Highway 53 subdivision development

Submitted by David Goolsbee, 15618 Brunetto Ln., Clearlake

Following are concerns that I believe need to be addressed when considering approval of this project.

Old 53: The bridge on old 53 at the north end of this site over the wet weather stream is already inadequate, has been the site of a number of accidents, and will need to be upgraded to handle the higher traffic created by this subdivision. The bridge need to be upgraded regardless. The site plan indicates that on street parking, curb and gutter and sidewalks will be added. This suggests that the power lines will need to be moved and/or placed underground. This stretch of road has become a place for cars and motorcycles to exceed safe speeds, noise, and reckless driving. (squealing tires, donuts, etc.) The road may not be adequate to handle the increased traffic as a primary access into Burns Valley. Measures need to be considered to discourage unsafe driving.

Site drainage: Roughly 4 acres of impermeable surface will be created if this property is fully developed. This will create faster runoff into the wet weather stream and ultimately increased potential for flooding in Burns Valley Creek and even in the tributary stream on this property unless mitigated with dry wells, swales, catchment ponds, or other technique to encourage this surface water to soak into the aquifer rather than runoff into the the stream.

Solar and energy efficiency:The site plan does not consider solar access unless most of the trees on the south end are removed. The layout should be reconsidered to account for this. In addition, passive and/ or active solar along with photovoltaics should be required. There is also the potential to create a micro grid that potentially could be coupled with the other solar systems in the neighborhood. Zero energy and energy efficient building systems should be encouraged.

Septic systems, package treatment: It may be more economical to install a small package treatment plant rather than 20+ septic systems. It may be prohibitive to install septic systems adjacent to the stream, particularly in those parcels on the northwest end of the property. Gray water potential should be encouraged.

Development assurances: Will there be any assurances that the developer will complete this project to some minimum level regarding the # of homes and infrastructure? It is questionable whether this project will attract the high end clientele proposed due to the proximity to highway noise and the egg ranch and other commercial/industrial and cannabis grow zoning close by.

Wet weather stream protection: Consider creating a green belt owned by an HOA jointly and thus allowing smaller lot sizes. The shared ownership could then be used to meet the 1 1/4 acre min. for this zone. No trees cut within 50 ft. each side of creek to avoid erosion and alteration of the stream bed as indicated in the BRA.

Tree protection: Given that Lake County has lost an incredible number of trees over the past decade or so due to fires, drought, insect/blight, and development, we should actively protect every live healthy tree possible along with planting to offset the carbon sequestration loss. And when removal is absolutely necessary, at least 10 new trees should be planted along with a minimum number required for landscaping. Three trees is not adequate to account for the time to reach maturity and the survival rate.

Night sky protection: Our neighborhood is a great place to observe the stars and we want to be assured that this development will not disrupt that community asset, even more than the Night Sky County Ordinance.

CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL CHECKLIST FORM
FINAL INITIAL STUDY, IS 2022-08
SCH No. 202311007

1. Project Title:	Danco Subdivision Development Project
2. Permit Numbers:	Subdivision Development SD 2022-01 Tentative Map TM 2022-01 Environmental Analysis - CEQA, IS 2022-08
3. Lead Agency Name/Address:	City of Clearlake 14050 Olympic Drive Clearlake, CA 95422
4. Contact Person:	Mark Roberts, Senior City Planner Phone: (707) 994-8201 Email: mroberts@clearlake.ca.us
5. Project Location(s):	2890 Old Highway 53 Clearlake, California 95422 Section 15 of Township 13 North and Range 7 West on the U.S. Geological Survey (USGS) "Lower Lake, California" 7.5-minute quadrangle map.
6. Parcel Number(s):	APN: 010-048-008-000
7. Project Developers Name:	Danco Communities 5251 Ericson Way Arcata, California 95521
8. Property Owner(s) Name/Address:	City of Clearlake 14050 Olympic Drive Clearlake, CA 95422
9. Zoning Designation:	Rural Residential
10. General Plan Designation:	Low Density Residential
11. Supervisor District:	District Two (2)
12. Earthquake Fault Zone:	Not within a fault zone

13. **Dam Failure Inundation Area**: Not within a Dam Failure Inundation Zone

14. **Flood Zone**: FEMA Flood Mapping Zone D - undetermined (not within a known flood zone)

15. **Waste Management**: Clearlake Waste Solutions

16. **Water Access**: Highlands Water Company

17. **Fire Department**: Lake County Fire Protection District

18. **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.)***

    The project consists of subdividing a 30-arce parcel into twenty-two (22) lots which will result in a net increase of dwelling units on the site from one to 22 housing units (Attachment G, Tentative Subdivision Map). The parcels would range in size from 1.25 to 2.75 acres in size. The map shows concept locations of 22 houses with related improvements on each new lot (i.e. anticipated building areas and septic locations).

    Access to the proposed lots will be located off Old Highway 53 via two proposed roadways, indicated as Road A and B on the tentative map (formal road names are to be determined). The northern proposed roadway will be greater than 800 feet in length and the southern proposed roadway is approximately 686 feet in length. The width of each roadway will be a minimum of 50 feet and have a turnaround/cul-da-sac.

    Utilities:

    - Each lot will be provided power through the Pacific Gas and Electric (PG&E)
    - Highlands Water Company will provide water to each lot.
    - Each new lot will have its own Onsite Waste Management System (septic).

19. **Environmental Setting:** The subject property *(Refer to Figure 2, Vicinity Map).* The parcel is relatively flat along Old Highway 53/State Route 53, however there is a slight slope in the southern portion of the parcel. In the center of the project site there is approximately 17 acres of a variety of native grass and signs of disturbance including a circular dirt road around this predominately vacant parcel. Of the 17 acres, there is approximately 11 acres that contain a variety of trees and shrubs; including pine and oak woodland. An intermittent drainage area travels through the site along the northsides side of the site (Refer to Figure 4, Site Photos).

20. **Surrounding Land Uses and Setting: Briefly describe the project's surroundings:**
    - The parcels to the **North** have a land use designation of Industrial and are developed with light to heavy commercial uses. Parcels greater than 0.50 miles from the Northern corner of the project parcel are within the County of Lake's Jurisdiction.

    - The parcels to the **East** have a land use designation of Rural Residential and are undeveloped. Parcels greater than 0.25 miles from the eastern project parcel boundary are County of Lake's Jurisdiction.

- The parcels to the **West and South** have a land use designation of Rural Residential and Low Density Residential. These parcels are either developed with single family dwellings and accessory structures or are undeveloped.

21. **Local Agencies** *(other Public Agencies whose approval may be required):* City of Clearlake - Community Development (Planning, Building, Public Works); Clearlake Police Department, Lake County Fire Protection District, Lake County Department of Environmental Health, Lake County Air Quality Management District, Lake County Special Districts, and Highlands Mutual Water District. The applicant will adhere to and obtain all necessary local agency permits.

22. **Federal and State Agencies** *(if applicable):* Central Valley Regional Water Quality Control Board, California Department of Transportation (Caltrans); California Department of Fish and Wildlife. The applicant will adhere to and obtain all necessary Federal and State Agency permits.

23. **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.

    Response Summary: On December 19th, 2022, the City emailed a formal RFR/AB 52 Notification to Koi Nation, and on December 20th, 2022, Habematolel. Each tribe was afforded 30 days to respond to request consultation, in accordance with Section 21080.3.1(d) of the Public Resources Code.

    On January 9, 2023, the City received a comment letter from Habematolel Pomo on behalf of Koi Nation of Northern California, including a request for Tribal Consultation. Although the request for consultation was received within the 30-day timeframe, the parties agreed to postpone consultation under Section 21080.3.1(e) of the California Public Resources Code until after the archaeological report was received by the City. On March 15, 2023, the City received the report and provided a copy to the Koi Nation immediately.

City representatives met with project applicants and tribal representatives of Koi Nation of Northern California and Habematolel Pomo of Upper Lake on April 6th, 2023, and on July 11th, 2023, and subsequently exchanged ideas, comments, and information through other means. Through this consultation, the City better understands that:

1. *The Koi Nation is culturally affiliated with, and has a cultural interest in, the proposed project area;*
2. *Archaeological data and tribal cultural resources need not necessarily align, as they represent two different, although related, areas of expertise and must be addressed separately in the CEQA document;*
3. *Avoidance and preservation in place of sensitive areas must be incorporated into the project design where feasible;*
4. *Decisions about tribal cultural resources prior to, during, and following project construction must take into consideration information provided by tribal experts; and;*
5. *Developing a robust plan for addressing unanticipated discoveries during construction is critically important.*

The City of Clearlake coordinated with Greg White of Sub-Terra Heritage Resource Investigations to help address tribal representatives concerns of Koi Nation of Northern California and Habematolel Pomo of Upper Lake discussed during Tribal Consultation Meetings and in their letters dated January 9th, 2023, June 27th, 2023, and July 13th, 2023. An amended archaeological assessment/report (dated April 1, 2023 & amended on July 18th, 2023) was released addressing their concerns. This report includes confidential information that is restricted from public distribution under state law; however, the findings of the study were assessed by the City as part of this environmental review. In an email dated August 28th, 2023, from Greg White of Sub-Terra Heritage Resource Investigations, Robert Geary was provided a copy of the Final Archaeologist Assessment/Report.

On October 16th, 2023, City representatives sent a letter to Koi Nation of Northern California and Robert Geary of Habematolel Pomo of Upper Lake concluding formal Tribal Consultation without agreement, and acknowledging that the coordination with the Tribe does not end with project approval; rather, the implementation of the mitigation measures and conditions of approval will involve tribal representatives through project development.

24. **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:
    - CalEPA. *Cortese List Data Resources*. Available at: https://calepa.ca.gov/sitecleanup/corteselist/. Accessed August 2022.
    - California Department of Conservation. *California Important Farmland Finder.* Available at: http://maps.conservation.ca.gov/ciff/ciff.html. Accessed August 2022.
    - California Department of Forestry and Fire Protection. *FHSZ Viewer.* Available at: https://egis.fire.ca.gov/FHSZ/. Accessed August 2022.
    - California Geological Survey. *Earthquake Zones of Required Investigation.* Available at: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed August 2022.
    - CalRecycle. *SWIS Facility/Site Activity Details – Eastlake Sanitary Landfill (17-AA-0001).* Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3787?siteID=930. Accessed August 2022.

- City of Clearlake. *2040 General Plan Update Final Environmental Impact Report (EIR).* February 2017.
- City of Clearlake. *2040 General Plan Update*. February 28, 2017.
- Department of Toxic Substances Control. *Hazardous Waste and Substances Site List (Cortese).* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed August 2022.
- Doug Gearhart, Air Pollution Control Officer at Lake County Air Quality Management District. Personal communication [phone] with Briette Shea, Senior Associate/Air Quality Technician at Raney Planning and Management, Inc. April 27, 2022.
- FEMA. *FEMA Flood Map Service Center.* Available at: https://msc.fema.gov/portal/home. Accessed August 2022.
- Highlands Mutual Water Company. *Drought Contingency Plan.* June 30, 2021.
- Cultural Resource Investigation of the Burns Valley Subdivision dated March 13th, 2023, and April 1st, 2023, and amended July 18th, 2023; Prepared by Gregory G. White.
- Biological Resource Assessment dated October 2022; Prepared by HELIX Environmental Planning.
- Hydrology Storage Volume Summary dated December 15, 2022; Prepared by Whitechurch Engineering.
- Focused Traffic Analysis fore the Burns Valley Subdivision Project; Prepared by W-Trans dated February 20, 2023.
- Water Model Result Summary; Prepared By: Whitechurch Engineering dated May 5, 2023.

25. Mitigation Monitoring Program: Section 21081.6 of the Public Resources Code and Section 15097 of the CEQA Guidelines require adoption of a Mitigation Monitoring or Reporting Program (MMRP) for all projects for which an Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND) has been prepared. The Mitigation Monitoring Program for this project is included at the end of this CEQA Checklist.

26. Figures:

- Figure #1: Regional Map
- Figure 2: Vicinity Map
- Figure 3: Land Use Zoning Map
- Figure 4: Site Photos
- Figure 5: General Plan Noise Contour Map
- Figure 6: FEMA Flood Elevations Map

27. Initial Study Attachments:

- Attachment A – Air Quality Impact Analysis
- Attachment B – Biological Resource Assessment
- Attachment C – Cultural Resources Assessment
- Attachment D --Water Model Result Summary
- Attachment E – Hydrological Storage Volume Summary & Water Model Result Summary
- Attachment F – Traffic Impact Analysis

Figure #1: Regional Map

Figure 1: Vicinity/Location Map

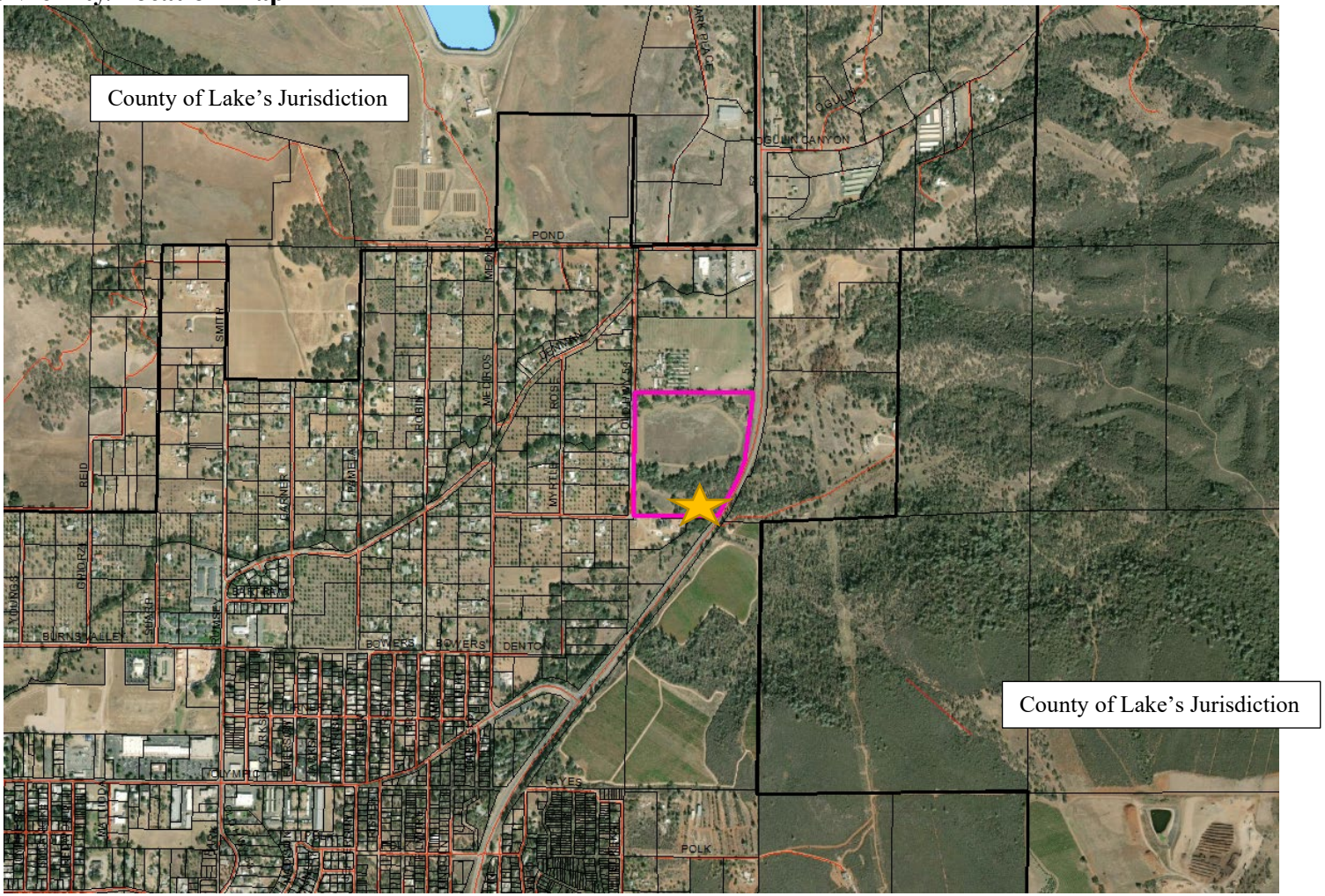


Figure 3: Land Use Zoning Map

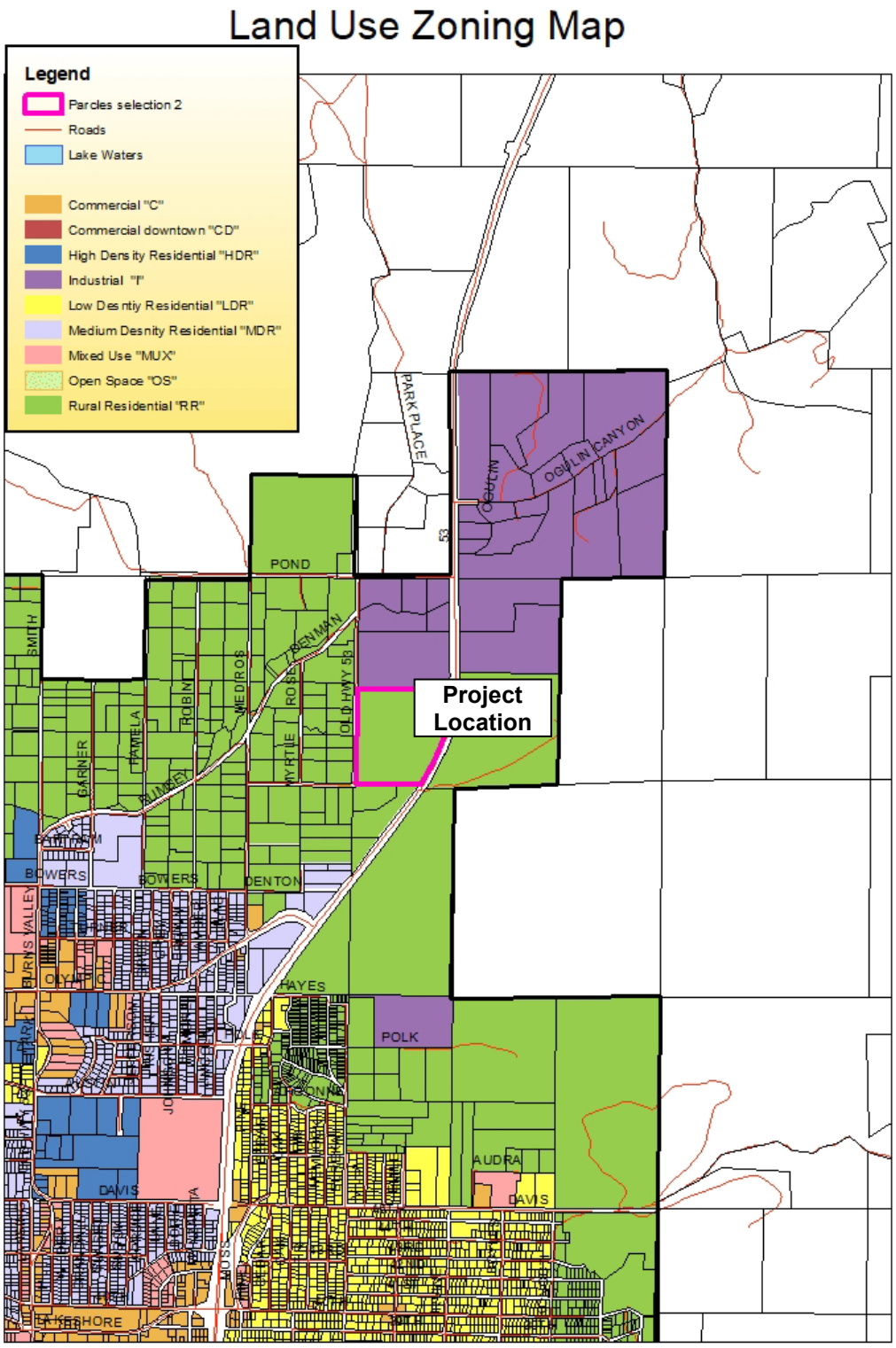


Figure 4: Site Photos

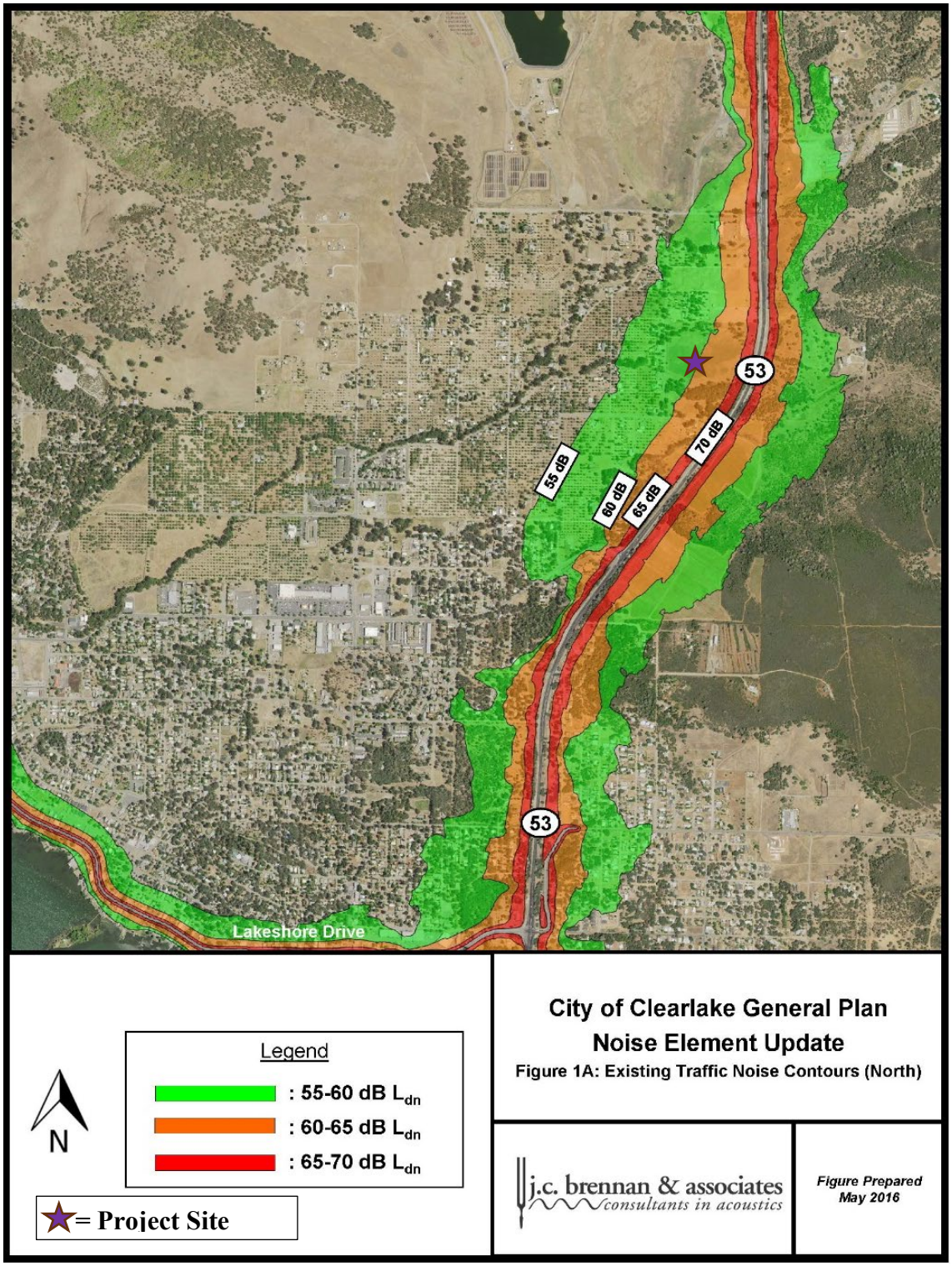
Old Highway 53 Photo # 1

Old Highway 53 Photo # 2

State Route 53 Photo # 3

State Route 53 Photo # 4

Figure 5: General Plan Noise Contour Maps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: 65-70 dB L_{dn}
= Project Site
City of Clearlake General Plan
Noise Element Update
Figure 1A: Existing Traffic Noise Contours (North)
j.c. brennan & associates
consultants in acoustics
Figure Prepared
May 2016

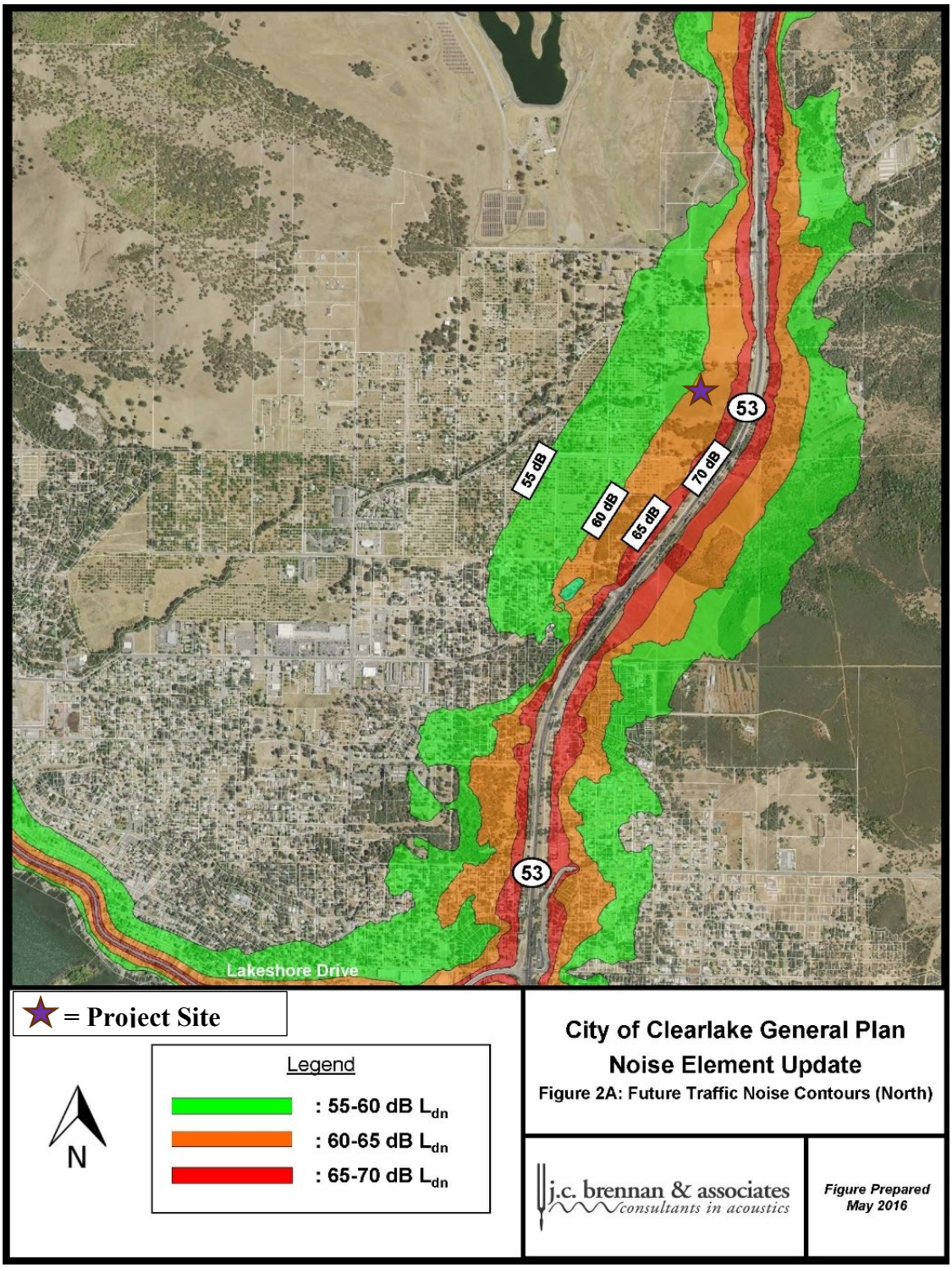
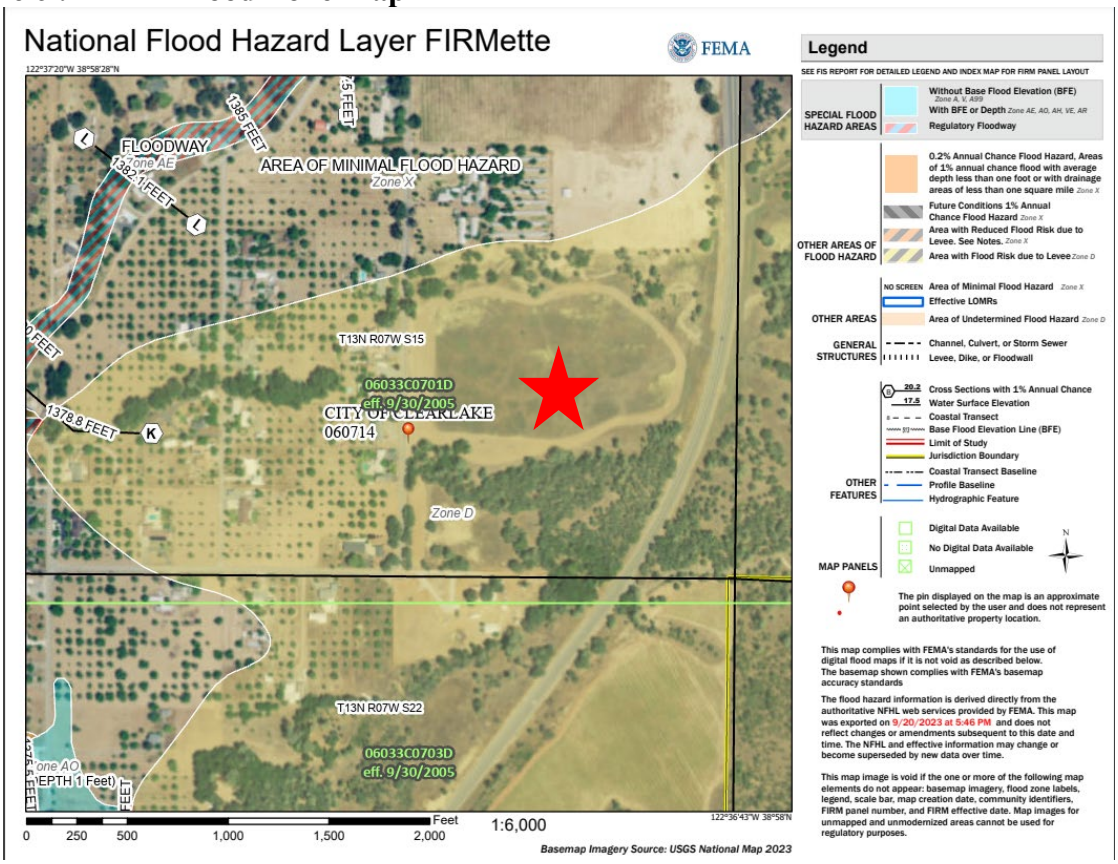

53
55 dB
60 dB
65 dB
70 dB
53
Lakeshore Drive
= Project Site
Legend
: 55-60 dB L_{dn}
: 60-65 dB L_{dn}
: 65-70 dB L_{dn}
N
City of Clearlake General Plan
Noise Element Update
Figure 2A: Future Traffic Noise Contours (North)
j.c. brennan & associates
consultants in acoustics
Figure Prepared
May 2016

Figure 6 : FEMA Flood Zone Map



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 a "less than significant impact with mitigation" as indicated by the analysis in the following evaluation of environmental impacts.

☐	Aesthetics	☐	Greenhouse Gas Emissions	☐	Public Services
☐	Agriculture & Forestry Resources	☐	Hazards & Hazardous Materials	☐	Recreation
☒	**Air Quality**	☒	**Hydrology / Water Quality**	☒	**Transportation**
☒	**Biological Resources**	☐	Land Use / Planning	☒	**Tribal Cultural Resources**
☒	**Cultural Resources**	☐	Mineral Resources	☐	Utilities / Service Systems
☐	Energy	☒	**Noise & Vibration**	☐	Wildfire
☒	**Geology / Soils**	☐	Population / Housing	☒	**Mandatory Findings of Significance**

DETERMINATION: (To be completed by the lead Agency) - On the basis of this initial evaluation:

☐ 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 although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ 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.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Prepared By: Mark Roberts **Title: City Senior Planner**

Signature:  **Date: December 8, 2023**

SECTION 1 - EVALUATION OF ENVIRONMENTAL IMPACTS:

1) 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 on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) 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.

4) "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 Incorporated**
- **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?	☐	☐	☐	☐	☒	☐	**Less Than Significant**: According to the City of Clearlake 2040 General Plan scenic places in the city are identified as city parks, vistas from the parks, State Route 53 (SR 53) and Lakeshore Drive scenic drives, view corridors from Lakeshore Drive, "glimpses" of the lake, Clear Lake, Borax Lake, and Anderson Marsh Historic State Park. SR 53 is eligible for listing as a State Scenic Highway; but is not officially designated as such. Even though the project is along State route 53, it is zoned Rural Residential, which allows for the development of single-family dwellings, accessory structures and supporting infrastructure as a by right use. **Therefore, the project is not expected to have a substantial adverse effect on a scenic vista that is visible from a City scenic corridor.**
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?	☐	☐	☐	☐	☒	☐	**Less Than Significant.** The project is located along State Route 53 (SR 53) and Old Highway 53. SR 53 is eligible for listing as a State Scenic Highway; but is not officially designated as such. In addition, passing motorists will have views of residential development, however the Land Use Designation Zoning is Rural Residential allows residential use and developed by right and shall adhere to all applicable Federal, State and local agency requirements. The Tentative Subdivision Map shows the construction of 22 single family dwellings. During initial development, (roads and infrastructure), including residential development will require the removal of Oak Trees. The trees that are listed as protected trees in the City's Native Tree Protection Ordinance will require a tree removal permit. Tree removal may result in a change in the site's appearance, the residential development of the site, which is

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							proposed is consistent with the level of development addressed in the General Plan/EIR and would not be considered to result in a significant adverse impact to scenic resources. **The project would 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.**
c) Conflict with applicable General Plan policies or zoning regulations governing scenic quality.	☐	☐	☐	☐	☒	☐	**Less Than Significant**. The City of Clearlake General Plan designates the project site as Low Density Residential (LDR) with a Land Use Zoning Designation of Rural Residential. The project would be required to comply with Section 18-3.010, of the City's Municipal Code, which sets forth requirements and standards for development that apply to the Rural Residential Zones such as buildings, setbacks, height limitations and in some cases securing a discretionary permit. Furthermore, all development within the city is required to adhere to the general development standards included in Article 18-5, Development Standards, of the City's Municipal Code. The project is consistent with the site's land use and zoning designations, will not conflict with applicable zoning and other regulations governing scenic quality.
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐	☒	☐	**Less Than Significant.** The proposed project may increase lighting levels in the area, which may impact night-time views and may result in substantial light or glare. All lighting for the project, including house development is subject to the City's Dark Sky Lighting Design Standard to assure all exterior will be directed downwards and shielded to avoid any substantial light or glare impacts.
SECTION II. AGRICULTURE AND FORESTRY RESOURCES *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.* *Would the project:*							
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☒	☐	**Less Than Significant.** According to the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the site is identified as "Other Land" which is not farmland of statewide importance (2018). It states that this site, and other areas around it as "low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. The project parcel is surrounded by vacant and nonagricultural land on all sides by urban development.
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☐	☒	**No Impact**. The project site has a Land Use Zoning Designation of "RR" Rural Residential and designated as Low Density Residential (LDR) by the City's 2040 General Plan. In addition, the project site is not under a Williamson Act contract

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. 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))?	☐	☐	☐	☐	☐	☒	**No Impact**. The project site has signs of disturbance with a dirt road that is commonly used. Much of the site, however, appears to be undisturbed as open glades/grass lands and a wooded area in the southern portion. The project site is not considered forest land (as defined in Public Resources Code [PRC] Section 12220[g]), timberland (as defined by PRC Section 4526) and is not zoned Timberland Production (as defined by Government Code Section 51104[g]).
d) 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?	☐	☐	☐	☐	☐	☒	**No Impact**. See Questions II-a and II-c, above.
SECTION III. AIR QUALITY *Where available, the significant criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.* *Would the project:*							
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The project is located within the Lake County Air Basin (LCAB) which is currently an attainment air basin in California. This means the air basin meets all California Ambient Air Quality Standards and is, therefore, not required to have an air quality plan. The City of Clearlake is in the Lake County Air Basin (LCAB), which is under the jurisdiction of the local air quality agency, the Lake County Air Quality Management District (LCAQMD). Attachment A of this ISMND is an Air Quality Impact Analysis that addresses how the project does not conflict or obstruct implementation of the applicable provisions of LCAQMD, regardless of whether or not there is an established air quality plan. This analysis provides a quantitative analysis of criteria pollutants and greenhouse gas emissions that are identified in the air quality plan and demonstrates that the project will not result in a significant adverse impact to air quality. It is noted that Subsection b of this section provides a list of mitigation measures that will help implement LCAQMD's air quality plan.
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** As noted in Section III, Subsection A, the project is located within the Lake County Air Basin (LCAB) which is currently an attainment air basin in California. This means the air basin meets all California Ambient Air Quality Standards and is, therefore, not required to have an air quality plan. The City of Clearlake is in the Lake County Air Basin (LCAB), which is under the jurisdiction of the local air quality agency, the Lake County Air Quality Management

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
attainment under an applicable federal or state ambient air quality standard?							District (LCAQMD). Furthermore, the project was evaluated for potential air quality impacts and treated similarly to other non-attainment basins for compliance with applicable regulations. Attachment A of this ISMND is an Air Quality Impact Analysis that addresses how this project will not result in a cumulatively considerable net increase in any criteria pollutant from the project . This includes a quantitative analysis using industry standard air modeling using California Emissions Estimator Model (CalEEMod) software version 2022.1 to estimate air emissions from both project construction and operation (full build-out of the 22 housing units in the project. The analysis does show that the project would result in potentially significant air quality impacts, particularly during construction. **However, with the incorporated Mitigation Measures below all potential significant impacts have been reduced to less than significant levels.** **<u>Mitigation Measures:</u>** **AQ-1: Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.** **AQ-2: Construction activities shall be conducted with adequate dust suppression methods, including watering during grading and construction activities to limit the generation of fugitive dust or other methods approved by the Lake County Air Quality Management District. Prior to initiating soil removing activities for construction purposes, the applicant shall pre-wet affected areas with at least 0.5 gallons of water per square yard of ground area to control dust.** **AQ-3: Driveways, access roads and parking areas shall be surfaced in a manner to minimize dust. The applicant shall obtain all necessary encroachment permits for any work within the right-of-way. All improvement shall adhere to all applicable federal, State and local agency requirements.** **AQ-4: Any disposal of vegetation removed as a result of lot clearing shall be lawfully disposed of, preferably by chipping and composting, or as authorized by the Lake County Air Quality Management District and the Lake County Fire Protection District.** **AQ-5 During construction activities, the applicant shall remove daily accumulation of mud and dirt from any roads adjacent to the site.** **AQ-6: Grading permits shall be secured for any applicable activity from the Community Development Department, Building Division. Applicable activities shall adhere to all grading permit conditions, including Best Management Practices. All areas disturbed by grading shall be either surfaced in manner to minimize dust, landscaped or hydro seeded. All BMPs shall be routinely inspected and maintained for life of the project.**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							AQ-7: Construction activities that involve pavement, masonry, sand, gravel, grading, and other activities that could produce airborne particulate should be conducted with adequate dust controls to minimize airborne emissions. A dust mitigation plan may be required should the applicant fail to maintain adequate dust controls. **AQ-8: If construction or site activities are conducted within Serpentine soils, a Serpentine Control Plan may be required. Any parcel with Serpentine soil shall obtain proper approvals from LCAQMD prior to beginning any construction activities. Contact LCAQMD for more details.** **AQ-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 shall follow 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.** **AQ-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.** **AQ-11: Significant dust may be generated from increased vehicle traffic if driveways and parking areas are not adequately surfaced. Surfacing standards shall 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.** **AQ – 12: 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 shall be performed utilizing water trucks, if necessary, reduce travel times through efficient time management and consolidating solid waste removal/supply deliveries, and speed limits.**
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest sensitive receptors include existing rural single-family residences, located in the immediate area. The major pollutant concentrations of concern for this land use designation are localized carbon monoxide (CO) emissions, toxic air contaminants (TAC) emissions, and criteria pollutant emissions. Attachment A of this ISMND is an Air Quality Impact Analysis that addresses how this project will not result in significant exposure to sensitive receptors of substantial pollutant concentrations. **A list of 12 mitigation measures noted in Section III, Subsection B of this section which will further reduce air pollution concentrations to a level of less than significant.**
d) Result in other emissions that create objectionable odors adversely affecting a substantial number of people?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** While odors rarely cause physical harm, they can be unpleasant, may generate citizen complaints to local governments and air districts. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact(s), and the variety of odor sources, it is difficult to quantitatively determine the presence of a significant odor impact. Typical odor-generating land uses include, include but are not limited to, wastewater treatment plants, landfills, and composting facilities. Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction is temporary and construction equipment would operate intermittently throughout the course of a day and would likely only occur over portions of the site at a time. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. Project construction would also be required to comply with all applicable LCAQMD rules and regulations, particularly associated with permitting of air pollutant sources. Considering the short-term nature of construction activities, as well as the regulated and intermittent nature of the operation of construction equipment, the project would not be expected to create objectionable odors affecting a substantial number of people.
SECTION 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.	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated**. Special-status species are plant and wildlife species that have been afforded special recognition and protection by federal, State, or local resource agencies or organizations. These species are generally of relatively limited distribution and may require specialized habitat conditions. HELIX Environmental Planning, Inc. (HELIX) conducted a Biological Resources Assessment (BRA) for the project to assess the general biological resources on the project site, assess the suitability of the site to support special-status species and sensitive vegetation communities or habitats, and analyze any potential impacts to biological resources that may occur as a result of the project *(Refer to Attachment B)*. The BRA included results of a field survey that covered the site. Candidate and sensitive, or special status species were not found during the survey, but the report indicates that the site is an appropriate habitat for some special status species and some of special concern could be potentially located on the project site depending on time or year.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
Fish and Wildlife Service?							An email was received on January 6, 2023, from Ben Huffer, Environmental Scientist, California Department of Fish and Wildlife indicating the need to include a survey of the Western Bumble Bee *(Refer to Attachment F -Agencies Comments).* WBB, The WBB (Bombus occidentalis), once common throughout western North America, is a species of concern and will be considered for listing by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA). The BRA was revised to address the Western Bumble Bee (WBB) Mitigation Measures have been created to address this concern. **In accordance with recommendations made by CDFW and from the BRA, with the incorporated Mitigation Measures below, the project will have less than a significant impact on candidate, sensitive, and/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:** **<u>Mitigation Measures:</u>** **BIO-1: Prior to grading and/or soil disturbance, a follow-up survey, prepared by qualified professionals for special status plant species, special status bat species, and nesting birds shall be conducted. Said survey shall comply with minimum standards of referenced in the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.** **BIO-2: Prior to grading and/or soil disturbance, a follow-up survey for the Bumble Bee Survey shall be conducted by a qualified biologist (approved by the City Planning Department). Said survey shall occur during the western bumble bee active season, including focusing on foraging habitat and suitable underground refuge areas identified during the habitat assessment.** - **The surveyor shall spend at least one hour per 3-acre area surveying suitable habitat, based on survey protocols for the rusty patched bumble bee (B. affinis) (USFWS 2019).** - **Surveyor(s) shall note other species of bumble bee, approximate number of each species and photographs of bumble bees shall be taken to properly identify species of bumble bee present onsite (USFWS 2019). If western bumble bee is not identified in or immediately adjacent to the Study Area (within 25 feet), no further surveys or actions would be required.** - **Results from the habitat assessment and follow-up surveys shall be provided to the California Department of Fish and Wildlife. If a western bumble bee individual or colony is identified in the Study Area or within 25 feet, then a 25-foot setback shall be implemented around the colony and consultation with CDFW may be necessary if the project activities will impact an active western bumble bee colony. Since the western bumble bee is a candidate species under California Endangered Species Act, incidental take coverage may be required for project-related impacts that will result in take of WBB.**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							BIO-3: Project design shall incorporate a 25-foot setback around milkweed habitat on the project site to protect larval habitat for Monarch Butterfly during the summer breeding season (March 16 through October 31). Said 25-foot setback design and establishment, shall be determined by a qualified biologist and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023. **BIO-4: Project activities that occur during nesting season shall observe all mitigation measures in accordance with minimum standards referenced in the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.** **BIO-5: A 50-foot setback shall be established from the intermittent drainage for all building development and septic system development as part of the site plan. Said setback design and establishment, shall be determined by a qualified biologist and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.** **BIO-6: Prior to grading and/or soil disturbance, a qualified biologist shall conduct environmental awareness training to all project-related personnel prior to the initiation of work. The training shall follow the same guidelines as the special-status amphibians training described in the Biological Assessment prepared by HELIX Environmental Consulting. (as revised dated May, 2023).**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** According to the BRA, the project site does not contain any riparian habitat. A total of 1.66 acres (1,153-linear feet) of intermittent drainage is located along the north side of the site. The BRA indicates that this drainage area is absent of any hydrophytic vegetation that might be a sign of riparian habitat. Mitigation Measure BIO-5 assures avoidance of impacts to the drainage area along the north side of the project site. Due to lack of riparian habitat on the site, and the drainage setback requirements of Mitigation Measure BIO-5 the project will not have a significant impact on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
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?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** According to the BRA the project site is absent of any hydrophytic vegetation that might be a sign of riparian habitat. Mitigation Measure BIO-5 assures avoidance of impacts to the drainage area along the north side of the project site. Due to lack of riparian habitat on the site, and the drainage setback requirements of Mitigation Measure BIO-4, the project will not have a significant impact on state or federally protected wetlands (including, not limited to, marsh, vernal pool, coastal, etc.).
d) Interfere substantially with the movement of any	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** Wildlife movement corridors are areas where regional wildlife populations regularly and predictably move during dispersal or migration. The BRA indicates that the project site is bordered

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?							by major roadways, rural residential properties, vineyards, and undeveloped wild lands on all sides. Although wildlife may disperse through the project site the project is not expected to substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The BRA reports that approximately 11.42 acres of blue oak–foothill pine habitat occurs on the project site. Protected trees under the City's tree ordinance (Chapter 18-40 of the Municipal Code) within the project site include valley oak, interior live oak, and blue oak. To provide an accurate accounting of the identified oak trees on the project site, a tree survey and tree preservation plan will need to be conducted to determine what trees will need to be removed and trees to be preserved both during the subdivision improvement stage and later for individual house development on the separate 22 lots. All heritage tree removed shall adhere to the adopted City Ordinance. Mitigation Measure BIO-6 will mitigate the impact of tree loss from the project to assure there is no conflict with local policies or ordinances protecting biological resources, such as trees. **Mitigation Measure:** **BIO-7: Prior to any tree removal (qualifying trees per Chapter 18-40 of the Municipal Code, Native Tree Protection), a complete tree survey shall be conducted by a qualified arborist that identifies all trees that have a greater diameter of 6" at breast height, type, and health, on the project site to be removed.** • ***The survey/preservation plan shall include recommended measures to preserve trees on the project site during this initial construction, such as fencing at dripping lines, etc.***
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?	☐	☐	☐	☐	☐	☒	**No Impact.** The project site is not located within an area that is subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.
SECTION V. CULTURAL RESOURCES *Would the project:*							
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The project is currently vacant. A Cultural Resource Investigation *(dated April 1st, 2023, and amended on July 18th, 2023)* was prepared for the project by Sub-Terra Heritage Resource Investigations (Sub-Terra), which included an archival review of historic General Land Office Plats and USGS topographic maps, as well as an archeological field survey of the entire project site. In addition to the Cultural Resource Investigation Report, City representatives met with project

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							applicants and tribal representatives on April 6th, 2023, and on July 11th, 2023, and subsequently exchanged ideas, comments, and information through other means regarding Cultural Resources. The report indicates that on October 11, 2022, the Northwest Information Center of the California Historical Resource Information System (NWIC) completed an in-house document review covering reports and records for a 0.5-mile radius around the project area. The resources consulted included the National Register of Historic Places files for Lake County; California Points of Historical Interest files for Lake County; the California Historical Landmarks Registry for Lake County; the California Register of Historical Resources listings for Lake County; and the directory of properties in the Historic Properties Data File for Lake County. The Cultural Resource Investigation Report indicates the project area could contain isolated cultural and historical era resources. However, according to the report the isolated and/or historic era items have been determined to not be eligible for the California Register of Historical Resources and no protections are recommended. The Cultural Resource Investigation Report found that the Project Site contains one cultural resource that is potentially eligible for the California Register of Historic Resources. The Project has been designed to avoid any impacts to this potentially eligible resource. No other impacts to historical resources are anticipated. **In the unlikely event historic resources are discovered during project development, Mitigation Measures CUL-1 through CUL-6 will be implemented to ensure that any impacts will be less than significant for historical resource pursuant to §15064.5 (Refer to Section V(b) for Mitigation Measures)**
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** As described above, a Cultural Resource Investigation *(dated April 1st, 2023, and amended on July 18th, 2023)* was prepared for the project by Sub-Terra Heritage Resource Investigations (Sub-Terra), which included an archival review of historic General Land Office Plats and USGS topographic maps, as well as an archeological field survey of the entire project site. In addition to the Cultural Resource Investigation Report, City representatives met with project applicants and tribal representatives on April 6th, 2023, and on July 11th, 2023, and subsequently exchanged ideas, comments, and information through other means regarding Cultural Resources. The Cultural Resource Investigation Report indicates the project area could contain isolated cultural and historical era resources. However, according to the report the isolated and/or historic era items have been determined to not be eligible for the California Register of Historical Resources and no protections are recommended. The Cultural Resource Investigation Report found that the Project Site contains one cultural resource that is potentially eligible for the California Register of Historic Resources. The Project has been designed to avoid any impacts to this potentially eligible resource. No other impacts to historical resources are anticipated. **In the unlikely event previously unknown archaeological resources are discovered during project construction/development, Mitigation Measures CUL-1 through CUL-6 will be implemented to ensure that any impacts will be less than significant for archeological resources, pursuant to §15064.5.**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							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 owner shall utilize a qualified cultural resources consultant to identify and investigate any subsurface historic remains and define their physical extent and the nature of any built features or artifact-bearing deposits.** **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. The cultural resource report shall be prepared with input from the Consulting Tribe. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – it shall 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 by the City 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 within 90 days of completion of the Project. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If a historic 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. It is understood that destructive data testing and/or curation of tribal cultural resources is strongly opposed by the Consulting Tribe and should be avoided.** **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 be contacted within 24 hours. The Native American Heritage Commission must then identify the "most likely descendant(s)". 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 Code 5097.98.]**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							CUL-4: On or prior to the first day of construction the owner shall organize cultural resource sensitivity training for contractors involved in ground disturbing activities. **CUL-5: The shaded area indicated on the Southern portion of said subdivision map shall be a non-buildable area, where no construction is allowed. The shaded area shall be identified on the parcel map and be titled as a non-buildable area.** **CUL-6: Tribal monitoring shall be required during ground disturbing activities in sensitive areas of the project area, as specifically identified in a confidential map on file with the City. The Consulting Tribe may provide spot check monitoring or voluntary monitoring, at no cost, in other areas of the project with prior coordination and approval of the owner. Tribal monitoring shall comply with the City of Clearlake's Tribal Monitoring Policy.**
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	☐	☐	**See Response to Section V(a)(b): Less than Significant Impact with the incorporated Mitigation Measures CUL-1 through CUL-6.**
SECTION VI. ENERGY *Would the project:*							
a) Consume energy resources in a wasteful, inefficient, or unnecessary amount during project construction and/or operation?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The main forms of available energy supply are electricity, propane gas, diesel, and oil. The following provides a discussion regarding the project's potential effects related to energy demand during construction and operation. <u>Construction Energy Use</u> Construction of the single-family dwellings, accessory structures and supporting infrastructure would involve increased energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. The project would result in the temporary increase in energy use occurring during construction, but the project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. <u>Operational Energy Use</u> PG&E would provide electricity to the project for ongoing use by residents. Energy use would consist of energy use by 22 housing units. Project construction would be subject to all relevant provisions of the most recent update of the California Buildings Standards Code (CBSC), including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Codes and Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently. Required compliance with the CBSC would ensure that the building energy use associated with the project would not be wasteful, inefficient, or unnecessary. The project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. Based on the above, compliance with the State's latest Energy Efficiency Standards would ensure that the project would implement all necessary energy efficiency regulations.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** See Question VI-a, above.
SECTION 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: 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 known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The Coast Ranges are composed primarily of Mesozoic and Cenozoic sedimentary strata. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by ridges and valleys comprised primarily of Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. Mount Konocti, the largest volcanic feature of the Clear Lake volcanic fields, is located approximately eight miles northeast of the Project site. <u>ii) Seismic Ground Shaking</u> According to the City's 2040 General Plan, a 50 percent to 60 percent chance exists that a 6.0 magnitude earthquake could occur within 50 kilometers of Clearlake in the next 50 years, and strong ground shaking could occur in the area. However, the proposed buildings would be properly engineered in accordance with the CBSC, which includes engineering standards appropriate for the seismic area in which the project site is located. Projects designed in accordance with the CBSC should be able to: 1) resist minor earthquakes without damage, 2) resist moderate earthquakes without structural damage but with some nonstructural damage, and 3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Conformance with the design standards is verified by the City prior to the issuance of building permits. Proper engineering of the proposed buildings would ensure that the project would not be subject to substantial risks related to seismic ground shaking. <u>iii) Seismic–Related Ground Failure, including liquefaction</u> The California Geologic Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones, which are areas considered at risk of liquefaction-related ground failure during a seismic event based upon mapped surficial deposits and the depth to the areal groundwater table. The project site is not currently mapped for potential liquefaction hazard by the CGS. However, as noted in the City's General Plan, Clearlake contains soil that are susceptible to liquefaction during a seismic event. Therefore, the project site could be located on a geologic unit or soil that is susceptible to liquefaction, and a potential substantial adverse effect could occur. <u>iv) Landslides</u> According to the City's General Plan, the threat of seismically induced landslides in and around the City of Clearlake is low due to the gentle topography of much of the incorporated area. The City of Clearlake is classified by the CGS as being in landslide risk areas 1 and 2, which are the least hazardous landslide areas. In addition, due to the relatively level topography of the project site and general surrounding area, the potential for slope instability is considered low. Thus, landslides are not likely to occur on- or off-site as a result of the project.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							Based on the above, the project would not result in impacts associated with earthquake faults, seismic ground shaking, or landslides. However, the project site could contain potentially liquefiable soils. As required under the City's Building Codes a grading permit would be required to be obtained prior to project development. The grading permit review requirements include insuring compliance with all applicable Federal, State and local agency requirements. Also, project development will require 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. Said Grading Permit Application shall include but is not limited to: • Road Improvements & Paving. • Structural foundations, including retaining wall design (if applicable). • Grading practices. • Erosion/winterization. • Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, etc.); and Slope stability.
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The project does not result in result in substantial soil erosion or the loss of topsoil. However, future residential development may result in grading/preparation of soil to construct single family dwellings/accessory structures. If necessary, the applicant/developer 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. The NRCS has mapped four soil units within the Study Area: • *Manzanita gravelly loam,* 2 to 8 percent slopes is a well-drained soil that consists of gravelly loam, gravelly clay, and gravelly sandy clay loam derived from alluvium which consists of sedimentary rock (CGS 2010). Manzanita gravelly loam, 2 to 8 percent slopes is well drained and is found on terraces. This soil map unit is considered rich soil that could provide farmland of statewide importance. This soil map unit is not considered hydric (NRCS 2022). • *Phipps complex (195/196),* 15 to 30 percent slopes, are well drained soils that consists of clay loam, and clay derived from alluvium which consists of sedimentary rock (CGS 2010). Phipps complex, 15 to 30 percent slopes is well drained and is found on hills and backslopes. This soil map unit is not considered prime farmland. This soil map unit is not considered hydric (NRCS 2022). • *Still gravelly loam (234),* are well drained soils that consists of gravelly loam, stratified gravelly loam to gravelly clay loam and stratified loam to clay loam derived from alluvium derived from sandstone and shale. Still gravelly loam is well drained and is found on alluvial flats and backslopes. This soil map unit is not considered prime farmland. This soil map unit is not considered hydric (NRCS 2022). • *Wolfcreek gravelly loam (246/247)* are well drained soils that consists of gravelly loam, and stratified loam to sandy clay loam derived from alluvium which consists of sedimentary rock (CGS 2010). Wolf-creek gravelly loam is well drained and is found on

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							floodplains and backslopes. This soil map unit is considered prime farmland if irrigated. This soil map unit is not considered hydric (NRCS 2022). As part of the grading permit for the project (required by code) grading measures shall adhere to all Federal, State, and local agency requirements.
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. Potential impacts related to landslides and liquefaction are discussed in Question VII-a, above. As such, the project's potential effects related to lateral spreading, and subsidence are discussed below. <u>Lateral Spreading</u> Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site does not contain any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low. <u>Subsidence/Settlement</u> Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. According to the City's General Plan, unconsolidated or water saturated soils along drainages and the lake shore are most likely to be affected by settlement. However, the project site is not located along a drainage or within proximity to the lake shore. The potential for subsidence/settlement to pose a risk to the proposed development is relatively low. In addition, 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**.**
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?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** According to the Soil Survey of Lake County, California, the soil within the project area has a shrink well potential of low to moderate. Even though the soils have the potential for low to high, according to the Soil Survey of Lake County, California, the soils units will not impact future development, such as residential dwellings, accessory strictures and supporting infrastructure. The project shall adhere to all applicable Federal, State and local agency requirements, including all requirements in the City of Clearlake's Municipal Code(s).
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where	☐	☐	☐	☐	☒	☐	**Less Than Significant.** The project would include connection to the existing public water infrastructure and would use onsite waste management systems (septic). All onsite waste management systems shall adhere to all applicable Federal, State, and local agency requirements, including securing the necessary approval/permits from Lake County Environmental Health Department prior to issuance of permits.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
sewers are not available for the disposal of wastewater?							
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** Disturbance of paleontological resources or unique geologic features is not anticipated. However, if a previously unknown unique paleontological resource or unique geological feature is encountered during construction activities, the proposed project could result in a disturbance of such resources. **Nonetheless, the potential impact would be reduced to less than significant with the incorporated mitigation measures identified in Section V and XVIII of this ISMND.**
SECTION VIII. GREENHOUSE GAS EMISSIONS *Would the project:*							
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. Attachment A of this IS/MND is an Air Quality Impact Analysis that addresses greenhouse gas emissions. It concludes that although the project will generate potentially significant carbon emissions, the level of these emissions will not be adverse based on the City's and Lake County Air Quality Management District's measurement criteria. It is noted that Section III of this ISMND includes a list of 12 air quality mitigation measures which are expected to further reduce the project's potential use of carbon.
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The project is located within the Lake County Air Basin (LCAB) which is currently an attainment air basin in California. This means this air basin meets all California Ambient Air Quality Standards and is, therefore, not required to have a air quality plan. The City of Clearlake is in the Lake County Air Basin (LCAB), which is under the jurisdiction of the local air quality agency, the Lake County Air Quality Management District (LCAQMD). Attachment A of this IS/MND Air Quality Impact Analysis that addresses how the project does not conflict or obstruct implementation of the applicable provisions of LCAQMD, regardless of whether or not there is an established air quality plan. This analysis provides a quantitative analysis of greenhouse gas emissions that demonstrates that the project will not result in a significant adverse impact to air quality regarding greenhouse gas emissions. It is noted that Section III of this ISMND includes a list of 12 air quality mitigation measures which are expected to further reduce the project's potential use of carbon.
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?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. The division of land is not associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. During the development and routine on-site maintenance may involve the use of common cleaning products, fertilizers/herbicides, any of which could contain potentially hazardous chemicals, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. While transportation of hazardous materials could occur

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							along the proposed roadway extension, the number of vehicles transporting hazardous materials within the City of Clearlake would not increase as a result of the project. The majority of vehicles expected to travel along the proposed roadway extension are anticipated to be passenger vehicles, which typically do not transport hazardous materials. The project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. The project site is vacant and consists primarily of open glades, grass lands/vegetation, and wooded areas in the southern portion. There are no records indicating the presence of 19th or 20th century-built features. There are no known hazards (e.g., underground storage tanks, abandoned wells, structures containing lead-based paint or asbestos) are located on-site and according to the California Department of Toxic Substances Control Envirostor Database (https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=), hazardous material sites do not exist at the project site or in the project vicinity. Construction activities associated with the project would involve the use of light to heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. Additionally, construction of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. The use and storage of all potential hazardous materials would be required to comply with all Federal, State and local agencies' requirements, including but not limited to the California Health and Safety Codes. The project is not expected to create a significant hazard to the public or to the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐	☐	☒	**No Impact.** Schools are not located within one-quarter mile of the project site. The nearest school is greater than one mile to the West/Southwest and one to the south/southwest. Therefore, the proposed project would result in no impact related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐	☐	☒	**No Impact.** The California Environmental Protection Agency provides a list of data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements, pursuant to Government Code 65962.5. The project site is not located on the Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List, which is a component of the Cortese List. The other components of the Cortese List include the list of leaking underground storage tank sites from the SWRCB's Geo-Tracker database, the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB. The project site is not located on any of the components of the Cortese List.
e) For a project located within an airport land use plan	☐	☐	☐	☐	☐	☒	**No Impact.** The nearest airport to the site is Lampson Field Airport, which is located greater than 20 miles west of the site. As such, the project site is not

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
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?							located within two miles of any public airports and does not fall within an airport land use plan area
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. 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. During operation, the project would provide adequate access for emergency vehicles and would not interfere with potential evacuation or response routes used by emergency response teams. During construction of the project, all construction equipment would be staged on-site so as to prevent obstruction of local and regional travel routes in the City that could be used as evacuation routes during emergency events. The project would not substantially alter existing circulation systems in the surrounding area. Rather, the proposed roadway extension would have the potential to provide an additional evacuation route in the event of an emergency.
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. Issues related to wildfire hazards are further discussed in Section XX, Wildfire, of this IS/MND. As noted therein, per the Office of the State Fire Severity Zone Mapping (https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/), the the project site is not located within a Moderate or High to Very High Fire Hazard Severity Zone. Additionally, the proposed project would be required to comply with all applicable requirements of the California Fire Code through the installation of fire sprinkler systems, fire hydrants, and other applicable requirements. The primarily developed nature of the area surrounding the project site generally precludes the spread of wildfire to the site. Thus, the potential for wildland fires to reach the project site would be low. Based on the above, the project would not expose people or structures to the risk of loss, injury or death involving wildland fires, and a less-than-significant impact would occur
SECTION X. HYDROLOGY AND WATER QUALITY *Would the project:*							
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** During project construction, topsoil would be exposed due to grading and excavation of the site. After grading and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which could adversely affect water quality. Following project buildout, disturbed areas of the site would be largely covered with impervious surfaces and topsoil would no longer be exposed. Given that the project site is currently undeveloped, development of the project would result in an increase of

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							impervious surfaces on-site. However, stormwater runoff from the new impervious surfaces within the project site would flow into the proposed stormwater drainage system, as well as landscaped areas on-site. The State Water Resources Control Board (SWRCB) regulates stormwater discharge associated with construction activities where clearing, grading, or excavation results in a land disturbance of one or more acres. The project is subject to applicable SWRCB regulations which requires that a Storm Water Pollution Prevention Plan (SWPPP) be developed and implemented as part of the grading permit. The SWPPP describes Best Management Practices (BMPs) to control or minimize pollutants from entering stormwater and must address both grading/erosion impacts and non-point source pollution impacts of the development project, including post-construction impacts. Compliance with State regulations, including implementation of a SWPPP, would ensure that construction activities associated with the project would not adversely affect water quality. A Hydraulic Storage Volume Summary, prepared by Derik Long, PE, Whitchurch Engineering in 2022 indicates the site has capacity to contain stormwater anticipated *(Refer to Attachment D).* Additionally, the City's Stormwater Management Ordinance (Chapter 14 of the Clearlake Municipal Code) includes regulations and requirements to prevent, control, and reduce stormwater pollutants within the City. The City of Clearlake requires all development projects to use BMPs to treat runoff and ensure that the water quality of the drainage systems within the City is not adversely impacted. Temporary construction phase BMPs may include, but are not limited to, silt fencing, straw wattles, staging areas, tree protection fencing, dust control, and other miscellaneous provisions as required by the regulatory agencies. BMPs would ensure that water quality is not degraded during the construction of the project. **Based on the above, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Thus, a less-than-significant impact would occur.**
b) 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.** Potable water service for the project would be provided by Highlands Mutual Water Company (HMWC). According to a 2021 Drought Contingency Plan prepared by the HMWC, the sole source of water supply for distribution is treated surface water from Clear Lake. As a result, any increase in water demand associated with the project would be primarily met through surface water supply, rather than groundwater. Additionally, according to the Water Model Result Summary (dated May 5, 2023) prepared by Whitchurch Engineering, the project parcel will be subdividing a 30-acre lot into a 22-lot subdivision, including installing five (5) new hydrants in the interior of the development. According to the City's General Plan, the City of Clearlake is located within the Burns Valley and Clear Lake Cache Formation groundwater basins. However, the project site represents a relatively small area compared to the overall surface area of the groundwater basins. In addition, a portion of the runoff from the proposed impervious surfaces would percolate through the on-site landscaped areas and recharge the basins. Therefore, any new impervious surfaces associated with the project would not interfere substantially with groundwater recharge within the area. Additionally, based on the above report, the combined domestic water demand is estimated as 137

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							gallons per capita per day with a peak demand multiplier of 1.8. The fire flow demands for sprinklered one- or two-family residences are anticipated as 500 gpm with a minimum residual pressure of 20 psi for a one-hour time duration, per the National Fire Protection Association Fire Code and confirmed by the Lake County Fire Protection District Fire Marshall. Existing water supply assumptions are based on a Fire Hydrant Flow Test performed by Highlands Water Company on April 131\ 2023. This shows that at 3009 Old Hwy 35 the existing water distribution network provides a static pressure of 59 psi with a residual pressure of 40 psi under 900 gpm flow conditions. The proposed water addition to the water distribution network consists of 611 diameter C900 pipe along Old Hwy 53 with branches up each new cul-d-sac. Pressure loss is modeled using the Hazen-Williams Equations through the EPANET 2.0 software provided by the US EPA. Therefore, the model results show that there is sufficient supply from the existing water distribution network with the proposed addition to meet the fire flow and domestic water demands throughout the proposed subdivision. Detailed results can be found in the attached calculation packet. **Based on the above, the project would result in a less-than-significant impact in substantially decreasing groundwater supplies and/or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**
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-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	☐	☒	☐	☐	☐	☐	**ci-iv) Less than Significant Impact with Mitigation Incorporated.** The project would create a 22-lot subdivision. Each lot may be developed with single family dwellings, accessory structures and supporting infrastructure. As discussed above, the project site is currently undeveloped and does not have any impervious surfaces. The development of single-family dwellings, accessory structures and supporting infrastructure would result in an increase of impervious surfaces on the site (Building pads/structures, asphalt/concrete roads, driveways, ect), which could alter the existing drainage pattern of the site and would result in increased concentrated stormwater runoff which could affect downstream properties. A Hydrologic Capacity Analysis was conducted for the project by Whitchurch Engineering, which shows that the project is feasible with proper engineering design to retain stormwater on site to a level that will not increase flows *(Refer to Attachment D)*. The City of Clearlake has been designated as a regulated small MS4 because the City's storm runoff discharges to a sensitive water body (Clear Lake). As such, the proposed project may be subject to the standards established in the MS4 permit, which would require that post-development peak stormwater runoff discharge rates not exceed the estimated pre-development rate. Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) the project site is shown as being in Flood Zone D, which indicates there is undetermined flood hazards on the site (See Figure 6). According to City of Clearlake - City Engineer/Flood Plain Manager, this water shed has shown that the creek to the north and adjacent to the project, does not overtop the creek bank nor the roadway culverts at Old Highway 53. In December 2022, County of Lake experienced a nearly 100-year storm event, and witness firsthand the drainage system and impacts City wide. According to the Clearlake - City Engineer/Flood Plain Manager, the City would treat this area similar to an AE Flood Zone Designation. **Therefore, to remain in compliance with all applicable Federal, State, and local agencies requirements, the following Mitigation Measure shall be implemented.**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
of polluted run-off; or iv) impede or redirect flood flows?							**Mitigation Measure:** **HYDRO-1. Permitting for any new structures on site shall require FEMA compliance. Permits for new construction shall require a pre-construction and post-construction flood elevation certificate prepared by a California Licensed Surveyor and/or Engineer. Said certificates shall be submitted at time of Building Permit Application(s).**
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** As discussed above, development of the project would not impede or redirect flood flows. Tsunamis are defined as sea waves created by undersea fault movement. The project site is not located in proximity to a coastline and would not be potentially affected by flooding risks associated with tsunamis. A seiche is a long-wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir. **The project site is not located near the shore of Clear Lake, and, therefore, would not be susceptible to impacts from seiches due to seismic activity.**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** The project would not conflict with or obstruct any water quality or groundwater management plans. Additionally, to control runoff, the project would be required to incorporate appropriate BMPs consistent with the City's Municipal Code and State Storm Water Drainage Regulations to prevent or reduce discharge of all construction and post-construction pollutants into the local storm drainage system.
SECTION XI. LAND USE AND PLANNING *Would the project:*							
a) Physically divide an established Community?	☐	☐	☐	☐	☐	☒	**No impact.** The project will not physically divide an established community or alter land uses so as to change the land use conditions in the surrounding community or isolate an existing land use.
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?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** The project has a Land Use Designation of "RR" Rural Residential and a General Plan Designation of "LDR" Low Density Residential. According to the General Plan, anticipated uses for the "Residential" to provide housing opportunities for lower density residential development, such as single-family homes on larger lots. The development of a single-family dwelling is a use by right as long as the applicant secures a Building Permit and adheres to the current California Building Codes and Standards. The project would not conflict with City policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, the City's noise standards, applicable SWRCB regulations related to stormwater, and standards set within the City of Clearlake General Plan and General Plan EIR.
SECTION XII. MINERAL RESOURCES *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?	☐	☐	☐	☐	☐	☒	**No Impact.** According to the City's General Plan, the only active mining taking place within city limits is aggregate mining. However, aggregate mineral resources or other mineral resources of State or local significance are not mapped within the City of Clearlake. **Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State.**
b) Result in the loss of availability of a locally important mineral resource recovery site	☐	☐	☐	☐	☐	☒	**No Impact.** See Question XII-a, above.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
delineated on a local general plan, specific plan, or other land use plan?							
SECTION XIII. 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?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** Some land uses are considered more sensitive to noise than others, and, thus, are referred to as sensitive noise receptors. Land uses often associated with sensitive noise receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Noise sensitive land uses are typically given special attention to help achieve protection and/or minimize excessive noise. The nearest sensitive receptors include existing single-family residences, located on old Highway 53, adjacent to the project site. Table 7.2 of the City's General Plan establishes maximum non-transportation interior and exterior noise level standards for residential land uses within the City. As shown in the table, the City has established a maximum interior noise level standard of 45 decibels (dB) equivalent continuous sound level (L_{eq}) for residential uses, and maximum exterior noise level standards of 55 dB L_{eq} during daytime (7:00 AM to 10:00 PM) hours, and 45 dB L_{eq} during nighttime (10:00 PM to 7:00 AM) hours. As established in Policy NO 1.5.1 of the City's General Plan, for projects that are required by CEQA to analyze noise impacts, a significant impact may occur regarding stationary and non-transportation noise sources if the project results in an exceedance of the noise level standards contained above, or the project would result in an increase in ambient noise levels by more than 3 dB, whichever is greater. In addition, where existing traffic noise levels are less than 60 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +5 dB L_{dn} increase in roadway noise levels would be considered significant; where existing traffic noise levels range between 60 and 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a +3 dB L_{dn} increase in roadway noise levels would be considered significant; and where existing traffic noise levels are greater than 65 dB L_{dn} at the outdoor activity areas of noise-sensitive uses, a + 1.5 dB L_{dn} increase in roadway noise levels would be considered significant. Figure 6 of this ISMND provides a current ambient noise levels (2016-General Plan Noise Element-Figure 6a) and future noise levels (2040-General Plan-Figure 6b) noise contour map that shows that the project site is impacted by noise from Highway 53 which travels along the east side of the project. It should be noted that the standards included in the City's General Plan do not apply to construction activities which are conducted according to City regulations. City regulations for construction activities are contained in Section 5-4 of the Clearlake Municipal Code. As noted therein, noise in excess of 65 dB at a distance within 50 feet of any dwelling or transient accommodation shall not be produced between the hours of 7:00 AM and 10:00 PM, except, pursuant to permission granted by the Building Official in any case where a building permit has been obtained, or by the City Engineer in any case where public work not requiring a building permit is being performed, construction equipment may be operated during daylight hours which produces noise up to a level of 80 dB when measured at a distance of 100

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							feet from the source. According to the General Plan, compliance with the City's construction requirements would be sufficient to reduce construction-related noise impacts to a less than significant level. This analysis does show that the project may result in potentially significant noise impacts, both from construction and from impacts to new residents from future traffic noise levels from Highway 53. **Therefore, the incorporated mitigation measures below, have reduced all potential impacts to less than significant levels.** **<u>Mitigation Measures:</u>** **NOI-1: All construction activities including engine warm-up shall be limited to weekdays and Saturday, between the hours of 7:00am and 7:00pm to minimize noise impacts on nearby residents.** **NOI-2: Permanent potential noise sources such as, generators used for power shall be designed and located to minimize noise impacts to surrounding properties.** **NOI-3: During construction noise levels shall not exceed 65 decibels within fifty (50) feet of any dwellings or transient accommodations between the hours of 7:00 AM and 6:00 PM. This threshold can be increased by the Building Inspector or City Engineer have approved an exception in accordance with Section 5-4.4(b)(1) of the City Code. An exception of up to 80 decibels may be approved within one hundred (100) feet from the source during daylight hours. Project is expected to result in less than significant impacts with regards to noise and vibration.**
b) Generate a substantial temporary (non-construction) or permanent increase in vibration at existing sensitive receptors in the vicinity of the project site?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of amplitude and frequency. A person's perception of the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. The project would only cause elevated vibration levels during construction, as the project would not involve any uses or operations that would generate substantial groundborne vibration. **Therefore, the project, including the development of the individual parcels would not generate a substantial temporary (non- construction) or permanent increase in vibration at existing sensitive receptors in the vicinity of the project site.**
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	☐	☐	☐	☐	☐	☒	**No Impact.** The nearest airport to the site is Lampson Field Airport, which is located approximately 22 miles west of the site. As such, the project site is not located within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport or public use airport. Therefore, the project would not expose people residing or working in the project area to excessive noise levels or excessive ground borne vibration.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
people residing or working in the project area to excessive noise levels and generate excessive ground borne vibration?							
SECTION XIV. POPULATION AND HOUSING *Would the project:*							
a) Induce substantial unplanned population growth in an area, either directly or indirectly?	☐	☐	☐	☐	☒	☐	**Less than Significant.** The project is anticipated to result in an increase in population of the City of approximately 60 people. This is based on complete development of 22 housing units at a current average household size of 2.72 people. More people or less could ultimately occupy the project depending on demographic characteristics the potential to development of additional dwelling units on the site, such as the creation of accessory dwelling units. This is speculative and not valid for determining for planned population growth in the City. The City's General Plan and related General Plan Environmental Impact Report (EIR) anticipated that the site would be developed at a low residential density of between 1 and 4 dwelling units per acre which would result in a planned population for the site of between 30 and 120 dwelling units, or between 91 and 326 people; the planned population growth for this site. **Since the project will result in a reduced population than planned in the General Plan, this project will not induce substantial unplanned growth either directly or indirectly in the City**.
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐	☐	☒	**No Impact.** The project parcel is vacant and undeveloped and would not result in the destruction of any permanent or temporary residences. As such, the proposed project would not displace a substantial number of existing housing or people and would not necessitate the construction of replacement housing elsewhere.
SECTION XV. 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	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** (a) Fire Protection: Fire protection services are currently provided to the site by the Lake County Fire Department (LCFPD). The nearest fire station to the project site is Station #71, located approximately 1.2 miles from the project site by way of Old Highway 53. All construction shall adhere to all applicable Federal, State and local agency requirements, including the CA Fire Code. (b) Police Protection: The City of Clearlake Police Department provides police protection services at the project site. The City's Police Department headquarters is located at 14050 Olympic Drive, approximately 1.3 miles from the project site. The General Plan EIR determined that implementation of General Plan goals, policies, and actions would ensure that build-out of the General Plan would result in a less than significant impact with respect to fire and police protection services. Furthermore, new or expanded fire protection facilities would not be required as a result of the project. Additionally, the project was circulated during the initial reviewing and commenting period, and the Clearlake Police Department has no concerns at this time.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
objectives for any of the following public services: a) Fire Protection? b) Police Protection? c) Schools? d) Parks? e) Other public facility?							The project is consistent with the project site's current General Plan and zoning designations, potential increases in demand for fire and police protection services associated with buildout of the site have been anticipated by the City and analyzed in the General Plan EIR. Furthermore, the project would comply with all applicable State and local requirements related to fire safety and security, including installation of fire sprinklers. Compliance with such standards would minimize fire and police protection demands associated with the project. Therefore, the project would have a less-than-significant impact related to the need for new or physically altered fire or police protection facilities, the construction of which could cause significant environmental impacts. (c) School and Fire Services: The project would be subject to payment of School Impact Mitigation Development prior to the issuance of any Building Permits for each individual lot. (d) Parks: The project would not impact the local parks and recreation department. (e) Other Public Facilities: The project would not impact any additional public facilities. **Therefore, based on the above the project would not result in substantial adverse physical impacts associated with the provision of new and/or physically altered government facilities, need for new or physically altered government facilities, or 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 above public services.**
SECTION 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?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The proposed project would include the development of a 22 Lot Subdivision for residential development, which may increase the use of existing neighborhoods, regional parks and/or other recreational facilities. As noted in Section XIV, Population, of this ISMD, the project will result in an increase of about 60 people which will increase the demand for recreational facilities. However, this increase in demand is anticipated in the General Plan and the General Plan Environmental Impact Report (EIR).
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?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The project does not necessitate the need or require the construction or expansion of recreational facilities which might have an adverse impact on the environment. See Question XVI-a, above.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
SECTION XVII. TRANSPORTATION *Would the project:*							
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact:** A Transportation Impact Analysis (Focused Transportation Analysis for the Burns Valley Subdivision Project) was prepared for the project by W-Trans in May 2023 that includes an assessment of potential transportation impacts from the project related to this ISMND (refer to Attachment E). As noted in the third bullet point, the project would not conflict with any policies or plans so it would have a less-than significant impact on transportation for these modes. • The proposed project would be expected to generate an average of 207 trips on a daily basis, including 15 trips during the morning peak hour and 21 trips during the evening peak hour. • The lack of existing pedestrian, bicycle, and transit facilities is considered acceptable for the limited anticipated demand. • The project would not conflict with any policies or plans so it would have a less-than significant impact on transportation for these modes. • The proposed project would meet the small project screening criteria identified in the Lake County Vehicle Miles Traveled (VMT)Regional Baseline Study and therefore can be presumed to have a less-than-significant VMT impact. • Sight lines along Old Highway 53 at the proposed street locations are adequate to accommodate all turns into and out of the project site. • To maintain adequate sight lines, any new signage, monuments, or other structures should be kept out of the vision triangles at the project intersections. Further, any landscaping planted in the vision triangle should be placed and maintained to ensure that the area between three and seven feet from the pavement is foliage free. • The segment of Old Highway 53 from Olympic Drive to SR 53 had an above-average collision rate for the five-year period evaluated, but with so few collisions dispersed along the segment no pattern was evident, so no remedial action is recommended. • Left-turn lanes would not be warranted on Old Highway 53 at the proposed project streets. • The proposed project would have a less-than-significant impact on emergency response times and access for emergency responders is anticipated to be acceptable assuming incorporation of appropriate design standards. Recognizing that the project will generate in excess of 200 daily vehicle trips, the project will increase cumulative traffic levels in the City and could impact the City's transportation system. In 2020, the City adopted Ordinance No. 247-2020, Enacting Development Impact Fees to mitigate cumulative traffic impacts from new development. This project will be subject to payment of these fees upon securing building permits for each new dwelling unit. These fees are expected to mitigate cumulative impacts from traffic generation from the project to a level of non-significance.
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of Vehicle Miles Traveled (VMT) attributable to a project is the most appropriate measure of transportation impacts. As noted in the Traffic Assessment conclusions, the project would meet the small project screening criteria identified in the Lake

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							County Vehicle Miles Traveled (VMT)Regional Baseline Study and therefore can be presumed to have a less-than-significant VMT impact. The California Office of Planning and Research Technical Advisory recommends development of screening thresholds pf significant for CEQA that can be applied to quickly to identify projects that would be expected to have a less-than-significant VMT impact without conducting a detailed analysis. One of these screening criteria applies to "small projects". This project, which will result in the development of 22 housing units is clearly identified as a small project that meets the definition of a small project that does not require a large scale VMT analysis. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). A letter dated January 12, 2023 from Jesse Robertson, Transportation Planning, Caltrans District indicates that this project should be evaluated as a larger project that is subject to a large scale VMT analysis (see Attachment F). The letter indicates that the project should be considered as a 44 dwelling unit project since each of the 22 lots within the subdivision could add an additional dwelling unit from development of additional accessory dwelling units. As lead agency for the project, the City's methodology for reviewing for environmental impacts for this project is 22 dwelling units; the number of primary residential dwelling units proposed for development. City staff concurs with the conclusions of the traffic study that indicates that" "ADUs are exempt from CEQA considerations so it would be unreasonable to consider them in the VMT analysis or analysis of any other CEQA topic areas. Further, no ADUs are proposed to be constructed as part of the project so it would be speculative to estimate whether or not any homeowners may decide to build an ADU on their properties in the future. For these reasons, ADUs were not analyzed as part of the project."
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The Transportation Impact Analysis prepared for the proposed project included an evaluation of traffic safety issues in terms of the adequacy of sight distance. The Analysis concludes: • *Sight lines along Old Highway 53 at the proposed street locations are adequate to accommodate all turns into and out of the project site.* • *The segment of Old Highway 53 from Olympic Drive to SR 53 had an above-average collision rate for the five-year period evaluated, but with so few collisions dispersed along the segment no pattern was evident, so no remedial action is recommended.* • *Left-turn lanes would not be warranted on Old Highway 53 at the proposed project streets.* • *To maintain adequate sight lines, any new signage, monuments, or other structures should be kept out of the vision triangles at the project intersections. Further, any landscaping planted in the vision triangle should be placed and maintained to ensure that the area between three and seven feet from the pavement is foliage free.* To help reduce and/or maintain adequate line of sight for increased vehicle traffic, the following mitigation measure has been incorporated to reduce potential impacts to less than significant levels. **Mitigation Measure:**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							TRI-1: To maintain adequate sight lines, any new signage, monuments, and/or landscaping on Lots 1, 12, 13 and 22 shall be kept out of the vision triangles along the intersections on Old Highway 53.
d) Result in inadequate emergency access?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact.** The Traffic Analysis indicates that the project would have a less-than-significant impact on emergency response times and access for emergency responders is anticipated to be acceptable assuming incorporation of appropriate design standards.
SECTION XVIII. TRIBAL CULTURAL RESOURCES *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with 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	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** Greg White of Sub-Terra Heritage Resource Investigations conducted a Cultural Resource Investigation of the proposed 30.608-acre project parcel. In addition to the Cultural Resource Investigation Report, City representatives met with project applicants and tribal representatives on April 6th, 2023, and on July 11th, 2023, as part of consultation under AB 52, and subsequently exchanged ideas, comments, and information through other means regarding Tribal Cultural Resources. According to the Cultural Resource Investigation Report, the Project Site does not contain any resources listed or formally deemed eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. However, the Cultural Resource Investigation Report found that the Project Site contains one tribal cultural resource that is potentially eligible for the California Register of Historic Resources. The Project has been designed to avoid any impacts to this potentially eligible resource. No other impacts to tribal cultural resources are anticipated. **In the unlikely event Inknown tribal cultural resources are discovered during project development, Mitigation Measures CUL-1 through CUL-6 and TCR-1 through TCR-4 will be implemented to ensure any impacts to tribal cultural resources will be less than significant.** **<u>Mitigation Measures:</u>** **TCR-1: Before ground disturbing activities, a reburial area shall be designated on the Project site, in the event that tribal cultural resources materials are discovered during construction which cannot be avoided or feasibly preserved in place. The reburial area shall be in a mutually agreed upon location with the Consulting Tribe, in an area not subject to further disturbance, and capped after ground disturbance is complete.** **TCR-2: Before ground disturbing activities, contractors engaged in ground disturbing activities shall receive a one-time, meaningful training from a tribal representative regarding tribal cultural sensitivity and tribal cultural resources.** **TCR-3: The project shall comply with existing state law including but not limited to, Health and Safety Code Section 7050.5 and Public Resources Code sections 5097.94-5097.99 in the event of the discovery of Native American human remains during ground disturbance.** **TCR-4: In the event that reburial of tribal cultural resources in-place or on site is infeasible, as determined by the City and as contemplated**

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
							in CEQA Guidelines 15126.4(b)(3)(C), the provisions of CUL-2 shall be followed, with the following additional steps. the data recovery plan shall be submitted to the Native American Heritage Commission (NAHC). recognized experts in its discipline. Any additional mitigation measures recommended by NAHC, as reviewed and approved by the City, shall be undertaken prior to and during construction activities. Although the precise details of those measures would be based on the nature and extent of the resource(s) uncovered on the site, the measures shall be consistent with the avoidance and mitigation strategies described in this Initial Study. The owner and City shall consult with the Consulting tribe before any removal of tribal cultural soils from the project site.
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.	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** As described above, Greg White of Sub-Terra Heritage Resource Investigations conducted a Cultural Resource Investigation on the proposed 30.608-acre project parcel. In addition to the Cultural Resource Investigation report, City representatives met with project applicants and tribal representatives on April 6th, 2023, and on July 11th, 2023, as part of consultation under AB 52, and subsequently exchanged ideas, comments, and information through other means regarding Tribal Cultural Resources. According to the report, the study was completed in compliance with CEQA, PRC Section 5024.1 (14CCR4850 et seq). These provisions establish the California Register of Historical Resources (CRHR) whose purpose is to create and maintain a list of historical resources to be protected—to the extent prudent and feasible—from material impairment and substantial adverse change. Any cultural resource (defined under these provisions as any object, building, structure, site, area, place, record, or manuscript) identified during inventory should be assessed for potential direct or indirect affects, and any resource likely to be affected must then be evaluated for Integrity and CRHR Eligibility. As described above, the Cultural Resource Investigation Report found that the Project Site contains one tribal cultural resource that is potentially eligible for the California Register of Historic Resources. The Project has been designed to avoid any impacts to this potentially eligible resource. No other impacts to tribal cultural resources are anticipated. **In the unlikely event unknown tribal cultural resources are discovered during project development, Mitigation Measures CUL-1 through CUL-6 and TCR-1 through TCR-4 will be implemented to ensure any impacts to tribal cultural resources will be less than significant.**
SECTION XIX. UTILITIES 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	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** All utilities for the proposed 22 lot subdivision would be provided by way of connection to the Highland Water Company and the use of onsite waste management systems (septic). All infrastructure shall adhere to all applicable regulations and codes at the time of installation/connections. In addition, the project is consistent with the project site's General Plan land use designation, so utility demand for the project has generally been anticipated by the City. According to Highlands Water company there is sufficient water to be able to serve the project and the residential development. Therefore, the project would result in a less-than-significant impact related to the relocation or

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
construction or relocation of which could cause significant environmental effects?							construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** The project would be served potable water by Highland Water Company. According to Highlands Water company there is sufficient water to be able to serve the project and the residential development. Highlands Water Company would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a less-than-significant impact would occur. In 2006, a Water Demand Forecast was prepared for Lake County by the Lake County Watershed Protection District. The Water Demand Forecast was based on information provided in the County's Water Inventory and Analysis report, which analyzed water resources within the County. Based on the Water Demand Forecast, urban water demand was anticipated to increase 81 percent, from 10,900 acre-feet per year in 2000 to 19,738 acre-feet per year by the year 2040. However, the Water Demand Forecast used a high population projection estimate that the City of Clearlake would grow to 20,196 residents by 2040, as compared to the projected population of 18,702 residents anticipated by the City's 2040 General Plan. Therefore, the General Plan EIR concluded that because the County anticipated a much larger population growth than what was anticipated for buildout of the City's General Plan, water purveyors would be prepared to provide services for the City, and with implementation of General Plan policies, which would help to further reduce water consumption within the City, a less-than-significant impact would occur. The project is consistent with the City's General Plan for rural residential land use and the water demand associated with buildout anticipated by the City and accounted for in regional planning efforts, including the Water Demand Forecast. In addition, the project would comply with Section 18-20.130 of the City's Municipal Code, which contains the City's Water Efficient Landscape Ordinance.
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?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact. Less than Significant Impact.** The project will provide separate onsite waste management systems (septic) for each lot. All onsite waste management systems (septic) shall adhere to all applicable federal, State and local agency requirements, including Lake County Environmental Health Department. No impacts on any public wastewater systems from this project.
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** Solid waste, recyclable materials, and compostable material collection within the project area is provided by Clearlake Waste Solutions. The nearest active landfill to the project site is Eastlake Landfill in Clearlake, California, located approximately 28 miles from the site. The Eastlake Landfill has a daily permitted disposal of approximately 200 tons per day, and a maximum permitted capacity of 6.05 million cubic yards. The Eastlake Landfill is expected to remain active until

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
otherwise impair the attainment of solid waste reduction goals?							the year 2023 and has a remaining capacity of approximately 2.86 million cubic yards. However, the Lake County Public Services Department is proposing an expansion of the Landfill to extend the landfill's life to approximately the year 2046; increasing the landfill footprint from 35 acres to 56.6 acres. The expansion is proposed to begin in 2023 and will take place in phases, with modules constructed every four to nine years. Pursuant to the CAL Green Code, at least 65 percent diversion of construction waste is required for projects permitted after January 1, 2017. Because the project would only create a temporary increase in the amount of waste during construction activities, the project would not result in a significant impact related to solid waste generation during construction. With respect to operational solid waste generation, the project would not be expected to generate substantial amounts of solid waste due to the relatively small scale of the project. In addition, because the project is consistent with the project site's current General Plan land use and zoning designations, the project would not result in increased solid waste generation beyond what has been previously anticipated for the site by the City and analyzed in the General Plan EIR. 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 and would comply with federal, State, and local management and reduction statutes and regulations.
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact.** See Question XIX, d, above.
SECTION XX. WILDFIRE *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*							
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐	☒	☐	**Less Than Significant Impact**. The project site is not located within a Moderate and/or High to Very High Fire Hazard Severity Zone nor within a State Responsibility Area (SRA). Additionally, the project would be required to comply with all applicable requirements of the California Building and Fire Codes/Standards. The developed nature of the area surrounding the project site generally precludes the spread of wildfire to the site. Thus, the potential for wildland fires to reach the project site would be low. According to the TIS, all study intersections are expected to operate at acceptable Levels of Service under Existing, near-term Baseline, and Future conditions/improvements with and without the addition of trips from the project assuming implementation of side-street stop controls at the proposed Old Highway 53.
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from	☐	☐	☐	☐	☒	☐	**Less than Significant Impact. See Question XX-a, above.** The project would not exacerbate wildfire risks and/or expose persons to pollutant concentrations in the event of a wildfire in the area. Additionally, the project would be required to adhere to all Federal, State, and local fire requirements/regulations related to the use of hazardous and/or flammable materials, including all mitigation measures and/or conditions of approval imposed on such use.

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
a wildfire or the uncontrolled spread of a wildfire?							
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact**. **See Question XX-a, above.** All infrastructure shall adhere to all Federal, State, and local agency requirements and would require inspections during construction/development to ensure all structures have meet the applicable requirements per the approved building permit application/plans. Furthermore, the developer would coordinate with the appropriate utilities companies to meet their standards/requirements.
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?	☐	☐	☐	☐	☒	☐	**Less than Significant Impact**. The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, and/or drainage changes.
SECTION XXI. MANDATORY 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?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** As discussed in Section IV, Biological Resources, of this IS/MND, while the potential exists for special-status plant species, as well as nesting birds and raptors protected according to the Biological Assessment/Report, Mitigation Measures BIO-1 through BIO-8 would ensure that impacts to Biological Resources would be less than significant. However, given that unknown cultural resources have the potential to exist on-site, Mitigation Measures CUL-1 through CUL-6 and TCR -1 through TCR-4 would ensure that impacts to Cultural and Tribal Resources would be less-than-significant. Considering the above, the proposed project would not result in impacts associated with the following: 1. *Would not degrade the quality of the environment.* 2. *Would not substantially reduce or impact the habitat of fish or wildlife species.* 3. *Would not cause fish or wildlife populations to drop below self-sustaining levels.* 4. *Would not threaten to eliminate a plant or animal community.* 5. *Would not reduce the number or restrict the range of a rare or endangered plant or animal.* 6. *Would not eliminate important examples of the major periods of California history or prehistory. Therefore, with mitigation incorporated, a less-than-significant impact would occur.*

IMPACT CATEGORIES*	1	2	3	4	5	6	All determinations need explanation. Reference to documentation, sources, notes and correspondence.
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.)	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** The project in conjunction with other developments within the City of Clearlake may incrementally contribute to cumulative impacts in the project area. However, as demonstrated in this IS/MND, all potential environmental impacts that may occur as a result of this project have been reduced to a less-than-significant level through compliance with the incorporated mitigation measures included in this IS/MND, as well as applicable General Plan Policies, Municipal Code Standards, and other applicable Federal, State and local regulations. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the project would not result in a cumulatively considerable contribution to cumulative impacts in the City of Clearlake, and the project's incremental contribution to cumulative impacts would be less than significant with the incorporated mitigation measures.
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	☐	☐	**Less than Significant Impact with Mitigation Incorporated.** As described in this IS/MND, the proposed project would comply with all applicable General Plan Policies, Municipal Code Standards, other applicable Federal, State and local regulations, in addition to the mitigation measures included herein. Additionally, as discussed in Section III, Air Quality; Section IV Biological Resources; Section V Cultural Resources, Section X Hydrology and Water Quality, Section XIII Noise & Vibrations, Section XVII Transportation, Section XVIII Tribal Cultural Resources and Section XXI Mandatory Findings of Significance of this IS/MND, the project would not cause substantial effects to human beings (directly or indirectly), including effects related to exposure to air pollutants and hazardous materials, with the mitigation measures incorporated.

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, Biological Resources, Cultural Resources, Geology & Soils, Noise & Vibration, Transportation, Hydrology/Water Quality 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.

MITIGATION MONITORING PROGRAM
DANCO SUBDIVISION DEVELOPMENT
IS 2022-08
SCH No. 2023110007

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
AIR-1	Air Quality	Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.		
AIR-2.	Air Quality	Construction activities shall be conducted with adequate dust suppression methods, including watering during grading and construction activities to limit the generation of fugitive dust or other methods approved by the Lake County Air Quality Management District. Prior to initiating soil removing activities for construction purposes, the applicant shall pre-wet affected areas with at least 0.5 gallons of water per square yard of ground area to control dust.		
AIR 3.	Air Quality	Driveways, access roads and parking areas shall be surfaced in a manner to minimize dust. The applicant shall obtain all necessary encroachment permits for any work within the right-of-way. All improvement shall adhere to all applicable federal, State and local agency requirements		
AIR 4.	Air Quality	Any disposal of vegetation removed as a result of lot clearing shall be lawfully disposed of, preferably by chipping and composting, or as authorized by the Lake County Air Quality Management District and the Lake County Fire Protection District.		
AIR-5.	Air Quality	During construction activities, the applicant shall remove daily accumulation of mud and dirt from any roads adjacent to the site.		
AIR-6.	Air Quality	Grading permits shall be secured for any applicable activity from the Community Development Department, Building Division. Applicable activities shall adhere to all grading permit conditions, including Best Management Practices. All areas disturbed by grading shall be either surfaced in manner to minimize dust, landscaped or hydro seeded. All BMPs shall be routinely inspected and maintained for life of the project		
AIR-7	Air Quality	Construction activities that involve pavement, masonry, sand, gravel, grading, and other activities that could produce airborne particulate should be conducted with adequate dust controls to minimize airborne emissions. A dust mitigation plan may be required should the applicant fail to maintain adequate dust controls		
AIR-8	Air Quality	If construction or site activities are conducted within Serpentine soils, a Serpentine Control Plan may be required. Any parcel with Serpentine soil shall obtain proper approvals from LCAQMD prior to beginning any construction activities. Contact LCAQMD for more details.		

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
AIR-9	Air Quality	All engines must notify LCAQMD prior to beginning construction activities and prior to engine Use. Mobile diesel equipment used for construction and/or maintenance shall follow 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	Air Quality	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	Air Quality	Significant dust may be generated from increased vehicle traffic if driveways and parking areas are not adequately surfaced. Surfacing standards shall 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.		
AIR-12	Air Quality	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 shall be performed utilizing water trucks, if necessary, reduce travel times through efficient time management and consolidating solid waste removal/supply deliveries, and speed limits		
Biological Resources				
BIO-1.	Biological Resources	Prior to grading and/or soil disturbance, a follow-up survey, prepared by qualified professionals for special status plant species, special status bat species, and nesting birds shall be conducted. Said survey shall comply with minimum standards of referenced in the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.		
BIO-2.	Biological Resources	Prior to grading and/or soil disturbance, a follow-up survey for the Bumble Bee Survey shall be conducted by a qualified biologist (approved by the City Planning Department). Said survey shall occur during the western bumble bee active season, including focusing on foraging habitat and suitable underground refuge areas identified during the habitat assessment.		

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
		- The surveyor shall spend at least one hour per 3-acre area surveying suitable habitat, based on survey protocols for the rusty patched bumble bee (B. affinis) (USFWS 2019). - Surveyor(s) shall note other species of bumble bee, approximate number of each species and photographs of bumble bees shall be taken to properly identify species of bumble bee present onsite (USFWS 2019). If western bumble bee is not identified in or immediately adjacent to the Study Area (within 25 feet), no further surveys or actions would be required. - Results from the habitat assessment and follow-up surveys shall be provided to the California Department of Fish and Wildlife. If a western bumble bee individual or colony is identified in the Study Area or within 25 feet, then a 25-foot setback shall be implemented around the colony and consultation with CDFW may be necessary if the project activities will impact an active western bumble bee colony. Since the western bumble bee is a candidate species under California Endangered Species Act, incidental take coverage may be required for project-related impacts that will result in take of WBB.		
BIO-3.	Biological Resources	Project design shall incorporate a 25-foot setback around milkweed habitat on the project site to protect larval habitat for Monarch Butterfly during the summer breeding season (March 16 through October 31). Said 25-foot setback design and establishment, shall be determined by a qualified biologist and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.		
BIO-4.	Biological Resources	Project activities that occur during nesting season shall observe all mitigation measures in accordance with minimum standards referenced in the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.		
BIO-5.	Biological Resources	A 50-foot setback shall be established from the intermittent drainage for all building development and septic system development as part of the site plan. Said setback design and establishment, shall be determined by a qualified biologist and follow minimum standards of the HELIX Environmental Planning, Inc. Biological Resources Assessment (BRA) as revised, dated May 2023.		
BIO-6	Biological Resources	Prior to grading and/or soil disturbance, a qualified biologist shall conduct environmental awareness training to all project-related personnel prior to the initiation of work. The training shall follow the same guidelines as the special-status amphibians training described in the Biological Assessment prepared by HELIX Environmental Consulting. (as revised dated May, 2023).		

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
BIO-7	Biological Resources	BIO-7: Prior to any tree removal (qualifying trees per Chapter 18-40 of the Municipal Code, Native Tree Protection), a complete tree survey shall be conducted by a qualified arborist that identifies all trees that have a greater diameter of 6" at breast height, type, and health, on the project site to be removed. *The survey/preservation plan shall include recommended measures to preserve trees on the project site during this initial construction, such as fencing at dripping lines, etc.*		
Cultural Resources				
CUL-1.	Cultural Resources	During construction activities, if any subsurface archaeological remains are uncovered, all work shall be halted within 100 feet of the find and the owner shall utilize a qualified cultural resources consultant to identify and investigate any subsurface historic remains and define their physical extent and the nature of any built features or artifact-bearing deposits.		
CUL-2.	Cultural Resources	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. The cultural resource report shall be prepared with input from the Consulting Tribe. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – it shall 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 by the City 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 within 90 days of completion of the Project. Archeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If a historic 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. It is understood that destructive data testing and/or curation of tribal cultural resources is strongly opposed by the Consulting Tribe and should be avoided.		

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
CUL-3.	Cultural Resources	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 be contacted within 24 hours. The Native American Heritage Commission must then identify the "most likely descendant(s)". 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 Code 5097.98.]		
CUL-4	Cultural Resources	On or prior to the first day of construction the owner shall organize cultural resource sensitivity training for contractors involved in ground disturbing activities.		
CUL-5	Cultural Resources	The shaded area indicated on the Southern portion of said subdivision map shall be a non-buildable area, where no construction is allowed. The shaded area shall be identified on the parcel map and be titled as a non-buildable area.		
CUL-6:	Cultural Resources	Tribal monitoring shall be required during ground disturbing activities in sensitive areas of the project area, as specifically identified in a confidential map on file with the City. The Consulting Tribe may provide spot check monitoring or voluntary monitoring, at no cost, in other areas of the project with prior coordination and approval of the owner. Tribal monitoring shall comply with the City of Clearlake's Tribal Monitoring Policy.		
Hydrology and Water Quality				
HYDRO-1	Hydrology & Water Quality	Permitting for any new structures on site shall require FEMA compliance. Permits for new construction shall require a pre-construction and post-construction flood elevation certificate prepared by a California Licensed Surveyor and/or Engineer. Said certificates shall be submitted at time of Building Permit Application(s).		
Noise and Vibrations				
NOS-1.	Noise & Vibrations	All construction activities including engine warm-up shall be limited to weekdays and Saturday, between the hours of 7:00am and 7:00pm to minimize noise impacts on nearby residents.		
NOS-2.	Noise & Vibrations	NOI-2: Permanent potential noise sources such as, generators used for power shall be designed and located to minimize noise impacts to surrounding properties.		

Mitigation Measure	Type	Monitoring Shown on Department Plans	Verified Implementation	Remarks
NOS-3.	Noise & Vibrations	During construction noise levels shall not exceed 65 decibels within fifty (50) feet of any dwellings or transient accommodations between the hours of 7:00 AM and 6:00 PM. This threshold can be increased by the Building Inspector or City Engineer have approved an exception in accordance with Section 5-4.4(b)(1) of the City Code. An exception of up to 80 decibels may be approved within one hundred (100) feet from the source during daylight hours. Project is expected to result in less than significant impacts with regards to noise and vibration.		
Transportation				
TRI-1.	Transportation	To maintain adequate sight lines, any new signage, monuments, and/or landscaping on Lots 1, 12, 13 and 22 shall be kept out of the vision triangles along the intersections on Old Highway 53.		
Tribal Cultural Resources				
TCR-1.	Tribal Resources	Before ground disturbing activities, a reburial area shall be designated on the Project site, in the event that tribal cultural resources materials are discovered during construction which cannot be avoided or feasibly preserved in place. The reburial area shall be in a mutually agreed upon location with the Consulting Tribe, in an area not subject to further disturbance, and capped after ground disturbance is complete.		
TCR-2.	Tribal Resources	Before ground disturbing activities, contractors engaged in ground disturbing activities shall receive a one-time, meaningful training from a tribal representative regarding tribal cultural sensitivity and tribal cultural resources.		
TCR-3.	Tribal Resources	The project shall comply with existing state law including but not limited to, Health and Safety Code Section 7050.5 and Public Resources Code sections 5097.94-5097.99 in the event of the discovery of Native American human remains during ground disturbance.		
TCR-4.	Tribal Resources	In the event that reburial of tribal cultural resources in-place or on site is infeasible, as determined by the City and as contemplated in CEQA Guidelines 15126.4(b)(3)(C), the provisions of CUL-2 shall be followed, with the following additional steps. the data recovery plan shall be submitted to the Native American Heritage Commission (NAHC). recognized experts in its discipline. Any additional mitigation measures recommended by NAHC, as reviewed and approved by the City, shall be undertaken prior to and during construction activities. Although the precise details of those measures would be based on the nature and extent of the resource(s) uncovered on the site, the measures shall be consistent with the avoidance and mitigation strategies described in this Initial Study. The owner and City shall consult with the Consulting tribe before any removal of tribal cultural soils from the project site		

Explanation of Headings

- Type = Project (mitigation for this specific project), ongoing, and/or cumulative.
- Monitoring Department = Department or agency responsible for monitoring a particular mitigation measure.
- Shown on Plans = When a mitigation measure is shown on the construction plans, this column must be initialed and dated.

- Verified Implementation = When mitigation measures have been implemented, this column must be initialed and dated.
- Remarks = Area for describing status of ongoing mitigation measures, or other information.

ATTACHMENTS "A" THROUGH "G"

FOR

MITIGATED NEGATIVE DECLARATION

ENVIRONMENTAL ANALYSIS (CEQA)

INITIAL STUDY IS 2022-08

Attachment A

Danco SD Project - Lake County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Danco SD Project

Lake County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	20.00	Dwelling Unit	6.49	36,000.00	57

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	67
Climate Zone	1			**Operational Year**	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Off-road Equipment -

Grading -

Demolition -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	LoadFactor	0.42	0.42

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	LoadFactor	0.30	0.30
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblSequestration	NumberOfNewTrees	0.00	200.00

2.0 Emissions Summary

Danco SD Project - Lake County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.8291	35.0765	36.0156	0.0794	19.8049	1.5768	21.0720	10.1417	1.4814	11.3074	0.0000	7,653.5200	7,653.5200	1.8990	8.7800e-003	7,703.5902
2024	56.5024	13.5847	16.4695	0.0279	0.1232	0.6144	0.6854	0.0327	0.5779	0.5971	0.0000	2,654.9830	2,654.9830	0.7188	8.5100e-003	2,672.6908
Maximum	**56.5024**	**35.0765**	**36.0156**	**0.0794**	**19.8049**	**1.5768**	**21.0720**	**10.1417**	**1.4814**	**11.3074**	**0.0000**	**7,653.5200**	**7,653.5200**	**1.8990**	**8.7800e-003**	**7,703.5902**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	3.8291	35.0765	36.0156	0.0794	19.8049	1.5768	21.0720	10.1417	1.4814	11.3074	0.0000	7,653.5200	7,653.5200	1.8990	8.7800e-003	7,703.5902
2024	56.5024	13.5847	16.4695	0.0279	0.1232	0.6144	0.6854	0.0327	0.5779	0.5971	0.0000	2,654.9830	2,654.9830	0.7188	8.5100e-003	2,672.6908
Maximum	**56.5024**	**35.0765**	**36.0156**	**0.0794**	**19.8049**	**1.5768**	**21.0720**	**10.1417**	**1.4814**	**11.3074**	**0.0000**	**7,653.5200**	**7,653.5200**	**1.8990**	**8.7800e-003**	**7,703.5902**

Danco SD Project - Lake County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

Danco SD Project - Lake County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.7364	0.6167	39.4306	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2517
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611
Mobile	1.0278	1.1352	7.3645	0.0121	1.1538	0.0132	1.1670	0.3080	0.0124	0.3204		1,226.9725	1,226.9725	0.0895	0.0649	1,248.5485
Total	**32.7708**	**1.8081**	**46.8190**	**0.0810**	**1.1538**	**5.3243**	**6.4781**	**0.3080**	**5.3235**	**5.6315**	**555.4346**	**1,534.6195**	**2,090.0541**	**0.6063**	**0.1099**	**2,137.9613**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.7364	0.6167	39.4306	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2517
Energy	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611
Mobile	1.0278	1.1352	7.3645	0.0121	1.1538	0.0132	1.1670	0.3080	0.0124	0.3204		1,226.9725	1,226.9725	0.0895	0.0649	1,248.5485
Total	**32.7708**	**1.8081**	**46.8190**	**0.0810**	**1.1538**	**5.3243**	**6.4781**	**0.3080**	**5.3235**	**5.6315**	**555.4346**	**1,534.6195**	**2,090.0541**	**0.6063**	**0.1099**	**2,137.9613**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/24/2023	6/20/2023	5	20	
2	Site Preparation	Site Preparation	6/21/2023	7/4/2023	5	10	
3	Grading	Grading	7/5/2023	8/1/2023	5	20	
4	Building Construction	Building Construction	8/2/2023	6/18/2024	5	230	
5	Paving	Paving	6/19/2024	7/16/2024	5	20	
6	Architectural Coating	Architectural Coating	7/17/2024	8/13/2024	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 72,900; Residential Outdoor: 24,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	1	8.00	158	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	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
Demolition	Generator Sets	2	8.00	84	0.74
Demolition	Pavers	1	8.00	130	0.42
Demolition	Surfacing Equipment	1	8.00	263	0.30
Demolition	Surfacing Equipment	2	8.00	263	0.30

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	12	30.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	7.00	2.00	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 Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6223	34.9685	34.7143	0.0770		1.5750	1.5750		1.4798	1.4798		7,416.7634	7,416.7634	1.8881		7,463.9650
Total	**3.6223**	**34.9685**	**34.7143**	**0.0770**		**1.5750**	**1.5750**		**1.4798**	**1.4798**		**7,416.7634**	**7,416.7634**	**1.8881**		**7,463.9650**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2068	0.1080	1.3013	2.3400e-003	0.2464	1.7600e-003	0.2482	0.0654	1.6200e-003	0.0670		236.7566	236.7566	0.0109	8.7100e-003	239.6252
Total	**0.2068**	**0.1080**	**1.3013**	**2.3400e-003**	**0.2464**	**1.7600e-003**	**0.2482**	**0.0654**	**1.6200e-003**	**0.0670**		**236.7566**	**236.7566**	**0.0109**	**8.7100e-003**	**239.6252**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6223	34.9685	34.7143	0.0770		1.5750	1.5750		1.4798	1.4798	0.0000	7,416.7634	7,416.7634	1.8881		7,463.9650
Total	**3.6223**	**34.9685**	**34.7143**	**0.0770**		**1.5750**	**1.5750**		**1.4798**	**1.4798**	**0.0000**	**7,416.7634**	**7,416.7634**	**1.8881**		**7,463.9650**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2068	0.1080	1.3013	2.3400e-003	0.2464	1.7600e-003	0.2482	0.0654	1.6200e-003	0.0670		236.7566	236.7566	0.0109	8.7100e-003	239.6252
Total	**0.2068**	**0.1080**	**1.3013**	**2.3400e-003**	**0.2464**	**1.7600e-003**	**0.2482**	**0.0654**	**1.6200e-003**	**0.0670**		**236.7566**	**236.7566**	**0.0109**	**8.7100e-003**	**239.6252**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1241	0.0648	0.7808	1.4100e-003	0.1479	1.0600e-003	0.1489	0.0392	9.7000e-004	0.0402		142.0540	142.0540	6.5500e-003	5.2300e-003	143.7751
Total	**0.1241**	**0.0648**	**0.7808**	**1.4100e-003**	**0.1479**	**1.0600e-003**	**0.1489**	**0.0392**	**9.7000e-004**	**0.0402**		**142.0540**	**142.0540**	**6.5500e-003**	**5.2300e-003**	**143.7751**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1241	0.0648	0.7808	1.4100e-003	0.1479	1.0600e-003	0.1489	0.0392	9.7000e-004	0.0402		142.0540	142.0540	6.5500e-003	5.2300e-003	143.7751
Total	**0.1241**	**0.0648**	**0.7808**	**1.4100e-003**	**0.1479**	**1.0600e-003**	**0.1489**	**0.0392**	**9.7000e-004**	**0.0402**		**142.0540**	**142.0540**	**6.5500e-003**	**5.2300e-003**	**143.7751**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1034	0.0540	0.6507	1.1700e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		118.3783	118.3783	5.4600e-003	4.3600e-003	119.8126
Total	**0.1034**	**0.0540**	**0.6507**	**1.1700e-003**	**0.1232**	**8.8000e-004**	**0.1241**	**0.0327**	**8.1000e-004**	**0.0335**		**118.3783**	**118.3783**	**5.4600e-003**	**4.3600e-003**	**119.8126**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1034	0.0540	0.6507	1.1700e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		118.3783	118.3783	5.4600e-003	4.3600e-003	119.8126
Total	**0.1034**	**0.0540**	**0.6507**	**1.1700e-003**	**0.1232**	**8.8000e-004**	**0.1241**	**0.0327**	**8.1000e-004**	**0.0335**		**118.3783**	**118.3783**	**5.4600e-003**	**4.3600e-003**	**119.8126**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0600e-003	0.1219	0.0312	4.4000e-004	0.0135	7.4000e-004	0.0143	3.8900e-003	7.1000e-004	4.6000e-003		46.2904	46.2904	1.9000e-004	6.7500e-003	48.3059
Worker	0.0483	0.0252	0.3037	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.2432	55.2432	2.5500e-003	2.0300e-003	55.9126
Total	**0.0523**	**0.1471**	**0.3348**	**9.9000e-004**	**0.0710**	**1.1500e-003**	**0.0722**	**0.0191**	**1.0900e-003**	**0.0202**		**101.5336**	**101.5336**	**2.7400e-003**	**8.7800e-003**	**104.2184**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0600e-003	0.1219	0.0312	4.4000e-004	0.0135	7.4000e-004	0.0143	3.8900e-003	7.1000e-004	4.6000e-003		46.2904	46.2904	1.9000e-004	6.7500e-003	48.3059
Worker	0.0483	0.0252	0.3037	5.5000e-004	0.0575	4.1000e-004	0.0579	0.0153	3.8000e-004	0.0156		55.2432	55.2432	2.5500e-003	2.0300e-003	55.9126
Total	**0.0523**	**0.1471**	**0.3348**	**9.9000e-004**	**0.0710**	**1.1500e-003**	**0.0722**	**0.0191**	**1.0900e-003**	**0.0202**		**101.5336**	**101.5336**	**2.7400e-003**	**8.7800e-003**	**104.2184**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7200e-003	0.1188	0.0294	4.3000e-004	0.0135	7.1000e-004	0.0142	3.8900e-003	6.8000e-004	4.5700e-003		45.7574	45.7574	1.8000e-004	6.6600e-003	47.7470
Worker	0.0448	0.0222	0.2733	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.5267	53.5267	2.2700e-003	1.8500e-003	54.1362
Total	**0.0486**	**0.1410**	**0.3027**	**9.6000e-004**	**0.0710**	**1.0900e-003**	**0.0721**	**0.0191**	**1.0300e-003**	**0.0202**		**99.2841**	**99.2841**	**2.4500e-003**	**8.5100e-003**	**101.8832**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7200e-003	0.1188	0.0294	4.3000e-004	0.0135	7.1000e-004	0.0142	3.8900e-003	6.8000e-004	4.5700e-003		45.7574	45.7574	1.8000e-004	6.6600e-003	47.7470
Worker	0.0448	0.0222	0.2733	5.3000e-004	0.0575	3.8000e-004	0.0579	0.0153	3.5000e-004	0.0156		53.5267	53.5267	2.2700e-003	1.8500e-003	54.1362
Total	**0.0486**	**0.1410**	**0.3027**	**9.6000e-004**	**0.0710**	**1.0900e-003**	**0.0721**	**0.0191**	**1.0300e-003**	**0.0202**		**99.2841**	**99.2841**	**2.4500e-003**	**8.5100e-003**	**101.8832**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0961	0.0475	0.5857	1.1300e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		114.7001	114.7001	4.8700e-003	3.9700e-003	116.0061
Total	**0.0961**	**0.0475**	**0.5857**	**1.1300e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.5000e-004**	**0.0334**		**114.7001**	**114.7001**	**4.8700e-003**	**3.9700e-003**	**116.0061**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0961	0.0475	0.5857	1.1300e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		114.7001	114.7001	4.8700e-003	3.9700e-003	116.0061
Total	**0.0961**	**0.0475**	**0.5857**	**1.1300e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.5000e-004**	**0.0334**		**114.7001**	**114.7001**	**4.8700e-003**	**3.9700e-003**	**116.0061**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**56.4960**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-003	3.1700e-003	0.0390	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6467	7.6467	3.2000e-004	2.6000e-004	7.7337
Total	**6.4000e-003**	**3.1700e-003**	**0.0390**	**8.0000e-005**	**8.2100e-003**	**5.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**7.6467**	**7.6467**	**3.2000e-004**	**2.6000e-004**	**7.7337**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**56.4960**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-003	3.1700e-003	0.0390	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.6467	7.6467	3.2000e-004	2.6000e-004	7.7337
Total	**6.4000e-003**	**3.1700e-003**	**0.0390**	**8.0000e-005**	**8.2100e-003**	**5.0000e-005**	**8.2700e-003**	**2.1800e-003**	**5.0000e-005**	**2.2300e-003**		**7.6467**	**7.6467**	**3.2000e-004**	**2.6000e-004**	**7.7337**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0278	1.1352	7.3645	0.0121	1.1538	0.0132	1.1670	0.3080	0.0124	0.3204		1,226.9725	1,226.9725	0.0895	0.0649	1,248.5485
Unmitigated	1.0278	1.1352	7.3645	0.0121	1.1538	0.0132	1.1670	0.3080	0.0124	0.3204		1,226.9725	1,226.9725	0.0895	0.0649	1,248.5485

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	188.80	190.80	171.00	533,932	533,932
Total	188.80	190.80	171.00	533,932	533,932

4.3 Trip Type Information

	Miles			Trip %			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
Single Family Housing	10.80	7.30	7.50	42.30	19.60	38.10	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.472559	0.063262	0.192211	0.153100	0.049114	0.009195	0.008711	0.006391	0.000408	0.000000	0.037171	0.001203	0.006676

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611
NaturalGas Unmitigated	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	609.746	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611
Total		**6.5800e-003**	**0.0562**	**0.0239**	**3.6000e-004**		**4.5400e-003**	**4.5400e-003**		**4.5400e-003**	**4.5400e-003**		**71.7348**	**71.7348**	**1.3700e-003**	**1.3200e-003**	**72.1611**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	0.609746	6.5800e-003	0.0562	0.0239	3.6000e-004		4.5400e-003	4.5400e-003		4.5400e-003	4.5400e-003		71.7348	71.7348	1.3700e-003	1.3200e-003	72.1611
Total		**6.5800e-003**	**0.0562**	**0.0239**	**3.6000e-004**		**4.5400e-003**	**4.5400e-003**		**4.5400e-003**	**4.5400e-003**		**71.7348**	**71.7348**	**1.3700e-003**	**1.3200e-003**	**72.1611**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.7364	0.6167	39.4306	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2517
Unmitigated	31.7364	0.6167	39.4306	0.0685		5.3066	5.3066		5.3066	5.3066	555.4346	235.9122	791.3468	0.5154	0.0437	817.2517

Danco SD Project - Lake County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0495	0.0190	1.6485	9.0000e-005		9.1500e-003	9.1500e-003		9.1500e-003	9.1500e-003		2.9711	2.9711	2.8500e-003		3.0422
Total	**31.7364**	**0.6167**	**39.4306**	**0.0685**		**5.3066**	**5.3066**		**5.3066**	**5.3066**	**555.4346**	**235.9122**	**791.3468**	**0.5154**	**0.0437**	**817.2517**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7704					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.6079	0.5977	37.7821	0.0685		5.2974	5.2974		5.2974	5.2974	555.4346	232.9412	788.3758	0.5126	0.0437	814.2095
Landscaping	0.0495	0.0190	1.6485	9.0000e-005		9.1500e-003	9.1500e-003		9.1500e-003	9.1500e-003		2.9711	2.9711	2.8500e-003		3.0422
Total	**31.7364**	**0.6167**	**39.4306**	**0.0685**		**5.3066**	**5.3066**		**5.3066**	**5.3066**	**555.4346**	**235.9122**	**791.3468**	**0.5154**	**0.0437**	**817.2517**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment B
Biological Resources Assessment

Attachment B

HELIX Environmental Planning

Burns Valley Subdivision Project

Biological Resources Assessment

October 2022 | 08391.00004.001

Revised May 2023

Prepared for:

The DANCO Group
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LIST OF APPENDICES

Acronyms and Abbreviations

BRA	Biological Resources Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	diameter at breast height
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MSL	mean sea level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	ordinary high water mark
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

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EXECUTIVE SUMMARY

HELIX Environmental Planning, Inc. (HELIX) conducted a Biological Resources Assessment (BRA) for the 30.60-acre Burns Valley Subdivision Project (Project) on September 15, 2022. The Project is located on Old Highway 53 in the City of Clearlake in Lake County, California (Study Area). The Study Area is situated in a portion of Section 15 of Township 13 North and Range 7 West on the U.S. Geological Survey (USGS) *Lower Lake, California* 7.5-minute quadrangle map. The approximate center of the Study Area is latitude 38.97126° and longitude - 122.61526 °, NAD 83, and is located at an elevation that ranges from approximately 1,395 feet to 1,455 feet above mean sea level (MSL).

The purpose of this BRA is to assess the general biological resources on the Study Area, assess the suitability of the Study Area to support special-status species and sensitive vegetation communities or habitats, analyze any potential impacts to biological resources that could occur as a result of the proposed project and provide suggested mitigation measures to avoid and/or reduce any such impacts to less than significant.

The 30.60-acre Study Area is in a residential area in the City of Clearlake, California and consists primarily of undeveloped land consisting of oak woodlands, nonnative annual grasslands, and an unnamed intermittent drainage. The Study Area is comprised of blue oak–foothill pine woodland (11.42 acres), nonnative annual grassland (17.52 acres), and intermittent drainage (1.66 acres and 1,153 linear feet). Surrounding land uses include rural, single-family residences, wild lands, and agriculture.

Known or potential sensitive biological resources in the Study Area include:

- Potential habitat for California Rare and California Rare Plant Rank (CRPR) rank 3 special-status plants including Tracy's eriastrum (*Eriastrum tracyi*);
- Potential habitat for CRPR rank 1B special-status plants including bent-flowered fiddleneck (*Amsinckia lunaris*), and Cobb Mountain lupine (*Lupinus sericatus*);
- Potential habitat for state candidate species western bumble bee (*Bombus occidentalis*);
- Potential summer breeding habitat for federal candidate species Monarch butterfly (*Danaus plexippus*);
- Potential habitat for California Department of Fish and Wildlife (CDFW) Species of Special Concern purple martin (*Progne subis*), and western red bat (*Lasiurus blossevillii*);
- Potential habitat for special-status birds including CDFW watch-list species Cooper's hawk (*Accipiter cooperii*), osprey (*Pandion haliaetus*) and other nesting migratory birds and raptors;
- Potential habitat for CDFW designated special mammals including silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus cinereus*);
- Sensitive aquatic resources including one intermittent drainage; and
- Trees protected by the City of Clearlake.

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1.0 INTRODUCTION

This report summarizes the findings of a Biological Resources Assessment (BRA) completed by HELIX Environmental Planning, Inc. (HELIX) for the for ±30.60-acre Burns Valley Subdivision Project (Project), located on Old Highway 53 in the City of Clearlake (City), Lake County, California (Study Area). This document characterizes the on-site physical features, plant communities present, and the common plant and wildlife species occurring or potentially occurring in the Study Area. In addition, the suitability of habitats to support special-status species and sensitive habitats are analyzed, as well as any potential impacts to biological resources that could occur as a result of development of the proposed project. Where applicable, mitigation measures are provided to avoid and/or reduce any such impacts to less than significant.

1.1 PROJECT DESCRIPTION

Project development would involve the development of 22 low density residential lots and associated infrastructure including, but not limited to access roads and utilities, including on-site septic systems.

2.0 REGULATORY FRAMEWORK

Federal, State, and local environmental laws, regulations, and policies relevant to the California Environmental Quality Act (CEQA) review process are summarized below. Applicable CEQA significance criteria are also addressed in this section.

2.1 FEDERAL REGULATIONS

2.1.1 Federal Endangered Species Act

The U.S. Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

FESA prohibits the “take” of endangered or threatened wildlife species. “Take” is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3) (19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR §17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR §17.3). Actions that result in take can result in civil or criminal penalties.

In the context of the proposed Project, FESA consultation with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) would be initiated if development resulted in the potential for take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species or adversely modify critical habitat of such a species.

2.1.2 Migratory Bird Treaty Act

Raptors, migratory birds, and other avian species are protected by State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

2.1.3 The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to "*take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.*" Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "*to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.*"

2.2 STATE JURISDICTION

2.2.1 California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to State-listed endangered and threatened species. CESA requires state agencies to consult with the CDFW when preparing CEQA documents. The purpose is to ensure that State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction, or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code §2080). CESA directs agencies to consult with CDFW on projects or actions that could affect listed species. It also directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (Fish & Game Code §2081).

2.2.2 California Department of Fish and Game Codes

A number of species have been designated as "Fully Protected" species under Sections 5515, 5050, 3511, and 4700 of the Fish and Game Code (FGC) but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The California Fish and Game Code defines take as "*hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.*" Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA), enacted in 1977, allows the Fish and Game Commission to designate plants as rare or endangered. The NPPA prohibits take of endangered or rare native plants, with some exceptions for agricultural and nursery operations and emergencies. Vegetation removal from canals, roads, and other sites, changes in land use, and certain other situations require proper advance notification to CDFW.

2.3 JURISDICTIONAL WATERS

2.3.1 Federal Jurisdiction

Unless considered an exempt activity under Section 404(f) of the Federal Clean Water Act, any person, firm, or agency planning to alter or work in "waters of the U.S.," including the discharge of dredged or fill material, must first obtain authorization from the USACE under Section 404 of the Clean Water Act (CWA; 33 USC 1344). Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act prohibits the obstruction or alteration of navigable waters of the U.S. without a permit from USACE (33 USC 403). Activities exempted under Section 404(f) are not exempted within navigable waters under Section 10.

The final "Revised Definition of 'Water of the United States'" rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023 including in California. The final rule is not currently operative in all states outside of California due to litigation.

(a) The current definition of waters of the U.S. in California are defined as follows under (33 Code of Federal Regulations [CFR] Part 328.3: (1) Waters which are: (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (ii) The territorial seas; or (iii) Interstate waters, including interstate wetlands; (2) Impoundments of waters otherwise defined as waters of the U.S. under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section; (3) Tributaries of waters identified in paragraph (a)(1) or (2) as defined above: (i) That are relatively permanent, standing or continuously flowing bodies of water; or (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) defined above; (4) Wetlands adjacent to the following waters: (i) Waters identified in paragraph (a)(1) defined above; or (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) above and with a continuous surface connection to those waters; or (iii) Waters identified in paragraph (a)(2) or (3) above when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) above; (5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) above: (i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) above; or (ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) above.

The 2023 final rule includes the agencies' longstanding definition of "wetlands" and "adjacent."

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Adjacent is defined under the CFR Part 328.3 as bordering, contiguous, or neighboring. The three types of jurisdictional adjacent wetlands include the following:

- wetlands that are adjacent to waters identified in paragraph (a)(1) above;
- adjacent wetlands that meet the relatively permanent standard;
- adjacent wetlands that meet the significant nexus standard.

The 2023 final rule determines jurisdiction for tributaries, adjacent waters, and additional waters through application of two standards, 1) the "relatively permanent" and 2) the "significant nexus" standards. To meet the relatively permanent standard, "waters must be relatively permanent, standing, or continuously flowing waters connected to paragraph (a)(1) waters, or waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters (33 CFR Part 328.3)." To meet the significance nexus standard, a significant nexus must exist such that "the waterbody (alone or in combination) significantly affects the chemical, physical, or biological integrity of traditionally navigable waters, the territorial seas, or interstate waters (33 CFR Part 328.3)." Functions to be assessed include contribution of flow; trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants); retention and attenuation of floodwaters and runoff; modulation of temperature in waters identified in paragraph (a)(1); or provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1). Factors to consider include the distance from water identified in paragraph (a)(1); hydrologic factors (i.e., frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flows); size, density of number of waters that have been determined to be similarly situated; landscape position and geomorphology; and climatological variables (e.g., temperature, rainfall, and snowpack).

The following are not considered "waters of the U.S." under the Revised Definition: (1) Waste treatment systems, including treatment ponds or lagoon, designed to meet the requirements of the Clean Water Act; (2) Prior converted cropland as designated by the Secretary of Agriculture. This exclusion ceases upon am change of use such that the area is no longer available for the production of agricultural commodities; (3)Ditches (including roadside ditches) excavated wholly in and draining only dry land that do not carry a relatively permanent flow of water; (4) Artificially irrigated areas that would revert to dry land if irrigation ceased; (5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; (6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons; (7) Waterfilled depression created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the U.S.; and (8) Swales and erosional features characterized by low volume, infrequent, or short duration flow.

Federal and state regulations pertaining to waters of the U.S., including wetlands, are discussed below.

The Clean Water Act (33 United States Code (USC) 1251-1376) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

Section 401 requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain a state certification that the discharge complies with other provisions of CWA. The Regional Water Quality Control Board (RWQCB) administers the certification program in California and may require State Water Quality Certification before other permits are issued.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the U.S.

Section 404 establishes a permit program administered by USACE that regulates the discharge of dredged or fill material into waters of the U.S. (including wetlands). Implementing regulations by USACE are found at 33 CFR Parts 320-332. The Section 404 (b)(1) Guidelines were developed by the USEPA in conjunction with USACE (40 CFR Part 230), allowing the discharge of dredged or fill material for non-water dependent uses into special aquatic sites only if there were no practicable alternative that would have less adverse impacts.

2.3.2 State Jurisdiction

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the CWA is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On May 28, 2020, the SWRCB implemented the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019). The Procedures consist of four major elements:

I. A wetland definition;
II. A framework for determining if a feature that meets the wetland definition is a water of the state;
III. Wetland delineation procedures; and
IV. Procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the State" includes all "Waters of the U.S."

More specifically, a wetland is defined as: "*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation*." The wetland definition encompasses the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands (SWRCB 2019).

Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

California Department of Fish and Wildlife

CDFW is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds… except when the department has been notified pursuant to Section 1601." Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends applying for a Streambed Alteration Agreement (SAA) for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

2.4 CEQA SIGNIFICANCE

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish or result in the loss of an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

2.4.1 California Native Plant Society

The California Native Plant Society (CNPS) maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

- Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- Rank 3: Plants about which we need more information – A Review List

All plants appearing on CNPS Rank 1 or 2 are considered to meet CEQA Guidelines Section 15380 criteria. The CDFW, in consultation with the CNPS assigns a California Rare Plant Rank (CRPR) to native species according to rarity; plants with a CRPR of 1A, 1B, 2A, 2B, or 3 are generally considered special-status species under CEQA. Furthermore, the CNPS CRPR include levels of threat for each species. These threat ranks include the following:

0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);

0.2 - Moderately threatened in California (20 to 80% occurrences threatened/moderate degree and immediacy of threat); and

0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Threat ranks do not designate a change of environmental protections, so that each species (i.e., CRPR 1B.1, CRPR 1B.2, CRPR 1B.3, etc.), be fully considered during preparation of environmental documents under CEQA.

2.4.2 California Department of Fish and Wildlife Species of Concern

Additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA and CESA or listed as fully protected. These species are included on the *Special Animals List*, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to "Species of Special Concern" (SSC), the *Special Animals List* includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as "California Special Animals" (CSA).

2.5 LOCAL POLICIES AND REGULATIONS

2.5.1 City of Clearlake General Plan

In addition to federal and State regulations described above, the City of Clearlake General Plan (General Plan) includes goals, objectives, and policies regarding biological resources within the City limits (City of Clearlake 2017). Applicable sections of the General Plan are included in Appendix A.

2.5.2 City of Clearlake Municipal Code 18-40 Native Tree Protection

The purpose of this article is to ensure the preservation and protection of resources that cannot be replaced while also balancing the needs of commerce, industry, and the human population within the City. Trees are a valuable asset to make the City environment a healthier and more aesthetically appealing place to live. Given these recognized benefits and constraints, the intent and objectives of this article are to:

1. Protect and enhance the aesthetic qualities of the community provided by mature native trees;
2. Promote a healthy and attractive urban landscape as the community grows;
3. Limit the indiscriminate felling, removal, and destruction of certain trees;
4. Require the replacement of certain trees that are removed, where appropriate; and
5. Promote the preservation of existing trees during development. (Ord. #248-2020, S2).

Per Section 18.40.030 of the City Clearlake City Native Tree Protection Ordinance, a native tree permit shall be required for the following trees of a diameter at breast height of greater than six inches, unless exempted under Section 18-40.030: blue oak (*Quercus douglasii*), valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), California black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), Oregon white oak (*Quercus garryana*), and any other tree designated by the City Council as a "Heritage Tree" as described in subsection 18-5.1406. A heritage tree is defined as a tree that meets at least one of the following criteria as determined by the City Council:

1. an outstanding specimen of a desirable species;
2. is one of the largest or oldest trees in Clearlake;

3. the tree is of historical interest; or
4. the tree is of distinctive appearance.

3.0 METHODS

Available information pertaining to the natural resources of the region was reviewed prior to conducting the field survey. The following published information was reviewed for this BRA:

- California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Database* (CNDDB); For: *Lower Lake, CA* and eight surrounding USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [September 14, 2022];

- California Native Plant Society (CNPS). 2022. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45) For: *Lower Lake, CA* and eight surrounding USGS 7.5-minute series quadrangles, Sacramento, CA. Accessed [September 14, 2022];

- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 2022. *Web Soil Survey*. Available at: http://websoilsurvey.sc.egov.usda.gov. Accessed [September 14, 2022];

- U.S. Fish and Wildlife Service (USFWS). 2022a. *Information for Planning and Consultation* (IPaC) *Burns Valley Subdivision Project.* Accessed [September 14, 2022]; and

- U.S. Geological Survey (USGS). 2022 *Lower Lake, California*. 7.5-minute series topographic quadrangle. United States Department of Interior.

Prior to conducting the biological field survey, existing information concerning known habitats and special-status species that may occur in the Study Area was reviewed, including queries of applicable resource agency databases. The results of the database queries are summarized in Appendix C. The biological field survey was conducted on September 15, 2022, by HELIX Senior Biologist Patrick Martin. The weather during the field survey was clear with an average temperature of between 75° and 80° Fahrenheit. The Study Area was systematically surveyed on foot to ensure total search coverage, with special attention given to portions of the Study Area with the potential to support special-status species and sensitive habitats. Binoculars were used to further extend site coverage and identify species observed. All plant and animal species observed were recorded (Appendix D), and all biological communities occurring on-site were characterized. All resources of interest were mapped with a Global Positioning System (GPS)-capable tablet equipped with a GPS receiver running ESRI Collector for ArcGIS® with sub-meter accuracy.

Following the field survey, the potential for each species (including special status species) identified in the database queries to occur within the Study Area was determined based on the site survey, soils, elevational and geographic ranges, habitats present within the Study Area, and species-specific information, as shown in Appendix E.

4.0 RESULTS

4.1 SITE LOCATION AND DESCRIPTION

The 30.60-acre Study Area is located on Old Highway 53 in the City of Clearlake, Lake County, California (Study Area), and can be located within a portion of Section 15, Township 13 North and Range 7 West on the U.S. Geological Survey (USGS) *Lower Lake, California* 7.5-minute quadrangle map (Appendix B, Figure 1). The approximate center of the Study Area is latitude 38.97126° and longitude -122.61526 °, NAD 83, and is located at an elevation that ranges from approximately 1,395 feet to 1,455 feet above mean sea level (MSL) as shown in Appendix B, Figure 2.

The Study Area and surrounding area has a history of agricultural production. Based on a review of historic aerial imagery (Google Earth 2022), the site has changed very little since 1993. The majority of the land surrounding the Study Area in 1993 was orchard to the west, and undeveloped wildlands to the east. Rural residences are located south and north of the Study Area. The surrounding area has gradually converted from agricultural uses to low density residential developments from 1993 to present. An aerial image of the Study Area is included in Appendix B, Figure 3.

4.2 PHYSICAL FEATURES

4.2.1 Topography and Drainage

Terrain in the Study Area is comprised of generally flat land adjacent to the intermittent drainage which consists of blue oak–foothill pine woodland and nonnative annual grassland with moderate hillslopes located in the southern portion of the Study Area in the blue oak–foothill pine woodland. The unnamed intermittent drainage originates to the east, which drains underneath State Route 53 to Clear Lake. Elevations on the site range from approximately 1,395 feet to 1,455 feet above MSL.

The Study Area is in the Upper Cache Creek watershed (USGS Hydrologic Unit Code (HUC) 18020116). All drainages adjacent to the Study Area drain to Clear Lake, and are ultimately tributary to the Sacramento River (via Cache Creek), a traditional navigable waters of the U.S.

4.2.2 Soils

The NRCS has mapped four soil units within the Study Area: Manzanita gravelly loam, 2 to 8 percent slopes, Phipps complex, 15 to 30 percent slopes, Still gravelly loam, and Wolfcreek gravelly loam (Appendix B, Figure 4). The general characteristics and properties associated with these soil types are described below. All soils in the Study Area are derived from alluvium (NRCS 2022) that consists of sedimentary rock (CGS 2010).

Manzanita gravelly loam, 2 to 8 percent slopes is a well-drained soil that consists of gravelly loam, gravelly clay, and gravelly sandy clay loam derived from alluvium which consists of sedimentary rock (CGS 2010). Manzanita gravelly loam, 2 to 8 percent slopes is well drained and is found on terraces. This soil map unit is considered rich soil that could provide farmland of statewide importance. This soil map unit is not considered hydric (NRCS 2022).

Phipps complex, 15 to 30 percent slopes, are well drained soils that consists of clay loam, and clay derived from alluvium which consists of sedimentary rock (CGS 2010). Phipps complex, 15 to 30 percent

slopes is well drained and is found on hills and backslopes. This soil map unit is not considered prime farmland. This soil map unit is not considered hydric (NRCS 2022).

Still gravelly loam, are well drained soils that consists of gravelly loam, stratified gravelly loam to gravelly clay loam and stratified loam to clay loam derived from alluvium derived from sandstone and shale. Still gravelly loam is well drained and is found on alluvial flats and backslopes. This soil map unit is not considered prime farmland. This soil map unit is not considered hydric (NRCS 2022).

Wolfcreek gravelly loam, are well drained soils that consists of gravelly loam, and stratified loam to sandy clay loam derived from alluvium which consists of sedimentary rock (CGS 2010). Wolfcreek gravelly loam is well drained and is found on floodplains and backslopes. This soil map unit is considered prime farmland if irrigated. This soil map unit is not considered hydric (NRCS 2022).

4.3 BIOLOGICAL COMMUNITIES

Two upland communities and one aquatic community occur within the Study Area: blue oak–foothill pine woodland (approximately 11.42 acres), and nonnative annual grassland (approximately 17.52 acres). One unnamed intermittent drainage (1.66-acres and 1,153-linear feet) is present in the Study Area. These habitat types are discussed below. A comprehensive list of all plant and wildlife species observed within the Study Area in these habitats is provided in Appendix D. Representative site photographs are included in Appendix F.

4.3.1 Blue Oak–Foothill Pine Woodland

Blue oak-foothill pine woodland habitat dominates the Study Area and is abundant in the surrounding vicinity. This habitat occurs between 500 and 3,000 feet above MSL and is diverse in structure and varies with a mix of hardwoods, conifers and shrubs that are often interspersed with annual grassland habitats. At lower elevations, this habitat merges with annual grasslands, blue oak woodlands and valley oak woodlands. Vegetation in this habitat consists primarily of blue oak (*Quercus douglasii*) interspersed with foothill pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizeni*). A shrub layer that consists of Eastwood manzanita (*Arctostaphylos glandulosa*), toyon (*Heteromeles arbutifolia*), birch-leaf mountain mahogany (*Cercocarpus betuloides*), and chaparral honeysuckle (*Lonicera interrupta*) is present underlain with an annual herbaceous species understory. Annual vegetation resembles that of the annual grassland habitat described in Section 4.3.2. Blue oak–foothill pine woodland along the intermittent drainage supports valley oak (*Quercus lobata*) in addition to the other species described. Blue oak–foothill pine woodland is located on a flat to moderate slopes that varies in elevation and aspect throughout the Study Area which is bordered by large residential lots and a vineyard. Blue oak–foothill pine woodland provides breeding and foraging habitat for a several species of wildlife, such as cavity nesting birds like woodpeckers. Approximately 11.42 acres of blue oak–foothill pine woodland habitat occurs in the Study Area (Appendix B, Figure 5).

4.3.2 Nonnative Annual Grassland

Nonnative annual grassland habitats are open grasslands composed primarily of annual plant species that are not native to California. Many of these species also occur as understory plants in the blue oak–foothill pine woodland and within the intermittent drainage. Dominant species observed within annual grassland habitat in the Study Area include medusahead (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), slender oats (*Avena barbata*), narrow tarplant (*Holocarpha virgata*), Harding grass

(*Phalaris aquaticus*), and yellow star-thistle (*Centaurea solstitialis*). Isolated patches of native vegetation also occur, which consist of narrow leaf mules ear (*Wyethia angustifolia*), naked buckwheat (*Eriogonum nudum*), and blue wildrye (*Elymus glaucus*). Approximately 17.52 acres of nonnative annual grassland habitat occurs in the Study Area (Appendix B, Figure 5).

4.4 AQUATIC RESOURCES

4.4.1.1 Intermittent Drainage

A total of 1.66 acres (1,153-linear feet) of intermittent drainage was mapped within the Study Area, consisting of one intermittent drainage that passes from underneath State Route 53, travels west and under a bridge along Old Highway 53. This unnamed intermittent drainage drains the surrounding slopes east of the Study Area to Clear Lake. Intermittent drainages are typically fed by waters from a seasonally perched groundwater table and are supplemented by precipitation and storm water runoff. After the initial onset of rains, these features have persistent flows throughout and past the end of the rainy season. Typically, these features exhibit a defined bed and bank and show signs of scouring because of rapid flow events. The bed of the intermittent drainage consists of gravel, and cobble with steeply incised banks and a floodplain. Hydrophytic vegetation was absent in the intermittent drainage which consists of nonnative annual grassland vegetation described in Section 4.3.2. The intermittent drainage has a wide floodplain, which includes blue oak–foothill pine woodland in the mapped intermittent drainage as described in Section 4.3.1. The intermittent drainage is tributary to Clear Lake, which is ultimately tributary to the Sacramento River.

4.5 SPECIAL-STATUS SPECIES

Special-status species are plant and wildlife species that have been afforded special recognition and protection by federal, State, or local resource agencies or organizations. These species are generally of relatively limited distribution and may require specialized habitat conditions. Special-status species are defined as meeting one or more of the following criteria:

- Listed or proposed for listing under CESA or FESA;
- Protected under other regulations (e.g., the PCCP, MBTA);
- Included on the CDFW Special Animals List or Watch List;
- Identified as Rare Plant Rank 1 to 3 by CNPS; or
- Receive consideration during environmental review under CEQA.

Special-status species considered for this analysis are based on queries of the CNDDB, USFWS, and CNPS ranked species (online versions) for the *Lower Lake, CA* USGS quadrangle and eight surrounding quadrangles. Appendix B includes the common name and scientific name for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence within the Study Area. The following set of criteria has been used to determine each species' potential for occurrence within the Study Area:

Will Not Occur: Species is either sessile (i.e., plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area;

Not Expected: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur in the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100 percent certainty;

Presumed Absent: Habitat suitable for residence and breeding occurs in the Study Area; however, focused surveys conducted for the current project were negative;

May Occur: Species was not observed on the site and breeding habitat is not present, but the species has the potential to utilize the site for dispersal;

High: Habitat suitable for residence and breeding occurs in the Study Area and the species has been recorded recently in or near the Study Area, but was not observed during surveys for the current project; and

Present: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

Only those species that are known to be present, have a high potential to occur, or may occur are discussed further in the following sections.

4.5.1 Listed and Special-status Plants

According to the database query, 60 listed and/or special-status plant species have the potential to occur on or in the vicinity of the Study Area (CDFW 2022). Based on field observations, published information, and literature review, three special-status plants have potential to occur within the Study Area: bent-flowered fiddleneck (*Amsinckia lunaris*), Tracy eriastrum (*Eriastrum tracyi*), and Cobb Mountain lupine (*Lupinus sericatus*). All soils in the Study Area are derived from alluvium (NRCS 2022) that consists of sedimentary rock (CGS 2010). Many special-status plant species in the vicinity of the Study Area occur in volcanic or metamorphic derived soils that are not present in the Study Area (NRCS 2022; CGS 2010).

Special-status Plants that May Occur

Bent-flowered Fiddleneck (CRPR 1B.2)

Bent-flowered fiddleneck is an annual herb that is CRPR 1B.2 by CNPS (see Section 2.4.1 for CNPS rating definitions). This species is typically found in a variety of soils on gravelly slopes in cismontane woodlands, and grassland habitats. It blooms from March to June and is found at elevations ranging from 5 to 800 meters (m) (CNPS 2022). Soil in the Study Area ranges from a gravelly loam to clay and is derived from alluvium (NRCS 2022) that consists of sedimentary rock (CGS 2010). The biological survey was conducted outside of the optimal period of identification for this species. The nearest CNDDB reported occurrence is located one mile north of the Study Area along State Route 53 (CDFW 2022). The CNDDB record is an estimated location based on an observation from 1938 (CDFW 2022). Bent-flowered fiddleneck may occur in the nonnative annual grassland and blue oak–foothill pine woodland habitat

within the Study Area. There is potential for direct and indirect effects to bent-flowered fiddleneck if this species were to occur within the Study Area.

Tracy's Eriastrum (California Rare and CRPR 3.2)

Tracy's eriastrum is an annual herb that is a California state rare and CRPR rated 3.2 by the CNPS. This species is found in open areas in chaparral, cismontane woodland, and valley and foothill grassland. It blooms from May to August and is found at elevations ranging from 400 to 1,000 m elevation (De Groot et al. 2012). The biological survey was conducted outside of the optimal period of identification for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). Tracy's eriastrum may occur in the nonnative annual grassland and blue oak–foothill pine woodland habitat within the Study Area. There is potential for direct and indirect effects to Tracy's eriastrum if this species were to occur within the Study Area.

Cobb Mountain Lupine (CRPR 1B.2)

Cobb Mountain lupine is a perennial herb that is CRPR rated 1B.2 by the CNPS. This species occurs in chaparral, broadleafed upland forest, cismontane woodland, and lower montane coniferous forest. It blooms from March to June and is found at elevations ranging from 275 to 1,525 m elevation. The biological survey was conducted outside of the optimal period of identification for this species. Cobb Mountain lupine may occur in the blue oak–foothill pine woodland habitat within the Study Area. There is potential for direct and indirect effects to Cobb Mountain lupine if this species were to occur within the Study Area.

4.5.2 Listed and Special-status Wildlife

According to the database query, 26 listed and/or special-status wildlife species have the potential to occur on-site or in the vicinity of the Study Area (CDFW 2022). Based on field observations, published information, and literature review, eight special-status wildlife species have the potential to occur within the Study Area: western bumble bee (*Bombus occidentalis*), Monarch butterfly (*Danaus plexippus*), Cooper's hawk (*Accipiter cooperii*), osprey (*Pandion haliaetus*), purple martin (*Progne subis*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*), and hoary bat (*Lasiurus cinereus*). These species are discussed in more detail below.

Special-status Wildlife that May Occur

Western Bumble Bee (CESA Candidate Endangered)

Western bumble bee is a primitively eusocial insect that lives in underground colonies made up of one queen, female workers, and reproductive members of the colony. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (Thorp et al. 1983). This species occurs in meadows and grasslands with an abundance of floral resources (CDFW 2019). This species is a generalist forager and has been reported visiting a wide variety of flowering plants. Select food plants include *Melilotus* spp., *Cirsium* spp., *Trifolium* spp., *Centaurea* spp., *Eriogonum* spp., and *Chrysothamnus* spp. (Koch *et al.* 2012). This species has a short tongue and typically prefers open flowers with short corollas but is known to chew through the base of flowers with long corollas. The flight period for queens in California is from early February to late November, peaking in late June and late September. New queens hibernate over the winter and initiate a new colony the following

spring (Thorp et al. 1983). This species is rare throughout its range and in decline west of the Sierra Nevada crest.

Annual grassland habitat provides marginally suitable habitat for this species in the Study Area where preferred select food plants such as yellow star-thistle (*Centaurea solstitialis*), naked buckwheat (*Eriogonum nudum*), and chaparral buckwheat (*Eriogonum dasyanthermum*) are present. Yellow star-thistle is an invasive weed that is scattered across the Study Area in grassland habitat. Buckwheat species present within grassland habitat in the Study Area is disturbed by annual weed management to reduce fire safety risks, however, disturbance to annual grassland habitat onsite is not so severe as to prevent underground bee colonies from being present. Western bumble bee is currently rare across its range and in decline as result of agricultural practices and diseases passed from domestic bees (CDFW 2019). In California it is limited to high elevation meadows in the Sierra Nevada and small coastal populations (CDFW 2019). There are no CNDDB documented occurrences of this species within 10 miles of the Study Area (CDFW 2023). There are only two documented occurrences of this species in Lake County, and both accounts are historic observations from the 1940s and 1960s (CDFW 2023). Additionally, there are no reported occurrences of western bumble bee in the iNaturalist database (iNaturalist 2023), which is a database for citizen scientists and naturalists to report and document observations of flora and fauna.

Monarch Butterfly (ESA Federal Candidate)

The federal determination December 17, 2020, determined that the Monarch butterfly warranted listing as an endangered or threatened species under the Federal Endangered Species Act of 1973, but the listing was precluded by higher priority listing actions (USFWS 2022b). Monarch butterflies roost in wind protected tree groves, especially with *Eucalyptus* sp., and species of pine or cypress with nectar and water sources nearby. Winter roost sites extend along the coast from Mendocino County to Baja California. As caterpillars, monarchs feed exclusively on the leaves of milkweed (*Asclepias* sp.) (Nial et al. 2019; USFWS 2020). Monarch butterfly migration routes pass east over the Sierra Nevada in the fall and back to the California coast in the spring (USFWS 2020). The overwintering population is located along the Coast while summer breeding areas occur in interior California and North America with spring breeding areas located further east (USFWS 2020).

Overwintering habitat is not present in the Study Area, although individual isolated eucalyptus trees are present along the boundary of the Study Area. Indian milkweed (*Asclepias eriocarpa*), a larval host plant is abundant along portions of the intermittent drainage in the Study Area and could provide habitat for the Monarch butterfly. The Study Area is in the summer breeding range of the Monarch butterfly and not in the coastal overwintering range (USFWS 2020). There are no CNNDB records for this species within a 5-mile radius of the Study Area and most records are located along the coast (CDFW 2022). Monarch butterfly could fly through the Study Area during the migration season and larval host plants are present in the Study Area. There is potential for direct and indirect effects to Monarch butterfly if this species were to lay eggs on larval host plant milkweed within or adjacent to Study Area.

Cooper's Hawk (CDFW Species of Special Concern)

Cooper's hawk is a year-round resident in California in wooded areas in the Central Valley and Sierra foothills. Areas near water are preferred. Cooper's hawks feed mainly on small birds and mammals (Zeiner et al. 1990).

Cooper's hawk was not observed during the biological survey on September 15, 2022. The Study Area provides nesting habitat in blue oak–foothill pine woodland and this species could also forage in this woodland. The Study Area is within this species year-round range and this species could nest in or adjacent to the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area, however this species has been documented nesting east of the Study Area during surveys conducted for northern goshawk (CDFW 2022). There is potential for direct and indirect effects to Cooper's hawk if this species were to nest within or adjacent to Study Area.

Osprey (CDFW Watch List Species)

Osprey breed in Northern California from the Cascade Ranges southward to Lake Tahoe, and along the coast south to Marin County. The species preys primarily on fish but also preys on small mammals, birds, reptiles, and invertebrates. Foraging areas include open, clear waters of rivers, lakes, reservoirs, bays, estuaries, and surf zones. Habitat and nesting requirements include large trees, snags, and dead-topped trees in open forest habitats for cover and nesting (Zeiner et al. 1990).

The Study Area contains suitable nesting habitat for this species in blue oak–foothill pine woodland. This species could nest in tall trees or other structures such as utility poles in or adjacent to the Study Area. This species is known to nest near the Study Area around Clear Lake (CDFW 2022). There is potential for direct and indirect effects to osprey if this species were to nest within or adjacent to Study Area. Foraging habitat is not present in the Study Area.

Purple Martin (CDFW Species of Special Concern)

Purple martin occurs as a summer resident and migrant, primarily from mid-March to late September. This species breeds from May (rarely late April) to mid-August. Purple martins are widely but locally distributed in forest and woodland areas at low to intermediate elevations throughout much of the state. Martins use a wide variety of nest substrates (e.g., tree cavities, bridges, utility poles, lava tubes, and buildings), but nonetheless are very selective of habitat conditions nearby. Martins are most abundant in mesic regions, near large wetlands and other water bodies, and at upper slopes and ridges, which likely concentrate aerial insects (Shuford and Gardali 2008).

Suitable habitat for purple martin is present in tree cavities and utility poles both in the Study Area and adjacent to the Study Area. This species could forage over the Study Area or nest in tree cavities or cavities in utility poles. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). There is potential for direct and indirect effects to purple martin if this species were to nest within or adjacent to Study Area.

Silver-haired Bat (CDFW Special Animals List)

Silver-haired bats are native bats tracked by the CNDDB. This bat species is insectivorous and roosts in hollow trees, beneath exfoliating bark, in abandoned woodpecker holes, and rarely under rocks. They primarily occur in coastal and montane forests, feeding over streams, ponds, and open brushy areas (Zeiner et al. 1990). Young are typically born from May through July and are volant 36 days after birth (Zeiner et al. 1990). Each liter may consist of 1–2 young. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). This species could occur roosting under tree bark, in tree cavities and/or tree hollows.

The Study Area contains suitable roosting habitat for this species in blue oak–foothill pine woodland, especially along the unnamed intermittent drainage. Although potential roosting habitat is not situated adjacent to water, water sources are present in the vicinity of the Study Area, including Clear Lake, where this species may forage. The Study Area provides both roosting habitat and foraging habitat along woodland edges over nonnative annual grassland, as well as Clear Lake. This species could roost in tree cavities or snags and exfoliating bark and forage over the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). There is potential for direct and indirect effects to silver-haired bat if this species were to roost within or adjacent to Study Area.

Western Red Bat (CDFW Species of Special Concern)

Western red bat roosts primarily in woodlands and forests and forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and/or riparian habitats or mosaics of open space and forests. This species forages along edge habitats and usually found foraging or drinking with other bat species (Zeiner et al. 1990). This species has a poor urine concentrating ability and is typically associated with water. Western red bat is known to primarily roost solitarily in trees from 2 to 40-feet high, with females and young roosting higher in the trees than males. Young are typically born from May through July, and volant between 3 to 6 weeks after birth (Zeiner et al. 1990). Reproduction typically occurs individually, with each liter consisting of 1–5 young. Occasionally maternity colonies are found but are rare. Western red bat may also move their young between roost sites and are not tied to a specific roost location (Zeiner et al. 1990).

The Study Area contains suitable roosting habitat for this species in blue oak–foothill pine woodland, especially along the unnamed intermittent drainage. Although potential roosting habitat is not situated adjacent to water, water sources are present in the vicinity of the Study Area, including Clear Lake. The Study Area provides both roosting habitat and foraging habitat along woodland edges over nonnative annual grassland, as well as Clear Lake. This species could roost in tall trees and forage over the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). There is potential for direct and indirect effects to western red bat if this species were to roost in or adjacent to Study Area.

Hoary Bat (CDFW Special Animals List)

Hoary bat roosts primarily in woodlands and forests and forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and/or riparian habitats or mosaics of open space and forests. This species forages along edge habitats and usually found foraging or drinking with other bat species (Zeiner et al. 1990). This species has a poor urine concentrating ability and is typically associated with water. Hoary bat is known to primarily roost solitarily in medium to large trees with few branches below the roost site and ground cover with low reflectivity (Zeiner et al. 1990). Females and young roosting higher in the trees than males. Young are typically born from May through July, and volant between 33 days after birth (Zeiner et al. 1990). Reproduction typically occurs individually, with each liter consisting of 1–4 young.

The Study Area contains suitable roosting habitat for this species in blue oak–foothill pine woodland, especially along the unnamed intermittent drainage. Although potential roosting habitat is not situated adjacent to water, water sources are present in the vicinity of the Study Area, including Clear Lake. The Study Area provides both roosting habitat and foraging habitat along woodland edges over nonnative annual grassland, as well as Clear Lake. This species could roost in tall trees and forage over the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).

There is potential for direct and indirect effects to hoary bat if this species were to roost in or adjacent to Study Area.

Nesting Migratory Birds and Raptors

Migratory birds are protected under the MBTA of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10; this also includes feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Additionally, Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., hawks, owls, eagles, and falcons), including their nests or eggs; and Section 3513 specifically states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

A number of migratory birds and raptors have the potential to nest in or adjacent to the Study Area. Many birds were observed within the Study Area during the field survey and suitable nest locations include trees, shrubs, grass, and bare ground. Habitat such as cavities in trees and tree snags may provide habitat for cavity nesting birds. Therefore, nesting birds are expected to occur within the Study Area during the nesting season (generally February 1 to August 31).

4.6 SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA; Section 1600 of the California Fish and Game Code, which includes riparian areas; and/or Sections 401 and 404 of the Clean Water Act, which include wetlands and other waters of the U.S. Sensitive habitats or resource types within the Study Area are discussed below.

4.6.1 Aquatic Resources

A total of 1.66 acres (1,153 linear feet) of aquatic resources have been delineated in the Study Area consisting of one intermittent drainage. This feature is likely considered a water of the U.S. and water of the State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA. The intermittent drainage also falls under the jurisdiction of Section 1600 of the California Fish and Game Code, which includes riparian areas. A formal aquatic resource delineation was not conducted in conjunction with this BRA.

4.6.2 Wildlife Migration Corridors

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. This fragmentation of habitat can also occur when a portion of one or more habitats is converted into another habitat; for instance, when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or construction activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species

extinction; and, (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The Study Area is bordered by major roadways, rural residential properties, vineyard, and undeveloped wild lands on all sides. Although wildlife may disperse through the Study Area on a local level, the Study Area is not considered a wildlife migration or movement corridor.

5.0 IMPACTS AND RECOMMENDED MITIGATION

5.1 SPECIAL-STATUS PLANTS

The Study Area contains suitable habitat for bent-flowered fiddleneck, Tracy's eriastrum, and Cobb Mountain lupine within the blue oak–foothill pine woodland, nonnative annual grassland, and intermittent drainage habitats. If present within the Study Area, these species could be impacted by the proposed project through grading or vegetation removal activities. Loss of special-status plant populations would represent a potentially significant impact. To avoid potential impacts to these species, the following measures are recommended:

- A qualified botanist should conduct a special-status plant survey within the appropriate identification (blooming) period prior to the initiation of any ground-disturbing activities that affect the Study Area. If no special-status plants are observed, then a letter report documenting the methods and results of the survey should be prepared and submitted to CDFW and no further measures are recommended.

- If special-status plants are observed within the Study Area, the location of the special-status plants should be marked with pin flags or other highly visible markers and may also be marked by GPS. The project proponent should determine if the special-status plant(s) on-site can be avoided by project design or utilize construction techniques to avoid impacts to the special-status plant species. All special-status plants to be avoided should have exclusion fencing or other highly visible material marking the avoidance area and the avoidance area should remain in place throughout the entire construction period.

- If special-status plants are found within the Study Area and cannot be avoided, the project proponent should consult with the CDFW to determine appropriate measures to mitigate the loss of special-status plant populations. These measures may include gathering seed from impacted populations for planting within nearby appropriate habitat, preserving or enhancing existing off-site populations of the plant species affected by the project, or restoring suitable habitat for special-status plant species habitat as directed by CDFW.

5.2 SPECIAL-STATUS WILDLIFE

5.2.1 Western Bumble Bee

The Study Area contains suitable habitat for western bumble bee within the nonnative annual grassland and intermittent drainage habitats. If present within the Study Area, this species could be impacted by the proposed project through grading or vegetation removal activities. The loss of western bumble bee

colonies would be a potentially significant impact. To avoid potential impacts to western bumble bee, the following measures are recommended:

A qualified biologist familiar with species of bumble bees in the area of the project should conduct a habitat assessment and preconstruction survey to confirm the presence or absence of western bumble bee prior to the implementation of project related activities. Surveys should be conducted during the active flight season from March 15th through September 30th (Koch *et al.* 2012) when this species will be most visible in the area.

- A qualified biologist shall conduct a habitat assessment for western bumble bee during the initial survey during the active flight season to map locations of suitable habitat for underground colonies and locations of preferred forage plants in the Study Area. Future survey events should focus on potential underground colony sites, foraging habitat and areas between potential colony sites and foraging habitat. Because the purpose of the surveys is to detect western bumble bee, surveys should be completed during the active season (March 15th through September 30th) when bumble bees will be the most observable while they are foraging or seeking sites for a new colony.

- At least one follow-up survey shall be conducted by a qualified biologist during the western bumble bee active season to focus on foraging habitat and suitable underground refuge areas identified during the habitat assessment. For each survey event, the surveyor should spend at least one hour per 3-acre area surveying suitable habitat, based on survey protocols for the rusty patched bumble bee (*B. affinis*) (USFWS 2019). Surveyors should note other species of bumble bee, approximate number of each species and photographs of bumble bees should be taken to properly identify species of bumble bee present onsite (USFWS 2019). Surveys should be conducted within a year of project implementation for negative findings to remain valid. If western bumble bee is not identified in or immediately adjacent to the Study Area (within 25 feet), no further surveys or actions would be required. Results from the habitat assessment and follow-up surveys should be provided to CDFW. If a western bumble bee individual or colony is identified in the Study Area or within 25 feet, then a 25-foot setback should be implemented around the colony and consultation with CDFW may be necessary if the project activities will impact an active western bumble bee colony. Since the western bumble bee is a candidate species under CESA, incidental take coverage may be required for project-related impacts that will result in take of western bumble bee.

5.2.2 Monarch Butterflies

Project design should incorporate a 25-foot setback around milkweed habitat adjacent to and within the Study Area as these perennial herbs could provide larval habitat for Monarch butterfly during the summer breeding season (March 16 through October 31 [USFWS 2021]). As feasible, any construction activities associated with or within 25 feet of milkweed should occur outside of the summer breeding season (from approximately November 1 through March 15 [USFWS 2021]). This would reduce impacts to all larval butterflies. If construction activities will occur and directly or indirectly impact milkweed during the summer breeding for Monarch butterflies (approximately March 16 through October 31), pre-construction surveys should be conducted by a qualified biologist within one week prior to the onset of construction. If no Monarch butterfly life stage is identified in or immediately adjacent to the Study Area (within 25 feet), no further surveys or actions would be required. If a Monarch butterfly eggs, larvae, or chrysalis are identified in the Study Area or within 25 feet, then then a 25-foot setback should

be implemented and consultation with USFWS may be necessary if the project activities will impact occupied Monarch larval host plant habitat.

5.2.3 Nesting Migratory Birds and Raptors

Cooper's hawk, osprey and purple martin have the potential to forage and nest within the Study Area and other migratory birds and raptors protected under federal, State, and/or local laws and policies have potential to nest and forage within the Study Area. Although no active nests were observed during the field survey, the Study Area and adjacent properties contain suitable habitat to support a variety of nesting birds within trees, shrubs, grass, and on bare ground. If project activities take place during the nesting season (February 1 to August 31), nesting birds may be impacted. Construction activities and construction-related disturbance (e.g., noise, vibration, increased human activity) could adversely affect these species if they were to nest in the Study Area or in suitable habitat adjacent to Study Area through loss of reproductive success, forced fledging, or nest abandonment, which would be a potentially significant impact. If project activities take place outside of the nesting season, no mitigation measures for nesting birds are required. If project activities occur during the nesting season, the following measures are recommended to avoid or minimize impacts to nesting birds:

- To avoid impacts to nesting birds, all ground disturbing activity should be completed between September 1 and January 31, if feasible.

- A qualified biologist should conduct a pre-construction nesting bird survey no more than 14 days prior to initiation of project activities. The survey area should include suitable raptor nesting habitat within 500-feet of the project boundary (inaccessible areas outside of the Study Area can be surveyed from the site or from public roads using binoculars or spotting scopes). Areas that have been inactive for more than 14 days during the avian breeding season must be re-surveyed prior to resumption of project activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure should be implemented:

    - A species-specific buffer (typically 75-to 100-feet for non-raptor birds and 300-to 500-feet for raptors) should be established by a qualified biologist around active nests and no construction activities within the buffer should be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest, or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer should be monitored by a qualified biologist to determine whether nesting birds are being impacted.

- A qualified biologist should conduct an environmental awareness training to all project-related personnel prior to the initiation of work. The training should follow the same guidelines as the special-status amphibians training described above.

5.2.4 Hoary Bat, Western Red Bat, and Silver-haired Bat

If these bat species are roosting in the Study Area at the time of construction, construction activities and construction-related disturbance (e.g., noise, vibration, increased human activity) could adversely affect hoary bat, western red bat, and silver-haired bat by direct harm, loss of roost tree(s), or by causing

individuals to leave the roost under suboptimal conditions and exposing them to stress or increased chance of predation, which would be a potentially significant impact. To avoid potential impacts to this species, the following measures are recommended:

A qualified wildlife biologist should conduct surveys for special-status bats during the appropriate time of day to maximize detectability to determine if bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (e.g., Anabat, etc.). The type of survey will depend on the condition of the potential roosting habitat. If no bat roosts are found, then no further study is required.

- If evidence of bat use is observed, then the number and species of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts.

- If roosts are determined to be present and have the likelihood to be disturbed by construction, then a qualified biologist will determine if the bats should be excluded from the roosting site before work adjacent to the roost occurs. A mitigation program addressing compensation, exclusion methods, and roost removal procedures will be developed prior to implementation if exclusion is recommended. Exclusion methods may include use of one-way doors at roost entrances (bats may leave, but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

5.3 BIOLOGICAL COMMUNITIES

5.3.1 Sensitive Habitats

Sensitive habitats in the Study Area include one unnamed intermittent drainage. A 50-foot setback will be established from the intermittent drainage for all building development and septic system development as part of the site plan.

5.3.1.1 Aquatic Habitats

The intermittent drainage (1.66 acres and 1,153 linear feet) within the Study Area is likely to be considered a water of the U.S. and State subject to USACE and RWQCB jurisdiction under Sections 404 and 401 of the CWA as well as CDFW jurisdiction under Section 1600 of the Fish and Game Code. Canopy cover of the blue oak–foothill pine woodland along the intermittent drainage may also fall under CDFW jurisdiction under Section 1600 of the Fish and Game Code. If any impacts to the feature or associated oak canopy over the feature is expected, then a formal aquatic resources delineation should be submitted to the appropriate resource agencies to determine the extent of jurisdiction. In the event that any aquatic resources are determined to be jurisdictional, the project proponent will be required to apply for appropriate permits to fill aquatic resources and any mitigation measures contained in the permits will require implementation prior to filling any on-site features deemed subject to regulation.

If aquatic habitats are anticipated to be avoided during the implementation of project activities, then boundaries of these habitats should be clearly marked and avoided during construction. Highly visible material, such as orange construction fencing should be constructed at least 50-feet from the boundary

of these habitats to establish an appropriate no-disturbance buffer. Erosion control measures should also be implemented around these habitats and all other measures outlined in the Project's Storm Water Pollution Prevention Plan (SWPPP) and other general construction permits should be followed.

5.3.1.2 Protected Trees

Approximately 11.42 acres of blue oak–foothill pine habitat occurs in the Study Area. Protected trees under the City's tree ordinance within the Study Area include valley oak, interior live oak, and blue oak. Some protected trees will be impacted by the project. A tree permit shall be obtained from the City of Clearlake prior to removal of any protected trees and mitigation shall be completed as required by the City. Mitigation typically includes planting of replacement trees on or off-site in addition to the development of a tree replacement plan that will be reviewed and approved by the Clearlake Community Development Department.

6.0 REFERENCES

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Appendix A

Applicable Sections of the City of Clearlake General Plan

CITY OF CLEARLAKE GENERAL PLAN

The objective of the General Plan (plan) is to provide guidance for decisions relating to the future use of land, community character and design, housing and neighborhoods, economic development, circulation and mobility, open space and recreation, resource conservation and management, and public facilities and services. The horizon of this plan is the Year 2040. Over this period, Clearlake will be facing many challenges in achieving its development goals. It is the intent of this plan that the policies and associated goals, objectives and recommended implementation strategies serve as a framework for community decision-making. To ensure growth that is both wise and sustainable, decisions must be based on a formulation of sound policy and founded by a comprehensive and integrated approach to analyzing community issues and identifying realistic solutions, as set forth in this plan. The plan was adopted by the City Council on February 28, 2017 (City of Clearlake 2017).

Chapter 5: Conservation

The Conservation Element describes water, forests, soils, rivers, harbors, fisheries, wildlife, minerals, cultural resources, and other natural resources. This element provides direction regarding the protection, management, and careful utilization of natural resources within a community and surrounding area.

California state law does not mandate the implementation of a Conservation Element as a chapter within the General Plan. Therefore, this element is considered an optional element. Stipulated by California Government Code Section 65303, a city or county may adopt “any elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city.

The Conservation Element addresses the natural and cultural resources of Clearlake and the region in consideration of future community development. Specific measures and programs have been developed in this element to address challenges and conservation of geologic, minerals, soils, water, air and cultural.

Goal CO-1: Clean and safe lake conditions for wildlife, swimming, fishing, and boating.

Objective CO 1.1: Protect the quality of surface and groundwater resources.

Policy CO 1.1.1: Meet local, state, and federal standards for water quality.

- Program CO 1.1.1.1: The City should continue to participate in the Clear Lake Integrated Watershed Management Plan.

Objective CO 1.2: Prevent sediment erosion and nutrient loading of Clear Lake.

Policy CO 1.2.1: Conform to the requirements for allowable levels of drainage loading into the lake.

- Program CO 1.2.1.1: The City should implement policies and programs established in the Total Maximum Drainage Load Implementation into the Lake.

Goal CO-4: A diverse landscape where plant and wildlife habitats, open space, and natural resources are preserved and protected.

Objective CO 4.1: Protect all state and federally listed endangered and threatened species.

Policy CO 4.1.1: The City shall adhere to all federal and state requirements regarding the protection of endangered species.

Policy CO 4.1.2: The City shall limit the encroachment of development within areas that contain a high potential for sensitive habitat, and direct development into less significant habitat areas.

Policy CO 4.1.3: The City shall require that buildings and other forms of development be set back (City Standard) from riparian corridors to avoid damage to habitat.

Policy CO 4.1.4: The City shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats.

Policy CO 4.1.5: The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well-adapted plants are maintained.

Policy CO 4.1.7: The City shall utilize the California Environmental Quality Act (CEQA) as the primary regulatory tool for identifying and mitigating, where feasible, impacts to open space and natural resources when reviewing proposed development projects.

Objective CO 4.2: Prevent conversion of wildlife habitat into other land uses.

Policy CO 4.2.1: The City should conserve existing open space and prevent wildlife habitat and connecting corridor loss resulting from new development.

Policy CO 4.2.2: Promote clustered development in lieu of low-density dispersed development.

Objective CO 4.3: Maintain a diverse and natural landscape to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well-adapted plants are maintained.

Policy CO 4.3.1: The Lake County list of native vegetation should be included among the City's approved list of plants.

- Program CO 4.3.1.1: The City should develop a list of approved plants for use in new development.

Policy CO 4.3.2: In accordance with CEQA Guidelines Section 15125 and/or 15380, plants listed in the California Native Plant List at 1A (Plants Presumed Extirpated (Extinct) in California and Either Rare or Extinct Elsewhere) or 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere shall be considered potentially significant) shall be analyzed during preparation of environmental documents.

Goal CO-8: Enhanced intergovernmental coordination on conservation issues in Lake County.

Objective CO 8.1: Coordinate with regional agencies on management and protection of County resources.

Policy CO 8.1.1: Work with other government land management agencies to preserve and protect biological resources while maintaining the ability to utilize and enjoy the natural resources in the City.

- Program CO 8.1.1.1: The City should participate in the creation of an intergovernmental management team, which includes unincorporated and tribal communities.

- Program CO 8.1.1.2: The City should develop and prioritize a list of countywide conservation issues, which are heavily reliant on public comment and participation.

Chapter 6: Open Space

The Open Space Element guides the comprehensive and long-range preservation and conservation of open space in the City. This element provides direction regarding the management of the City's open space programs. The Open Space Element is one of the seven mandatory elements of the General Plan, according to Government Code §65302.

The most attractive attribute of the City is the visual open space of the lake, surrounding hills and mountains. Other open space includes active space for recreation, passive open space for visual enhancement and related connections, such as trails and sidewalks. In combination, open spaces throughout the City and surrounding areas serve to help define Clearlake's rural character.

Goal OS-6: A city that preserves and celebrates its environmental resources.

Objective OS 6.1: Preserve and maintain forested areas, fields, stream corridors, wetlands, and other open spaces that are within and surround the City.

Policy OS 6.1.1: The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces.

- Program OS 6.1.1.2: The City should use conservation design, clustering and infill, and non-traditional housing development patterns in order to prevent new development from encroaching on preserved and open space areas.

REFERENCES

City of Clearlake. 2017. 2040 General Plan Update; City of Clearlake, California: Final. General Plan adopted February 28, 2017 by Resolution 2017-10.

Appendix B

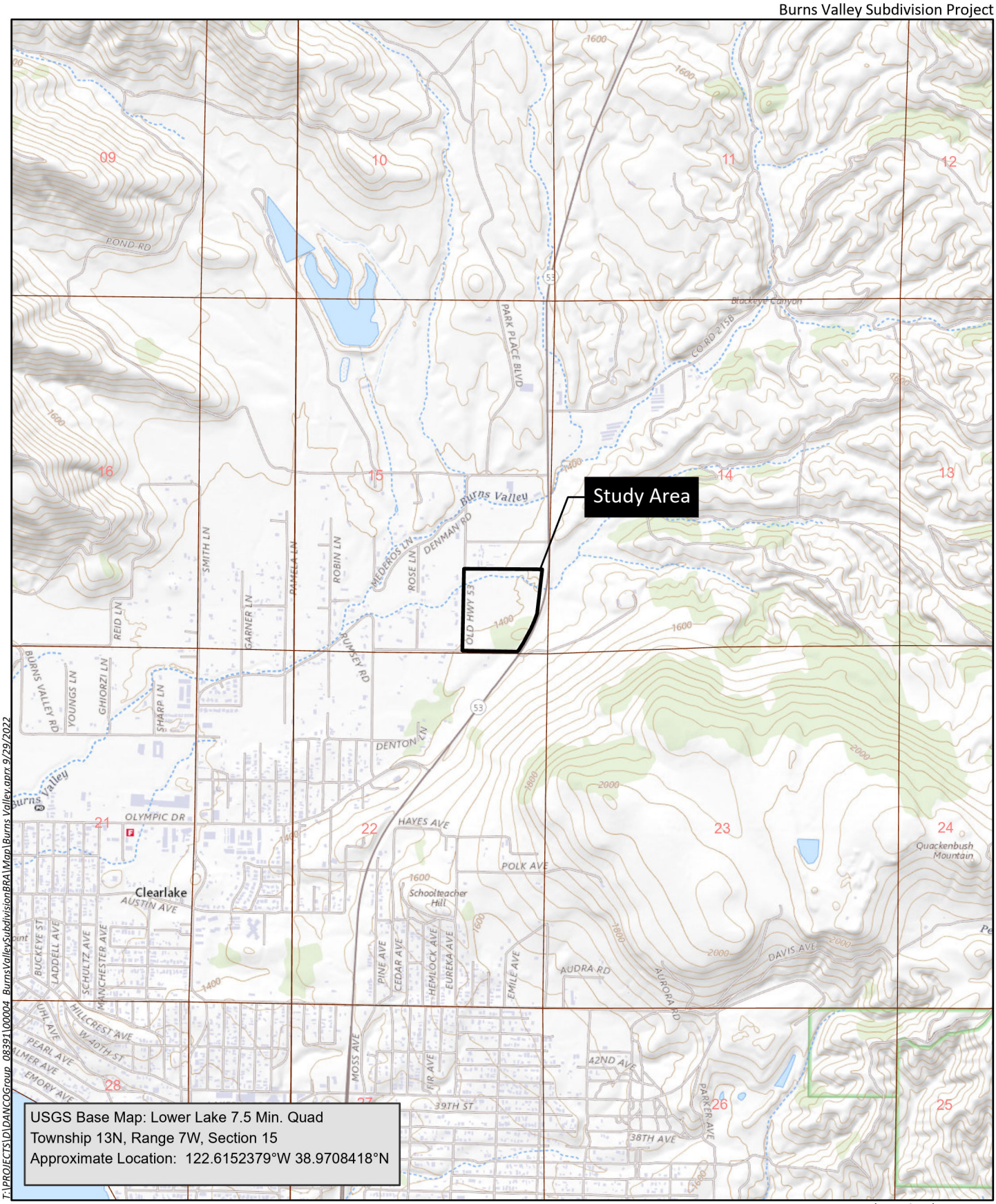
Figures

Source: Base Map Layers (Esri, USGS, NGA, NASA)

HELIX Environmental Planning

Site and Vicinity Map

Figure 1



USGS Base Map: Lower Lake 7.5 Min. Quad
Township 13N, Range 7W, Section 15
Approximate Location: 122.6152379°W 38.9708418°N

0 2,000 Feet

Source: USGS, The National Map, 2021

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HELIX Environmental Planning

USGS Topographic Map

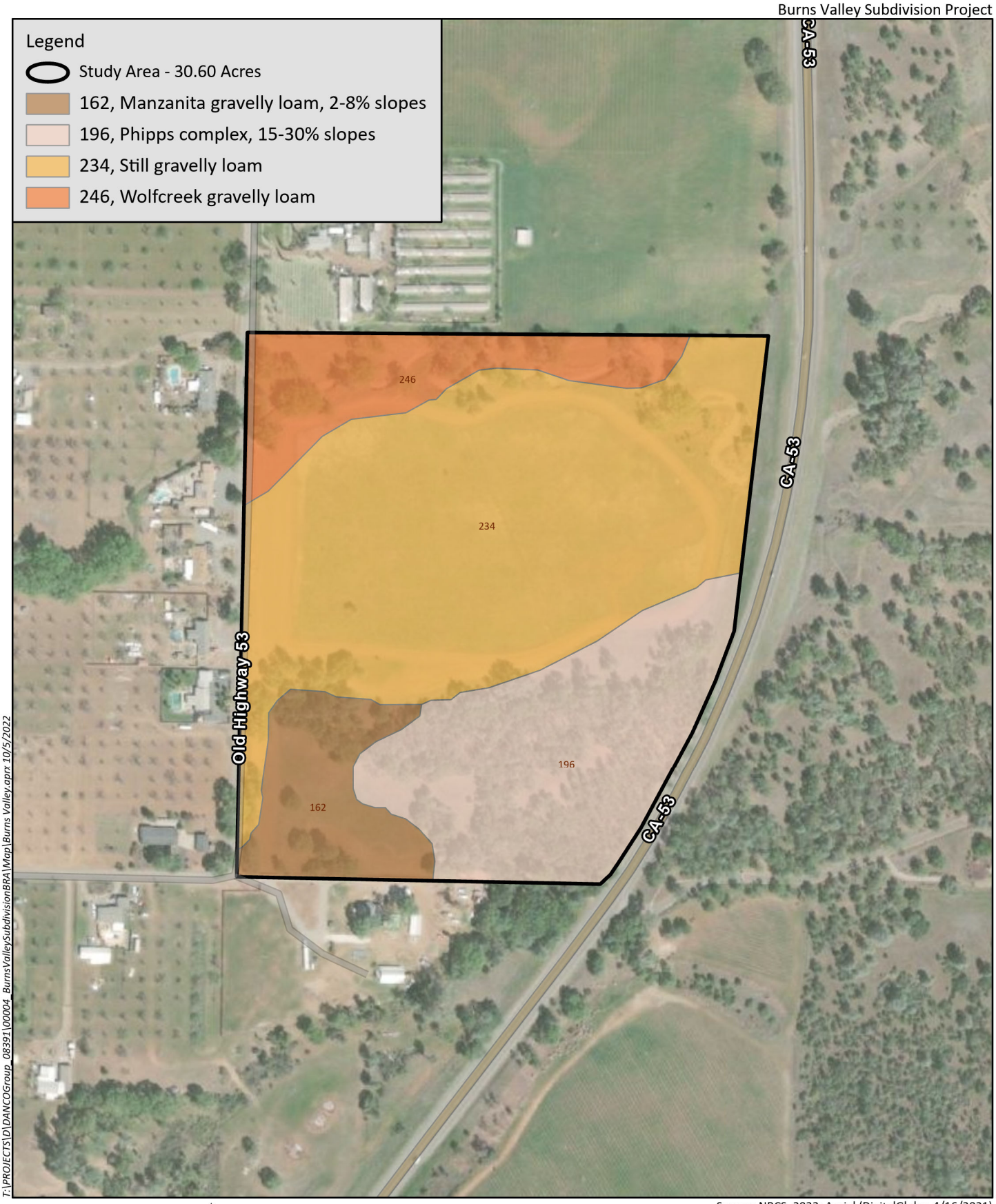
Figure 2

Source: Aerial (DigitalGlobe, 4/16/2021)

HELIX Environmental Planning

Aerial Map

Figure 3



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Source: NRCS, 2022; Aerial (DigitalGlobe, 4/16/2021)

HELIX Environmental Planning

Soils Map

Figure 4

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Source: Aerial (DigitalGlobe, 4/16/2021)

HELIX Environmental Planning

Biological Communities

Figure 5

Appendix C

Database Lists of Regionally Occurring Special-status Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Project Code: 2022-0085422
Project Name: Burns Valley Subdivision Project

September 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2022-0085422
Project Name: Burns Valley Subdivision Project
Project Type: Residential Construction
Project Description: Development
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.9707789,-122.61516213935454,14z

Counties: Lake County, California

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Few-flowered Navarretia *Navarretia leucocephala ssp. pauciflora (=N. pauciflora)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8242	Endangered
Slender Orcutt Grass *Orcuttia tenuis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

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Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Lower Lake (3812285) OR Clearlake Highlands (3812286) OR Clearlake Oaks (3912216) OR Benmore Canyon (3912215) OR Wilbur Springs (3912214) OR Jericho Valley (3812274) OR Middletown (3812275) OR Whispering Pines (3812276) OR Wilson Valley (3812284))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAF02020	***Taricha rivularis*** red-bellied newt	None	None	G2	S2	SSC
AAAAH01020	***Dicamptodon ensatus*** California giant salamander	None	None	G2G3	S2S3	SSC
AAABH01022	***Rana draytonii*** California red-legged frog	Threatened	None	G2G3	S2S3	SSC
AAABH01050	***Rana boylii*** foothill yellow-legged frog	None	Endangered	G3	S3	SSC
ABNKC01010	***Pandion haliaetus*** osprey	None	None	G5	S4	WL
ABNKC10010	***Haliaeetus leucocephalus*** bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC12040	***Accipiter cooperii*** Cooper's hawk	None	None	G5	S4	WL
ABNKC22010	***Aquila chrysaetos*** golden eagle	None	None	G5	S3	FP
ABNKD06090	***Falco mexicanus*** prairie falcon	None	None	G5	S4	WL
ABNRB02022	***Coccyzus americanus occidentalis*** western yellow-billed cuckoo	Threatened	Endangered	G5T2T3	S1	
ABPAU01010	***Progne subis*** purple martin	None	None	G5	S3	SSC
AFCJB19011	***Lavinia exilicauda chi*** Clear Lake hitch	None	Threatened	G4T1	S1	
AFCQB07010	***Archoplites interruptus*** Sacramento perch	None	None	G1	S1	SSC
AFCQK02013	***Hysterocarpus traskii lagunae*** Clear Lake tule perch	None	None	G5T3	S3	SSC
AMACC01070	***Myotis evotis*** long-eared myotis	None	None	G5	S3	
AMACC01090	***Myotis thysanodes*** fringed myotis	None	None	G4	S3	
AMACC02010	***Lasionycteris noctivagans*** silver-haired bat	None	None	G3G4	S3S4	
AMACC05030	***Lasiurus cinereus*** hoary bat	None	None	G3G4	S4	
AMACC05060	***Lasiurus blossevillii*** western red bat	None	None	G4	S3	SSC

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AMACC08010	***Corynorhinus townsendii*** Townsend's big-eared bat	None	None	G4	S2	SSC
AMACC10010	***Antrozous pallidus*** pallid bat	None	None	G4	S3	SSC
ARAAD02030	***Emys marmorata*** western pond turtle	None	None	G3G4	S3	SSC
CARA2422CA	***Central Valley Drainage Rainbow Trout/Cyprinid Stream*** Central Valley Drainage Rainbow Trout/Cyprinid Stream	None	None	GNR	SNR	
CARA2520CA	***Clear Lake Drainage Resident Trout Stream*** Clear Lake Drainage Resident Trout Stream	None	None	GNR	SNR	
CTT42130CA	***Serpentine Bunchgrass*** Serpentine Bunchgrass	None	None	G2	S2.2	
CTT42300CA	***Wildflower Field*** Wildflower Field	None	None	G2	S2.2	
CTT44131CA	***Northern Basalt Flow Vernal Pool*** Northern Basalt Flow Vernal Pool	None	None	G3	S2.2	
CTT44133CA	***Northern Volcanic Ash Vernal Pool*** Northern Volcanic Ash Vernal Pool	None	None	G1	S1.1	
CTT52410CA	***Coastal and Valley Freshwater Marsh*** Coastal and Valley Freshwater Marsh	None	None	G3	S2.1	
CTT61420CA	***Great Valley Mixed Riparian Forest*** Great Valley Mixed Riparian Forest	None	None	G2	S2.2	
CTT83220CA	***Northern Interior Cypress Forest*** Northern Interior Cypress Forest	None	None	G2	S2.2	
IICOL5A010	***Dubiraphia brunnescens*** brownish dubiraphian riffle beetle	None	None	G1	S1	
IICOL5S030	***Ochthebius recticulus*** Wilbur Springs minute moss beetle	None	None	G1	S1	
IIDIP13010	***Paracoenia calida*** Wilbur Springs shore fly	None	None	G1	S1	
IIHEM07010	***Saldula usingeri*** Wilbur Springs shorebug	None	None	G1	S2	
IIHYM24250	***Bombus occidentalis*** western bumble bee	None	None	G2G3	S1	
IIHYM68020	***Hedychridium milleri*** Borax Lake cuckoo wasp	None	None	G1	S1	
IMBIV19010	***Gonidea angulata*** western ridged mussel	None	None	G3	S1S2	
IMGASJ0F40	***Pyrgulopsis ventricosa*** Clear Lake pyrg	None	None	G1	S1	
NBMUS32330	***Grimmia torenii*** Toren's grimmia	None	None	G2	S2	1B.3

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
NBMUS4Q022	***Mielichhoferia elongata*** elongate copper moss	None	None	G5	S3S4	4.3
PDAPI0Z0W0	***Eryngium constancei*** Loch Lomond button-celery	Endangered	Endangered	G1	S1	1B.1
PDAST11061	***Balsamorhiza macrolepis*** big-scale balsamroot	None	None	G2	S2	1B.2
PDAST3M5G0	***Erigeron greenei*** Greene's narrow-leaved daisy	None	None	G3	S3	1B.2
PDAST4R065	***Hemizonia congesta ssp. congesta*** congested-headed hayfield tarplant	None	None	G5T2	S2	1B.2
PDAST4R0P2	***Centromadia parryi ssp. parryi*** pappose tarplant	None	None	G3T2	S2	1B.2
PDAST5L010	***Lasthenia burkei*** Burke's goldfields	Endangered	Endangered	G1	S1	1B.1
PDAST5N0F0	***Layia septentrionalis*** Colusa layia	None	None	G2	S2	1B.2
PDAST650A0	***Harmonia hallii*** Hall's harmonia	None	None	G2?	S2?	1B.2
PDBOR01070	***Amsinckia lunaris*** bent-flowered fiddleneck	None	None	G3	S3	1B.2
PDBOR0A0H2	***Cryptantha dissita*** serpentine cryptantha	None	None	G3	S3	1B.2
PDBOR0A0W0	***Cryptantha excavata*** deep-scarred cryptantha	None	None	G1	S1	1B.1
PDBRA2G071	***Streptanthus brachiatus ssp. hoffmanii*** Freed's jewelflower	None	None	G2T2	S2	1B.2
PDBRA2G072	***Streptanthus brachiatus ssp. brachiatus*** Socrates Mine jewelflower	None	None	G2T1	S1	1B.2
PDBRA2G0S4	***Streptanthus morrisonii ssp. kruckebergii*** Kruckeberg's jewelflower	None	None	G2T1	S1	1B.2
PDBRA2G510	***Streptanthus hesperidis*** green jewelflower	None	None	G2G3	S2S3	1B.2
PDCAB01010	***Brasenia schreberi*** watershield	None	None	G5	S3	2B.3
PDCAM060E0	***Downingia willamettensis*** Cascade downingia	None	None	G4	S2	2B.2
PDCAM0C010	***Legenere limosa*** legenere	None	None	G2	S2	1B.1
PDCHE041F3	***Extriplex joaquinana*** San Joaquin spearscale	None	None	G2	S2	1B.2
PDCON04032	***Calystegia collina ssp. oxyphylla*** Mt. Saint Helena morning-glory	None	None	G4T3	S3	4.2

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDCON04036	***Calystegia collina ssp. tridactylosa*** three-fingered morning-glory	None	None	G4T1	S1	1B.2
PDCPR07080	***Viburnum ellipticum*** oval-leaved viburnum	None	None	G4G5	S3?	2B.3
PDCRA0F020	***Sedella leiocarpa*** Lake County stonecrop	Endangered	Endangered	G1	S1	1B.1
PDERI041G2	***Arctostaphylos stanfordiana ssp. raichei*** Raiche's manzanita	None	None	G3T2	S2	1B.1
PDERI04271	***Arctostaphylos manzanita ssp. elegans*** Konocti manzanita	None	None	G5T3	S3	1B.3
PDFAB0F7E1	***Astragalus rattanii var. jepsonianus*** Jepson's milk-vetch	None	None	G4T3	S3	1B.2
PDFAB2B3J0	***Lupinus sericatus*** Cobb Mountain lupine	None	None	G2?	S2?	1B.2
PDFAB2B4E0	***Lupinus milo-bakeri*** Milo Baker's lupine	None	Threatened	G1Q	S1	1B.1
PDFAB400R5	***Trifolium hydrophilum*** saline clover	None	None	G2	S2	1B.2
PDLIN01010	***Hesperolinon adenophyllum*** glandular western flax	None	None	G2G3	S2S3	1B.2
PDLIN01020	***Hesperolinon bicarpellatum*** two-carpellate western flax	None	None	G2	S2	1B.2
PDLIN01070	***Hesperolinon didymocarpum*** Lake County western flax	None	Endangered	G1	S1	1B.2
PDLIN01090	***Hesperolinon drymarioides*** drymaria-like western flax	None	None	G2	S2	1B.2
PDLIN010E0	***Hesperolinon sharsmithiae*** Sharsmith's western flax	None	None	G2Q	S2	1B.2
PDMAL110D0	***Sidalcea keckii*** Keck's checkerbloom	Endangered	None	G2	S2	1B.1
PDMAL110K2	***Sidalcea oregana ssp. hydrophila*** marsh checkerbloom	None	None	G5T2	S2	1B.2
PDPGN08440	***Eriogonum nervulosum*** Snow Mountain buckwheat	None	None	G2	S2	1B.2
PDPLM030C0	***Eriastrum tracyi*** Tracy's eriastrum	None	Rare	G3Q	S3	3.2
PDPLM030H0	***Eriastrum brandegeeae*** Brandegee's eriastrum	None	None	G1Q	S1	1B.1
PDPLM09140	***Leptosiphon jepsonii*** Jepson's leptosiphon	None	None	G2G3	S2S3	1B.2
PDPLM0C0E1	***Navarretia leucocephala ssp. bakeri*** Baker's navarretia	None	None	G4T2	S2	1B.1

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDPLM0C0E4	***Navarretia leucocephala ssp. pauciflora*** few-flowered navarretia	Endangered	Threatened	G4T1	S1	1B.1
PDPLM0C0E5	***Navarretia leucocephala ssp. plieantha*** many-flowered navarretia	Endangered	Endangered	G4T1	S1	1B.2
PDPLM0C0J2	***Navarretia nigelliformis ssp. radians*** shining navarretia	None	None	G4T2	S2	1B.2
PDPLM0C160	***Navarretia paradoxinota*** Porter's navarretia	None	None	G2	S2	1B.3
PDRHA04220	***Ceanothus confusus*** Rincon Ridge ceanothus	None	None	G1	S1	1B.1
PDRHA04240	***Ceanothus divergens*** Calistoga ceanothus	None	None	G2	S2	1B.2
PDROS0W011	***Horkelia bolanderi*** Bolander's horkelia	None	None	G1	S1	1B.2
PDSCR0D482	***Castilleja rubicundula var. rubicundula*** pink creamsacs	None	None	G5T2	S2	1B.2
PDSCR0R060	***Gratiola heterosepala*** Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2
PDSCR1L483	***Penstemon newberryi var. sonomensis*** Sonoma beardtongue	None	None	G4T3	S3	1B.3
PDSCR2S070	***Antirrhinum subcordatum*** dimorphic snapdragon	None	None	G3	S3	4.3
PMCYP03B20	***Carex praticola*** northern meadow sedge	None	None	G5	S2	2B.2
PMLIL0C0K3	***Brodiaea rosea*** Indian Valley brodiaea	None	Endangered	G2Q	S2	3.1
PMLIL0G042	***Chlorogalum pomeridianum var. minus*** dwarf soaproot	None	None	G5T3	S3	1B.2
PMLIL0V0F0	***Fritillaria pluriflora*** adobe-lily	None	None	G2G3	S2S3	1B.2
PMPOA24028	***Panicum acuminatum var. thermale*** Geysers panicum	None	Endangered	G5T2Q	S2	1B.2
PMPOA3D020	***Imperata brevifolia*** California satintail	None	None	G3	S3	2B.1
PMPOA4G050	***Orcuttia tenuis*** slender Orcutt grass	Threatened	Endangered	G2	S2	1B.1
PMPOA53110	***Puccinellia simplex*** California alkali grass	None	None	G2	S2	1B.2
PMPOT03160	***Potamogeton zosteriformis*** eel-grass pondweed	None	None	G5	S3	2B.2

Record Count: 102

California Native Plant Society

Search Results

9 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B:3**] , 9-Quad include [**3912216:3812286:3912215:3912214:3812274:3812275:3812276:3812285:3812284**], Elevation above **250 feet**, Elevation below **2500 feet**

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Astragalus rattanii var. *jepsonianus*	Jepson's milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2	No Photo Available
Cryptantha dissita	serpentine cryptantha	Boraginaceae	annual herb	Apr-Jun	None	None	G3	S3	1B.2	 ©2019 Terry Gosliner
Cryptantha excavata	deep-scarred cryptantha	Boraginaceae	annual herb	Apr-May	None	None	G1	S1	1B.1	No Photo Available
Hesperolinon didymocarpum	Lake County western flax	Linaceae	annual herb	May-Jul	None	CE	G1	S1	1B.2	 © 2018 Aaron Arthur
Hesperolinon sharsmithiae	Sharsmith's western flax	Linaceae	annual herb	May-Jul	None	None	G2Q	S2	1B.2	 © 2017 Aaron Arthur
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	None	None	G2G3	S2S3	1B.2	 © 2012 Aaron Arthur
Lupinus milo-bakeri	Milo Baker's lupine	Fabaceae	annual herb	Jun-Sep	None	CT	G1Q	S1	1B.1	No Photo Available
Malacothamnus helleri	Heller's bush-mallow	Malvaceae	perennial deciduous shrub	May-Jul	None	None	G2Q	S2	3.3	 © 2017 Keir Morse
Streptanthus hesperidis	green jewelflower	Brassicaceae	annual herb	May-Jul	None	None	G2G3	S2S3	1B.2	No Photo Available

Showing 1 to 9 of 9 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 14 September 2022].

Appendix D

Plant and Wildlife Species Observed in the Study Area

Family	Species Name	Common Name
Native		
Agavacea	*Chlorogalum pomeridianum* var. *pomeridianum*	Common soaproot
Anacardiaceae	*Toxicodendron diversilobum*	Poison oak
Apiaceae	*Lomatium californicum*	Celery weed
Apocynaceae	*Asclepias eriocarpa*	Indian milkweed
Asteraceae	*Achillea millefolium*	Common yarrow
	Baccharis pilularis	Coyote bush
	Brickellia californica	California brickellia
	Calycadenia multiglandulosa	Rosin weed
	Holocarpha virgata	Narrow tarplant
	Pseudognaphalium canescens	Wright's cudweed
	Yehia angustifolia	Narrow leaf mules ear
Caprifoliaceae	*Lonicera interrupta*	Chaparral honeysuckle
Ericaceae	*Arctostaphylos glandulosa*	Eastwood manzanita
Fagaceae	*Quercus douglasii*	Blue oak
	Quercus lobata	Valley oak
	Quercus wislizeni	Interior live oak
Iridaceae	*Iris macrosiphon*	Ground iris
Lamiaceae	*Trichostema lanceolatum*	Vinegarweed
Namaceae	*Eriodictyon californicum*	Yerba santa
Onagraceae	*Epilobium brachycarpum*	Fireweed
Papaveraceae	*Eschscholzia californica*	California poppy
Pinaceae	*Pinus sabiniana*	Gray pine
Plantaginaceae	*Penstemon heterophyllus*	Foothill penstemon
Poaceae	*Elymus glaucus*	Blue wildrye
	Elymus elymoides	Squirrel tail grass
	Hordeum brachyantherum	Meadow barley
	Melica californica	California melic
	Stipa pulchra	Purple needle grass
Polygonaceae	*E*riogonum dasyanthermum	Chaparral buckwheat
	Eriogonum nudum	Naked buckwheat
Rhamnaceae	*Ceanothus cuneatus*	Buck brush
	Rhamnus crocea	Redberry buckthorn
Rosaceae	*Adenostoma fasciculatum*	Chamise
	Cercocarpus betuloides	Birch-leaf mountain mahogany
	Heteromeles arbutifolia	Toyon
Sapindaceae	*Aesculus californica*	California buckeye
Viburnaceae	*Sambucus mexicana*	Elderberry
Non-native		
Apiaceae	*Torilis arvensis*	Field hedge parsley
Asteraceae	*Carduus pycnocephalus*	Italian thistle
	Centaurea solstitialis	Yellow star-thistle
	Xanthium strumarium	Rough cocklebur
Brassicaceae	*Brassica nigra*	Black mustard
Lamiaceae	*Marrubium vulgare*	White horehound
Myrtaceae	*Eucalyptus globulus*	Blue gum

Family	Species Name	Common Name
Poaceae	*Aegilops cylindrica*	Jointed goat grass
	Avena barbata	Slender oats
	Brachypodium distachyon	Purple false brome
	Bromus diandrus	Ripgut brome
	Bromus hordeaceus	Soft brome
	Cynosurus echinatus	Dogtail grass
	Elymus caput-medusae	Medusahead
	Phalaris aquatica	Harding grass
Polygonaceae	*Rumex crispus*	Curly Dock
Rosaceae	*Prunus* spp.	Plum
Solanaceae	*Nicotiana acuminata*	Tobacco
Reptiles		
Phrynosomatidae	*Sceloporus occidentalis*	Western Fence Lizard
Birds		
Cathartidae	*Cathartes aura*	Turkey Vulture
Columbidae	*Zenaida macroura*	Mourning Dove
Corvidae	*Aphelocoma californica*	California Scrub Jay
	Corvus corax	Common raven
Fringillidae	*Haemorhous mexicanus*	House Finch
	Spinus psaltria	Lesser Goldfinch
Paridae	*Baeolophus inornatus*	Oak Titmouse
Passerellidae	*Melozone crissalis*	California Towhee
Picidae	*Melanerpes formicivorus*	Acorn Woodpecker
	Dryobates nuttallii	Nuttall's Woodpecker
Sittidae	*Sitta carolinensis*	White-breasted Nuthatch
Trochilidae	*Calypte anna*	Anna's Hummingbird
Turdidae	*Sialia mexicana*	Western Bluebird
Tyrannidae	*Sayornis nigricans*	Black Phoebe

Appendix E

Potential for Special-status Species in the Region to Occur in the Study Area

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Plants			
Amsinckia lunaris bent-flowered fiddleneck	--/--/1B.2	An annual herb found in gravelly slopes, openings in cismontane woodland, and valley and foothill grassland from 5 – 800 meters elevation. Blooms March – June (Kelley and Ganders 2012).	**May occur.** Suitable habitat is present in annual grasslands and woodlands in the Study Area. The nearest CNDDB reported occurrence is located one mile north of the Study Area (CDFW 2022).
Astragalus rattanii var. *jepsonianus* Jepson's milkvetch	--/--/1B.2	An annual herb found in chaparral, cismontane woodland, and valley and foothill grassland from 295 – 700 meters elevation, often on serpentine soils. Blooms March – June (CNPS 2022).	**Will not occur.** Suitable serpentinite soils are not present in the Study Area, which is derived from alluvium that consists of gravelly loam to gravelly and sandy clay that is derived from sedimentary rock such as mudstone and sandstone. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Arctostaphylos manzanita ssp. *elegans* Konocti manzanita	--/--/1B.3	A perennial evergreen shrub found on volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forest 395 – 1,615 meters elevation. Blooms (January) March – May (July) (CNPS 2022).	**Will not occur.** There is no suitable habitat or suitable soil for this species on the Study Area and this species was not observed during the biological survey. A common species of manzanita (*Arctostaphylos glandulosa*) was documented in the Study Area.
Arctostaphylos stanfordiana ssp. *decumbens* Raiche's manzanita	--/--/1B.1	A perennial evergreen shrub found in rhyolitic chaparral and cismontane woodlands from 75 – 370 meters elevation on mountain ridges and summits. Blooms February – April (May) (CNPS 2022).	**Will not occur.** There is no suitable habitat or suitable soil for this species on the Study Area and this species was not observed during the biological survey. A common species of manzanita (*Arctostaphylos glandulosa*) was documented in the Study Area.
Balsamorhiza macrolepis big-scale balsamroot	--/--/1B.2	A perennial herb found on slopes in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentine soil. Elevation range 45 – 1,555 meters. Blooms March – June (CNPS 2022).	**Will not occur.** Suitable serpentinite soils and slope habitats are not present in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Brasenia schreberi watershield	--/--/2B.3	A rhizomatous aquatic herb found in freshwater marshes and swamps from 30 – 2,200 meters elevation. Blooms June to September (CNPS 2022).	**Will not occur.** There is no suitable aquatic habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Brodiaea rosea Indian Valley brodiaea	--/SE/3.1	A perennial bulbiferous herb found in chaparral, closed-cone coniferous forest, cismontane woodland, and valley and foothill grassland from 335 – 1,450 meters elevation, usually on serpentine soils. Formerly considered a more narrowly distributed serpentine endemic but recently expanded to include more common, non-serpentine taxa. Blooms May – June (CNPS 2022).	**Will not occur.** Suitable serpentinite soils and slope habitats are not present in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Calystegia collina ssp. *tridactylosa* three-fingered morning-glory	--/--/1B.2	A perennial rhizomatous herb found on rocky or gravelly serpentine soils in openings in chaparral and cismontane woodland from 0 – 600 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** Suitable serpentinite soil habitat is not present in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Carex praticola northern meadow sedge	--/--/2B.2	A perennial herb found in mesic meadows and seeps from 0 – 3,200 meters elevation. Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable mesic habitat for this species in the Study Area.
Castilleja rubicundula ssp. rubicundula pink creamsacs	--/--/1B.2	An annual herb found on serpentine soils in chaparral, cismontane woodland, meadows, seeps, and valley and foothill grassland from 20 – 910 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** Suitable serpentinite soils and seep habitats are not present in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Ceanothus confusus Rincon Ridge ceanothus	--/--/1B.1	A perennial evergreen shrub found on volcanic or serpentine soils in closed-cone coniferous forest, chaparral, and cismontane woodland from 75 – 1,065 meters elevation. Blooms February – June (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Ceanothus divergens Calistoga ceanothus	--/--/1B.2	A perennial evergreen shrub found on rocky volcanic or serpentine soils in chaparral from 170 – 950 meters elevation. Blooms February – April (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Centromadia parryi ssp. *parryi* pappose tarplant	--/--/1B.2	An annual herb found in chaparral, coastal prairie, meadows, seeps, coastal salt marshes, and vernally mesic valley and foothill grassland from 0 – 420 meters elevation, often in alkaline microsites. Blooms May – November (CNPS 2022).	**Will not occur.** Suitable mesic and alkaline soil habitats are not present in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Chlorogalum pomeridianum var. *minus* dwarf soaproot	--/--/1B.2	A perennial bulbiferous herb found on serpentine soils in chaparral from 305 – 1,000 meters elevation. Blooms May – August (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area. The common soaproot (*Chlorogalum pomeridianum* var. *pomeridianum*) was detected in the Study Area. There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022).
Cryptantha dissita Serpentine cryptantha	--/--/1B.2	An annual herb found on serpentine soils in chaparral from 395 – 580 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Cryptantha excavata deep-scarred cryptantha	--/--/1B.1	An annual herb found on sandy or gravelly soils is cismontane woodland from 100 – 500 meters elevation. Currently known from only five extant locations. Blooms April – May (CNPS 2022).	**Will not occur.** Suitable soil and habitat is present for this species in the Study Area, however this species is not known to occur in Lake County (CNPS 2022). There are no CNDDB reported occurrences for this species within a 5-mile radius of the Study Area (CDFW 2022). This species has a very limited distribution (CNPS 2022).
Downingia willamettensis Cascade downingia	--/--/2B.2	An annual herb found along lake margins in cismontane woodlands, valley and foothill grasslands, and vernal pools from 15 – 1,110 meters elevation. Blooms June -July (September) (CNPS 2022).	**Will not occur.** There is no suitable aquatic habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Eriastrum brandegeeae Brandegee's eriastrum	--/--/1B.1	An annual or perennial herb found in volcanic sandy soils in chaparral and cismontane woodland from 460 – 855 meters in elevation. Blooms April – August (CNPS 2022).	**Will not occur.** There is no suitable volcanic soil habitat for this species in the Study Area. The Study Area consists of sedimentary rocks derived from alluvium (California Geologic Survey (CGS) 2010; NRCS 2022). There are several CNDDB reported occurrences located two miles west of the Study Area in soil that is documented as volcanic and metavolcanic soil (CGS 2010). The CNDDB records document observations from 1977 and 2006, however the 2006 record was uncertain as to the identification of the species (CDFW 2022).
Eriastrum tracyi Tracy's eriastrum	--/SR/3.2	An annual herb found in open areas in chaparral, cismontane woodland, and valley and foothill grassland from 400 – 1,000 meters elevation. This species prefers shale and/or alluvium soils. Taxonomy of the species is uncertain. Blooms May – August (De Groot et al. 2012).	**May occur.** Suitable habitat for this species is present in the Study Area, which prefers alluvium derived from shale and other sedimentary rocks. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area.
Erigeron greenei Greene's narrow-leaved daisy	--/--/1B.2	A perennial herb found on serpentine or volcanic soils in chaparral from 80 – 1,005 meters elevation. Blooms May – September (CNPS 2022).	**Will not occur.** There is suitable soil habitat for this species in the Study Area.
Eriogonum nervulosum Snow Mountain buckwheat	--/--/1B.2	A perennial rhizomatous herb found on serpentine soils in chaparral from 300 – 2,105 meters elevation. Currently known from only nine extant locations. Blooms June – September (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Eryngium constancei Loch Lomond button-celery	FE/SE/1B.1	An annual or perennial herb found in vernal pools from 460 – 855 meters elevation. Known from 4 occurrences. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable vernal pool habitat for this species on the Study Area. There is one CNDDB reported occurrence located approximately 4.5 miles south of the Study Area. The CNDDB record is from 1997 and documents this species in a vernal pool (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Extriplex joaquinana San Joaquin spearscale	--/--/1B.2	An annual herb found in alkaline habitats in chenopod scrub, meadows and seeps, playas, and valley and foothill grassland from 1 – 835 meters elevation. Blooms April – October (CNPS 2022).	**Will not occur.** There is no suitable alkaline soil habitat for this species in the Study Area. Soil in the Study is neutral to slightly acidic (NRCS 2022).
Fritillaria pluriflora adobe-lily	--/--/1B.2	A bulbiferous herb found in chaparral, cismontane woodland, and valley and foothill grassland from 60 – 705 meters elevation, often on adobe soils. Blooms February – April (CNPS 2022).	**Will not occur.** There is no suitable heavy clay soil habitat for this species in the Study Area.
Gratiola heterosepala Boggs Lake hedge-hyssop	--/SE/1B.2	An annual herb found on clay soils in marshes and swamps at lake margins, and in vernal pools from 10 – 2,375 meters elevation. Blooms April – August (CNPS 2022).	**Will not occur.** There is no suitable aquatic habitat for this species on the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area.
Grimmia torenii Toren's grimmia	--/--/1B.3	A moss found in rocky openings and boulder and rock walls, on carbonate or volcanic substrates, in chaparral, cismontane woodland, and lower montane coniferous forest from 325 – 1,160 meters elevation. No blooming period (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area. There are no CNDDB records within a 5-mile radius of the Study Area (CDFW 2022).
Harmonia hallii Hall's harmonia	--/--/1B.2	An annual herb found on serpentine soils in chaparral from 305 – 975 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Hemizonia congesta ssp. *congesta* Congested-headed hayfield tarplant	--/--/1B.2	An annual herb found on valley and foothill grassland, and roadsides. Elevation range is 20 – 560 meters elevation. Blooms April – November (CNPS 2022).	**Presumed absent.** Suitable habitat is present for this species in grasslands and roadsides. However, this species was not observed during a site visit on September 15, 2022, when this species would have been in bloom. There are no CNDDB records within a 5-mile radius of the Study Area (CDFW 2022).
Hesperolinon adenophyllum glandular western flax	--/--/1B.2	An annual herb usually found on serpentinite soils in chaparral, cismontane woodlands, and valley and foothill grasslands from 150 – 1,315 meters elevation. Blooms May – August (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Hesperolinon bicarpellatum two-carpellate western flax	--/--/1B.2	An annual herb found on serpentine soils in chaparral from 60 – 1,005 meters elevation. Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Hesperolinon didymocarpum Lake County western flax	--/SE/1B.2	A perennial herb found in chaparral and cismontane woodland on Ione formation soils and other soils from 80 – 1,070 meters elevation. Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Hesperolinon sharsmithiae Sharsmith's western flax	--/--/1B.2	An annual herb found on serpentine soils in chaparral from 270 - 300 meters elevation. Not included in Baldwin et al. (2012). Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Horkelia bolanderi Bolander's horkelia	--/--/1B.2	A perennial herb found at the edges of vernally mesic areas in chaparral, lower montane coniferous forest, meadows, seeps, and valley and foothill grassland from 450 – 1,100 meters elevation. Blooms (May) June – August (CNPS 2022).	**Will not occur.** There is no suitable vernally mesic habitat for this species in the Study Area.
Imperata brevifolia California satintail	--/--/2B.1	A perennial rhizomatous herb found in mesic microsites in chaparral, coastal scrub, Mojavean desert scrub, riparian scrub, and alkaline meadows and seeps from 0 – 1,215 meters elevation. Blooms September – May (CNPS 2022).	**Will not occur.** There is no suitable mesic microhabitat for this species in the Study Area.
Lasthenia burkei Burke's goldfields	FE/SE/1B.1	An annual herb found in mesic meadows and vernal pools from 15 – 600 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable wetland habitat for this species in the Study Area.
Layia septentrionalis Colusa layia	--/--/1B.2	An annual herb found on sandy serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland from 100 – 1,095 meters elevation. Blooms April – May (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.
Legenere limosa legenere	--/--/1B.1	An annual herb found in vernal pools from 1 – 880 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable wetland habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Leptosiphon jepsonii Jepson's leptosiphon	--/--/1B.2	An annual herb usually found on volcanic soils in chaparral, cismontane woodlands, and valley and foothill grasslands from 100 – 500 meters elevation. Blooms March – May (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species on the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area.
Lupinus milo-bakeri Milo Baker's lupine	--/ST/2B.1	An annual herb found in cismontane woodland and valley and foothill grassland from 395 – 430 meters, often along roadsides. Blooms June – September (CNPS 2022). This species is only found in Round Valley in Mendocino County, near the community of Covelo.	**Will not occur.** The Study Area is outside of this species' known range. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area.
Lupinus sericatus Cobb Mountain lupine	--/--/1B.2	A perennial herb found in chaparral, broadleafed upland forest, cismontane woodland, and lower montane coniferous forest from 275 – 1,525 meters elevation. Blooms March – June (CNPS 2022).	**May occur.** Suitable habitat is present for this species in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area.
Malacothamnus helleri Heller's bush-mallow	--/--/3.3	A perennial deciduous shrub found on sandstone substrates in chaparral and gravel substrates in riparian woodland from 305 – 635 meters elevation. Synonymous with more common *M. fremontii* in Baldwin et al. (2012). Blooms May – July (CNPS 2022).	**Presumed absent.** Suitable habitat is present for this species in gravelly soil along an intermittent drainage. However, this species was not observed during a site visit on September 15, 2022, when this species would have been identifiable. There are no CNDDB records within a 5-mile radius of the Study Area (CDFW 2022).
Navarretia leucocephala ssp. bakeri Baker's navarretia	--/--/1B.1	An annual herb found in mesic meadows and vernal pools in cismontane woodland, lower montane coniferous forest, and valley and foothill grassland from 5 – 1,740 meters elevation. Blooms April – July (CNPS 2022).	**Will not occur.** There is no suitable vernal pool habitat for this species in the Study Area. A CNNDB reported occurrence in the Study Area shows a nonspecific area near the Study Area from 1945 that has not been field verified by CDFW (CDFW 2022).
Navarretia leucocephala ssp. *pauciflora* few-flowered navarretia	FE/ST/1B.1	An annual herb found in vernal pools on volcanic ash flow soils from 400 – 855 meters elevation. Blooms May – June (CNPS 2022).	**Will not occur.** There is no suitable wetland or volcanic soil habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Navarretia leucocephala ssp. *plientha* many-flowered navarretia	FE/SE/1B.2	An annual herb found in vernal pools on volcanic ash flow soils from 30 – 950 meters elevation. Blooms May – June (CNPS 2022).	**Will not occur.** There is no suitable wetland or volcanic soil habitat for this species in the Study Area.
Navarretia nigelliformis ssp. *radians* shining navarretia	--/--/1B.2	An annual herb found in vernal pools and on clay soils in cismontane woodland and valley and foothill grassland from 65 – 1,000 meters elevation. Blooms (March) April – July (CNPS 2022).	**Will not occur.** There is no suitable wetland habitat for this species in the Study Area.
Navarretia paradoxinota Porter's navarretia	--/--/1B.3	An annual herb found on serpentine soils in vernally mesic openings and drainages from 165 – 840 meters elevation. Blooms May – June (July) (CNPS 2022).	**Will not occur.** There is no suitable wetland or soil habitat for this species in the Study Area.
Orcuttia tenuis slender Orcutt grass	FT/SE/1B.1	An annual herb found in vernal pools from 35 – 1,760 meters elevation. Blooms May to October (CNPS 2022).	**Will not occur.** There is no suitable vernal pool habitat for this species in the Study Area.
Panicum acuminatum var. *thermale* Geysers panicum	--/SE/1B.2	An annual/perennial herb found along streambanks in closed-cone coniferous forests, riparian forests, valley and foothill grasslands from 305 – 2,470 meters elevation. Blooms June – August (CNPS 2022).	**Will not occur.** There is no suitable riparian/streambank habitat for this species in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Penstemon newberryi var. *sonomensis* Sonoma beardtongue	--/--/1B.3	A perennial herb found in rocky microsites in chaparral 700 – 1,370 meters elevation. Blooms April – August (CNPS 2022).	**Will not occur.** The Study Area is located below the elevational range of this species. Rocky microsites are also absent for this species.
Potamogeton zosteriformis eel-grass pondweed	--/--/2B.2	An annual aquatic herb found in assorted freshwater habitats throughout the Central Valley from 0 – 1,860 meters elevation. Blooms June – July (CNPS 2022).	**Will not occur.** There is no suitable aquatic habitat for this species in the Study Area. A CNNDB reported occurrence is located in the Study Area, however this record was intended to be mapped in Clear Lake and this record is a nonspecific location from 1945 (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Puccinellia simplex California alkali grass	--/--/1B.2	An annual herb found in alkaline, vernally mesic sinks, flats, and lake margins in chenopod scrub, meadows, seeps, vernal pools, and valley and foothill grasslands from 2 – 930 meters elevation. Blooms March – May (CNPS 2022).	**Will not occur.** There is no suitable aquatic or alkaline habitat for this species in the Study Area.
Sedella leiocarpa Lake County Stonecrop	FE/SE/1B.1	An annual herb found in vernal pools on volcanic outcrops in cismontane woodlands, valley and foothill grasslands from 365 – 790 meters elevation. Blooms April – May (CNPS 2022).	**Will not occur.** There is no suitable vernal pool habitat for this species in the Study Area.
Sidalcea keckii Keck's checker mallow	FE/--/1B.1	An annual herb found in cismontane woodland and valley and foothill grassland, often in serpentinite and clay soils, from 75 to 650 meters elevation. Blooms April – May (June) (CNPS 2022).	**Will not occur.** There is no suitable serpentinite or clay soil habitat for this species in the Study Area.
Sidalcea oregona ssp. *hydrophila* marsh checkerbloom	--/--/1B.2	A perennial herb found in mesic microsites in meadows, seeps, and riparian forest from 1,100 – 2,300 meters elevation. Blooms (June) July – August (CNPS 2022).	**Will not occur.** There is no suitable marsh habitat for this species in the Study Area.
Streptanthus brachiatus ssp. *hoffmanii* Freed's jewelflower	--/--/1B.2	A perennial herb found in chaparral and cismontane woodland from 490 – 1,220 meters elevation, usually on serpentine soils. Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable serpentinite soil habitat for this species in the Study Area and the Study Area is located below the elevational range of this species.
Streptanthus brachiatus ssp. *brachiatus* Socrates Mine jewelflower	--/--/1B.2	A perennial herb found in chaparral and closed-cone coniferous forest from 545 – 1,000 meters elevation, usually on serpentine soils. Blooms May – June (CNPS 2022).	**Will not occur.** The Study Area is located below the elevational range of this species.
Streptanthus hesperidis green jewelflower	--/--/1B.2	An annual herb found on serpentinite, rocky soils in openings in chaparral, and cismontane woodlands from 130 – 760 meters elevation. Blooms May – July (CNPS 2022). Blooms May – July (CNPS 2022).	**Will not occur.** There is no suitable soil habitat for this species in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Streptanthus morrisonii ssp. *kruckebergii* Kruckeberg's jewelflower	--/--/1B.2	A perennial herb found on serpentine soils in cismontane woodland from 215 - 1,035 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable serpentinite soil habitat for this species in the Study Area.
Trifolium hydrophilum saline clover	--/--/1B.2	An annual herb found in marshes, swamps, mesic alkaline valley and foothill grassland, and vernal pools from 0–- 300 meters elevation. Blooms April – June (CNPS 2022).	**Will not occur.** There is no suitable marsh habitat for this species in the Study Area.
Viburnum ellipticum oval-leaved viburnum	--/--/2B.3	A perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 – 1,400 meters elevation. Blooms May – June (CNPS 2022).	**Presumed Absent.** Suitable habitat is present for this species in oak woodlands. However, this species was not observed during a site visit on September 15, 2022. This species is perennial deciduous shrub and would have been identifiable during the site visit.
Wildlife			
Invertebrates			
Bombus occidentalis western bumble bee	--/CE/--	Bumble bees are primitively eusocial insects that live in underground colonies made up of one queen, female workers, and reproductive members of the colony. New colonies are initiated by solitary queens, generally in the early spring, which typically occupy abandoned rodent burrows (Thorp et al. 1983). This species occurs in meadows and grasslands with an abundance of floral resources (CDFW 2019). This species is a generalist forager and have been reported visiting a wide variety of flowering plants. A short-tongued bumble bee; select food plants include *Melilotus* spp., *Cirsium* spp., *Trifolium* spp., *Centaurea* spp., *Eriogonum* spp., and *Chrysothamnus* spp. (Koch et al. 2012). This species has a short tongue and typically prefers open flowers with short corollas but is known to chew through the base of flowers with long corollas. The flight period for queens	**May occur.** Marginally suitable habitat is present in annual grassland in the Study Area where preferred select food plants are present. Grassland habitat is disturbed by annual vegetation management operations, however, disturbance to annual grassland habitat is not severe and the Study Area could still support underground bee colonies if this species is present. This species is currently rare across its range and in California it is limited to high elevation meadows in the Sierra Nevada and small coastal populations (CDFW 2019). There are CNDDB documented occurrences of this species within 10 miles of the Study Area (CDFW 2023). There are only two occurrences of this species in Lake County, and both accounts are from the 1940s and 1960s (CDFW 2023).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
		in California is from early February to late November, peaking in late June and late September. New queens hibernate over the winter and initiate a new colony the following spring (Thorp et al. 1983). Rare throughout its range and in decline west of the Sierra Nevada crest.	
Danaus plexippus pop. 1 monarch - California overwintering population	FC/--/--	Overwintering populations of Monarch butterflies roost in wind protected tree groves, especially with Eucalyptus sp., and species of pine or cypress with nectar and water sources nearby. Winter roost sites extend along the coast from Mendocino County to Baja California. As caterpillars, monarchs feed exclusively on the leaves of milkweed (*Asclepias* sp.) (Nial et al. 2019 and USFWS 2020). Monarch butterfly migration routes pass east over the Sierra Nevada in the fall and back to the California coast in the spring (USFWS 2020). The overwintering population is located along the Coast while summer breeding areas occur in interior California and North America with spring breeding areas located further east (USFWS 2020).	**May occur.** There is no suitable overwintering habitat in the Study Area, however Indian milkweed, a larval food plant is abundant along an intermittent drainage in the Study Area. There are no documented CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Fishes			
Archoplites interrupta Sacramento perch	--/--/SSC	Extinct in its native range, all known populations of this species are the result of introductions. The species is adapted for life in sloughs, slow moving rivers, and large lakes in the Central Valley, and can tolerate high temperatures and salinities as well as high pH (alkalinity). Extant populations are in reservoirs; the species has been replaced in its native range by introduced game fishes (Crain and Moyle 2011).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Hypomesus transpacificus Delta smelt	FT/SE/--	Delta smelt are tolerant of a wide salinity range. They have been collected from estuarine waters up to 14 ppt (parts per thousand) salinity. For a large part of their one-year life span, delta smelt live along the freshwater edge of the mixing zone (saltwater-freshwater interface), where the salinity is approximately 2 ppt. Shortly before spawning, adults migrate upstream from the brackish-water habitat associated with the mixing zone and disperse into river channels and tidally-influenced backwater sloughs. They spawn in shallow, fresh or slightly brackish water upstream of the mixing zone. Most spawning happens in tidally-influenced backwater sloughs and channel edge-waters. Although spawning has not been observed in the wild, the eggs are thought to attach to substrates such as cattails, bulrush, tree roots and submerged branches. Delta smelt are found only from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano and Yolo counties (USFWS 2017).	**Will not occur.** There is no suitable aquatic habitat in the Study Area and the Study Area is outside of this species' range.
Hysterocarpus traskii lagunae Clear Lake tule perch	--/--/SSC	Endemic to three altered lakes which have lost most of their own native fish species. Occurs in Clear Lake and may still occur in Lower Blue Lake and remains common in Upper Blue Lake. The species is adapted for life in lakes with warm waters. Clear Lake tule perch are tolerant of varied environmental conditions, however their absence from the Central Valley indicates they may be less tolerant of poor water quality (Moyle et al. 2015).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Lavinia exilicauda chi Clear Lake hitch	--/ST/--	Found only in Clear Lake, where it is associated with ponds in streams that are tributary to Clear Lake (CDFW 2022). Adults are typically found in the limnetic zone of the lake and juveniles are found nearshore amongst vegetation (CDFW 2022).	**Will not occur.** There is no suitable aquatic habitat in the Study Area.
Amphibians			
Dicamptodon ensatus California giant salamander	--/--/SSC	Endemic to California and occurs in wet coastal forests near clear, cold perennial streams below 3,000 feet above msl. Larval stage transforms to adult stage after approximately 18-24 months. Typically found on the surface on rainy nights or wet days while foraging. Will eat anything that it can overpower and fit into its mouth, such as slugs, rodents, other amphibians and reptiles (Kucera 1997).	**Will not occur.** There is no suitable aquatic or upland habitat in the Study Area. The Study Area is dominated by arid upland habitats. The Study Area is outside of this species' known range. There are no documented CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Rana boylii Foothill yellow-legged frog	--/SE/SSC (Northern Sierra Nevada and Feather River Pop ST; FE along the Coast and Southern California; North coast populations are not listed)	The foothill yellow-legged frog occurs along the coast ranges from Oregon to Los Angeles and along the western side of the Sierra Nevada. This species uses perennial rocky streams in a wide variety of habitats up to 6,400 feet above msl. This species rarely ventures far from water, is usually found basking in the water, or under surface debris or underground within 165 feet of water. Eggs are laid in clusters attached to gravel or rocks along stream margins in flowing water. Tadpoles typically require up to four months to complete aquatic development. Breeding typically follows winter rainfall and snowmelt, which varies based upon location (Jennings and Hayes 1994).	**Will not occur.** There is no suitable aquatic or upland habitat in the Study Area. The stream in the Study Area is intermittent, which does not provide habitat for this species. There is a total of four CNDDB reported occurrences of this species within a 5-mile radius of the Study Area (CDFW 2022). The nearest and most current record is located four miles east of the Study Area along the North Fork of Cache Creek (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Rana draytonii California red-legged frog	FT/--/SSC	The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. The adults require dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow-moving water. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows (*Salix* spp.) and an intermixed fringe of cattails (*Typha latifolia*). Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter. California red-legged frogs aestivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. Studies have indicated that this species cannot inhabit water bodies that exceed 70° F, especially if there are no cool, deep portions (USFWS 2002).	**Will not occur.** There is no suitable aquatic or upland habitat in the Study Area. The intermittent drainage in the Study Area does not provide water of sufficient depth and duration to support larval development. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Taricha rivularis Red-bellied newt	--/--/SSC	Inhabits rapid flowing, rocky, permanent streams in redwood forest, mixed coniferous forest, valley-foothill woodland, montane hardwood and hardwood-conifer habitats. Migrates to streams during the rainy season to breed, which it may move across uplands up to one mile. During the summer, it aestivates underground (Jennings and Hayes 1994).	**Will not occur.** There is no suitable aquatic or upland habitat in the Study Area. The Study Area is dominated by arid upland habitats. The Study Area is outside of this species' known range. There is one documented CNDDB reported occurrence within a 5-mile radius of the Study Area (CDFW 2022). The record is located 3.3 miles southeast of the Study Area along Dry Creek where one larvae was collected in 1943 (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Reptiles			
Actinemys (=Emys) marmorata western pond turtle	--/--/SSC	Inhabits slow-moving water with dense submerged vegetation, abundant basking sites, gently sloping banks, and dry clay or silt soils in nearby uplands. Turtles will lay eggs up to 0.25 mile from water, but typically go no more than 600 feet (Jennings and Hayes 1994).	**Will not occur.** There is no suitable aquatic or upland habitat in the Study Area. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Birds			
Accipiter cooperii Cooper's hawk	--/--/WL	Nests in woodlands and urban trees. Preys on medium-sized birds and small mammals. Forages in open woodland and habitat edges (Zeiner et al. 1990).	**May occur.** The Study Area provides suitable nesting and foraging habitat for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Aquila chrysaetos Golden eagle	--/--/FP	Typically occurs in rolling foothills, mountain areas, deserts and other open habitats up to 3,822 m amsl. Typically nests on cliff ledges or large trees in open areas in canyons. Will occasionally use other tall structures for nesting, such as electrical transmission towers. Prey consists mostly of rodents, carrion, birds, reptiles and occasionally small livestock (Zeiner et al. 1990).	**Not expected.** The Study Area is does not provide suitable nesting habitat for this species. This species could occur in flight foraging over the Study Area. There is one CNDDB reported occurrence within a 5-mile radius of the Study Area (CDFW 2022). The record documents a nest site 4.4 miles southeast of the Study Area from 1986 (CDFW 2022).
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT/SE/--	Occurs at isolated sites in Sacramento Valley in northern California, and along Kern and Colorado River systems in southern California. Frequents valley foothill and desert riparian habitats. Inhabits open woodlands with clearings, and riparian habitats with dense understory foliage along slow-moving drainages, backwaters, or seeps. Prefers dense willows for roosting but will use adjacent orchard in the Sacramento Valley (CDFW 2005).	**Will not occur.** Suitable nesting habitat is not present in the Study Area. There is one potential observation of this species in the vicinity of the Study Area from 1973 that documented an observation in riparian forest near Clear Lake (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Falco mexicanus prairie falcon	--/--/WL	An uncommon permanent resident of the deserts, Central Valley, inner Coast Ranges, and Sierra Nevada in California. Primarily found in grasslands, rangelands, desert scrub, and some agricultural areas. Requires sheltered cliffs and ledges for cover. Dives from a perch or from flight to take prey on the ground (Zeiner et al. 1990).	**Will not occur.** Suitable nesting habitat is not present in the Study Area. This species is likely to occur nesting and foraging in the adjacent rocky slopes. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Haliaeetus leucocephalus Bald eagle	FD/SE/FP	Requires large bodies of water with an abundant fish population. Feeds on fish, carrion, small mammals, and water-fowl. Nests are usually located within a 1-mile radius of water. Nests are most often situated in large trees with a commanding view of the area (Zeiner et al. 1990).	**Will not occur.** Suitable nesting habitat is not present in the Study Area. This species could nest in the region and it could occur in flight traveling between nesting sites and foraging habitat in Clear Lake or Cache Creek. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Pandion haliaetus Osprey	--/--/WL	Osprey breed in Northern California from the Cascade Ranges southward to Lake Tahoe, and along the coast south to Marin County. They prey primarily on fish but also predate small mammals, birds, reptiles, and invertebrates. Foraging areas include open, clear waters of rivers, lakes, reservoirs, bays, estuaries, and surf zones. Habitat and nesting requirements include large trees, snags, and dead-topped trees in open forest habitats for cover and nesting (Zeiner et al. 1990).	**May occur.** Suitable habitat is present in the Study Area in oak woodlands and utility poles in and adjacent to the Study Area. However, this species is more likely to nest closer to Clear Lake or other waterways with foraging habitat. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area of this species nesting near Clear Lake (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Progne subis purple martin	--/--/SSC	Occurs as a summer resident and migrant, primarily from mid-March to late September. Breeds from May (rarely late Apr) to mid-August. Purple martins are widely but locally distributed in forest and woodland areas at low to intermediate elevations throughout much of the state. Martins use a wide variety of nest substrates (e.g., tree cavities, bridges, utility poles, lava tubes, and, formerly, buildings), but nonetheless are very selective of habitat conditions nearby. Martins are most abundant in mesic regions, near large wetlands and other water bodies, and at upper slopes and ridges, which likely concentrate aerial insects (Shuford and Gardali 2008).	**May occur.** Suitable habitat is present in the Study Area in oak woodlands. Tree cavities in trees and tree snags were present in addition to other cavity nesting birds. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Strix occidentalis caurina Northern spotted owl	FT/--/--	Northern spotted owl resides in dense, old-growth, multi-layered mixed conifer, redwood, and Douglas-fir habitats, from sea level up to approximately 7,600 ft. In southern California, this species is nearly always associated with oak and oak-conifer habitats. Northern spotted owl is found from British Colombia south through northwestern California south to San Francisco.	**Will not occur.** The Study Area does not provide old growth coniferous forest habitat or meadow edge habitat for this species. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Mammals			
Antrozous pallidus pallid bat	--/--/SSC	Occurs throughout California except for the high Sierra Nevada and the northern Coast Ranges. Habitats include grasslands, shrublands, woodlands, and forests from sea level to 6,000 feet. Most common in open, dry habitats with rocky areas for roosting; roosts also include cliffs, abandoned buildings, bird boxes, and under bridges (Bolster, ed. 1998).	**Not expected.** There is no suitable roosting habitat in the Study Area for this species. However, this species could forage within the Study Area at night and generally disperse through the area. There are two CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022). Both records are historic accounts from over 50 years ago (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Corynorhinus townsendii Townsend's big-eared bat	--/--/SSC	Widely distributed throughout California except alpine and subalpine habitats. This species eats moths, beetle and other insects which it catches on the wing or by gleaning from vegetation. Typically found near water since it is poor at concentrating its urine. This species uses caves, mines, tunnels, buildings, and human made structures for roosting. Maternity roosts are typically in warm sites. Hibernation sites are typically cold, but not freezing. This species is very sensitive to disturbance and may abandon its roost after one visit (Zeiner et al. 1990).	**Will not occur.** There is no suitable habitat for this species in or adjacent to the Study Area. There is one historic CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Lasionycteris noctivagans silver-haired bat	--/--/--	Insectivorous bat that roosts in hollow trees, beneath exfoliating bark, in abandoned woodpecker holes, and rarely under rocks. They primarily occur in coastal and montane forests, feeding over streams, ponds and open brushy areas (Zeiner et al. 1990).	**May occur.** The Study Area provides suitable habitat for this species. This species could roost under tree bark, in tree cavities and/or tree hollows and feed over the nonnative annual grassland. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Lasiurus blossevillii *Western red bat*	--/--/SSC	Roosts primarily in woodlands and forests amongst branches and avoids roosting in caves or buildings (Bolster 1998). Forages in open habitat such as croplands, grasslands and shrublands. This species is typically associated with water and has a poor urine concentrating ability. Primarily roosts solitarily in trees from 2–40 feet high in the trees, with females and young roosting higher in the trees than males. Forages along edge habitats (Zeiner et al. 1990). This species is rarely found in the winter at locations that freeze (Pierson et al. 2006).	**May occur.** The Study Area provides suitable habitat for this species. This species could roost in tree foliage. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Lasiurus cinereus hoary bat	--/--/--	Insectivorous bat, roosts in dense foliage of medium to large trees. Suitable breeding habitats include woodlands and forests with medium to large trees and dense foliage. Winters along the coasts and in southern California and breeds inland and north of the winter range. Primarily roosts solitarily in trees in trees, with females and young roosting higher in the trees than males. Breeds from May through August (Zeiner et al. 1990).	**May occur.** The Study Area provides suitable habitat for this species. This species could roost in tree foliage. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).
Myotis thysanodes Fringed myotis	--/--/--	Occurs throughout California up to 9,350 feet, although it is most common between 4,000 to 7,000 feet. Habitats include pinyon-juniper, foothill hardwood and hardwood-conifer forests. This species is typically found roosting in buildings, mines, caves or crevices. Separate day and night roosts may be used (Zeiner et al. 1990). This species forages close to water since it has a poor urine concentrating ability. This species is often seen gleaning prey off of foliage (Zeiner et al. 1990).	**Will not occur**. The Study Area does not provide suitable roosting habitat for this species and the Study Area is below the elevational range where this species is most common. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).

Species Name/ Common Name[1]	Status[2]	Habitat, Ecology and Life History	Potential to Occur
Myotis volans Long-legged myotis	--/--/--	Occurs in mountain ranges throughout California up to 11,400 feet. This species is most common in woodland habitats above 4,000 feet elevation. This species is typically found roosting in buildings, mines, caves or crevices and under tree bark. Separate day and night roosts may be used, which caves are only used for night roosts (Zeiner et al. 1990). Trees are the most important day roost habitat. This species forages close to water since it has a poor urine concentrating ability (Zeiner et al. 1990).	**Will not occur**. The Study Area does not provide suitable roosting habitat for this species and the Study Area is below the elevational range where this species is most common. There are no CNDDB reported occurrences within a 5-mile radius of the Study Area (CDFW 2022).

[1] Sensitive species reported in CNDDB or CNPS on the "*Clearlake Oaks, Clearlake Highlands, Benmore Canyon, Wilbur Springs, Jericho Valley, Middletown, Whispering Pines, Lower Lake, and Wilson Valley*" USGS quads, or in the USFWS list for the Study Area.

[2] Status is as follows: Federal (ESA) listing/State (CESA) listing/other CDFW status or CRPR. F = Federal; S = State of California; E = Endangered; T = Threatened; R = Rare; C = Candidate; FP=Fully Protected; SSC=Species of Special Concern; WL=Watch List.

[3] Status in the Study Area is assessed as follows. **Will Not Occur**: Species is either sessile (*i.e.* plants) or so limited to a particular habitat that it cannot disperse on its own and/or habitat suitable for its establishment and survival does not occur on the Study Area; **Not Expected**: Species moves freely and might disperse through or across the Study Area, but suitable habitat for residence or breeding does not occur on the Study Area, potential for an individual of the species to disperse through or forage in the site cannot be excluded with 100% certainty; **Presumed Absent:** Habitat suitable for residence and breeding occurs on the Study Area; however, focused surveys conducted for the current project were negative; **May Occur**: Species was not observed on the site and breeding habitat is not present but the species has the potential to utilize the site for dispersal; **High**: Habitat suitable for residence and breeding occurs on the Study Area and the species has been recorded recently on or near the Study Area, but was not observed during surveys for the current project; **Present**: The species was observed during biological surveys for the current project and is assumed to occupy the Study Area or utilize the Study Area during some portion of its life cycle.

CRPR = California Rare Plant Rank: 1B – rare, threatened, or endangered in California and elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere; 3 – plants about which we need more information – A Review List. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – Not very threatened in California.

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Appendix F

Representative Site Photos

Photo 1. Representative view of blue oak-foothill pine woodland along an intermittent drainage. Photograph taken on September 15, 2022.

Photo 2. Representative view of isolated eucalyptus trees in the Study Area. Photograph taken on September 15, 2022.

Photo 3. Representative view of fragmented blue oak-foothill pine woodland along an intermittent drainage. Photograph taken on September 15, 2022.

Photo 4. Representative view of blue oak-foothill pine woodland (background) above nonnative annual grassland (foreground). Photograph taken on September 15, 2022.

Attachment C

Water Model Result Summary

WHITCHURCH ENGINEERING

610 9th Street, Fortuna, CA 95540
716 Harris Street, Eureka, CA 95503

5/5/2023

ATTN: Mark Roberts
City of Clearlake - Community Development Department
14050 Olympic Drive
Clearlake, CA 95422

RE: Water Model Result Summary
Burns Valley Subdivision
2890 Old Hwy 53, Clearlake, Ca, 95422
APN: 010-048-08

JN: DAN2201

Dear Mark Roberts,

Whitchurch Engineering has analyzed the anticipated domestic water and fire water service demand generated by the proposed Burns Valley Subdivision located at 2890 Old Hwy 53 in Clearlake to determine the feasibility of providing adequate fire flow at the subdivision by connecting to the City of Clearlake water distribution system located at 3009 Old Hwy 35. This letter includes the anticipated water demand, existing water supply, analysis procedure through EPANET, and performance of the model.

The Burns Valley Subdivision involves subdividing a 30-acre lot into 22 one- and two-family residential parcels, ranging in size from 1.25 acres to 2.7 acres. Access will be by two cul-de-sacs. The water distribution system will include 5 new fire hydrants in the interior of the development. All structures served by these hydrants are assumed to be sprinkled one- and two-family residences.

Combined domestic water demand is estimated as 137 gallons per capita per day with a peak demand multiplier of 1.8. The fire flow demands for sprinklered one- or two-family residences are anticipated as 500 gpm with a minimum residual pressure of 20 psi for a one-hour time duration, per the National Fire Protection Association Fire Code and confirmed by the Lake County Fire Protection District Fire Marshall.

Existing water supply assumptions are based on a Fire Hydrant Flow Test performed by Highlands Water Company on April 13th, 2023. This shows that at 3009 Old Hwy 35 the existing water distribution network provides a static pressure of 59 psi with a residual pressure of 40 psi under 900 gpm flow conditions.

The proposed water addition to the water distribution network consists of 6" diameter C900 pipe along Old Hwy 53 with branches up each new cul-d-sac. Pressure loss is modeled using the Hazen-Williams Equations through the EPANET 2.0 software provided by the US EPA.

The model results show that there is sufficient supply from the existing water distribution network with the proposed addition to meet the fire flow and domestic water demands throughout the proposed subdivision. Detailed results can be found in the attached calculation packet.

Sincerely,

Jeffrey Laikam
Engineering Manager
RCE# 68586

WHITCHURCH ENGINEERING

610 9th Street, Fortuna, CA 95540
716 Harris Street, Eureka, CA 95503

Water Model for Burns Valley Subdivision

For: Mark Roberts
City of Clearlake – Community Development Office
14050 Olympic Drive
Clearlake, Ca 95422

JN: DAN2201
Rev: 0

Re: Burns Valley Subdivision
2890 Old Hwy 53, Clearlake, Ca 95422
APN: 010-048-008

Date: May 5th, 2023

Scope: This model examines a proposed water distribution for a 22-lot subdivision at the above-mentioned location. The purpose of this model is to verify that the proposed system is able to supply domestic and fire water demands as specified by the California Fire Code, National Fire Protection Association, and the Lake County Fire Marshall.

Includes:

Prepared by: Daniel Gent — Name — Signature/ Date 5/5/23

Checked by: Eric Allen — Name — Signature/ Date 5/5/23

Approved by: Jeffrey Laikam — Name — Signature/ Date 5-5-2023

Project Description

The Burns Valley Subdivision involves subdividing a 30-acre lot into 22 one- and two-family residential parcels, ranging in size from 1.25 acres to 2.7 acres. Access will be by two cul-de-sacs. The water distribution system will include 5 new fire hydrants in the interior of the development. All structures served by these hydrants are assumed to be sprinkled one- and two-family residences.

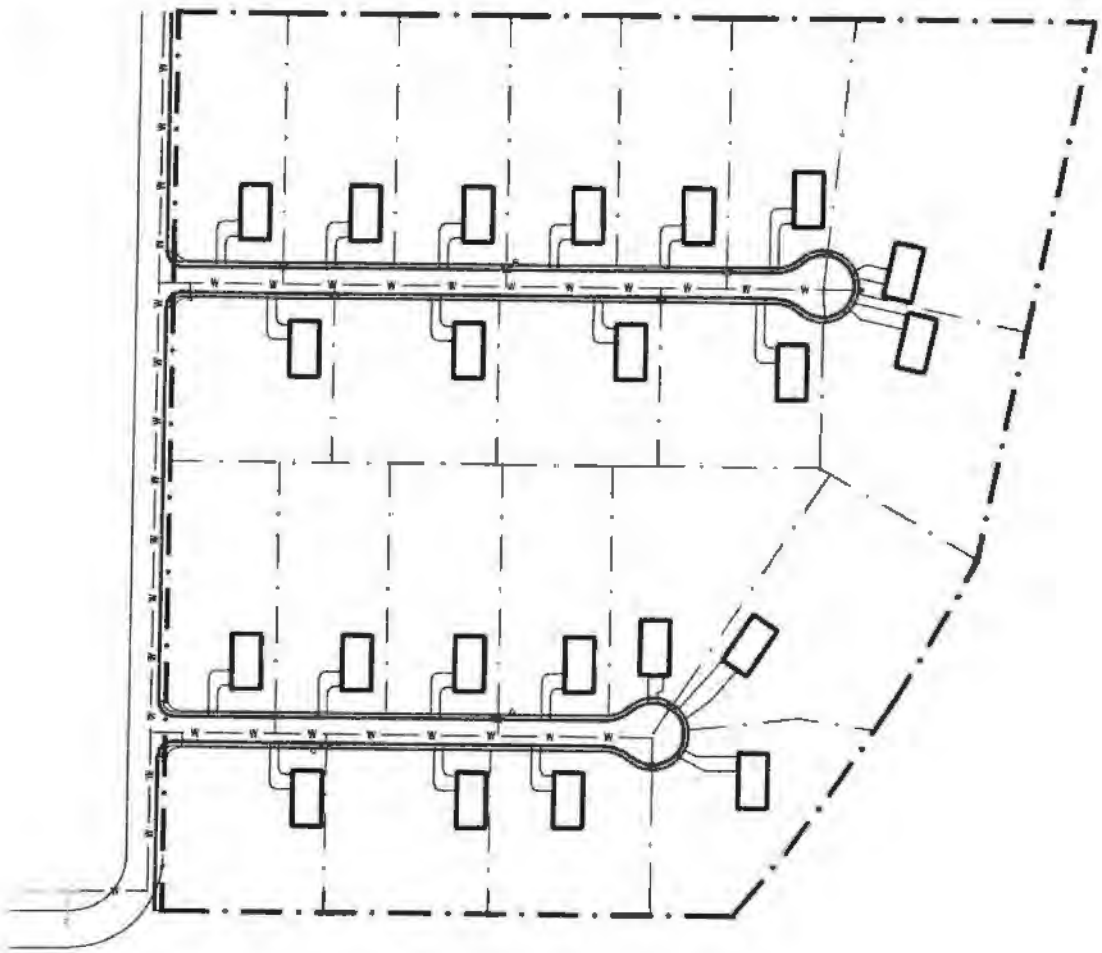


Figure 1: Project Layout

Acronyms

- GPCA – Gallons Per Capita Per Day
- gpm – Gallons per minute
- HP – Horse Power
- NFPA – National Fire Protection Association
- psi – Pounds per square inch
- PVC – Polyvinyl Chloride

Assumptions

- Water model was created in EPANET 2.2.
- Water is sourced from an existing water main with the following data:
    - Connection location at approximately 38°58'08.98"N 122°37'02.59W (WGS84 Datum) at the south east corner of lot 309 Old Hwy 53, APN: 039-354-23.
    - Static Pressure = 59 psi and Residual pressure = 40 psi at 900 gpm per Highlands Water Company Fire Hydrant Flow Data Sheet, dated 04/13/23, see Appendix A.
    - This situation is modeled by a reservoir with 136.25' of head with water delivered through a 2915' pipe with 8" diameter.
- C900 PVC pipe has a Hazen-Williams roughness coefficient of 130.
  Source: Civil Engineering Reference Manual, 8th Ed. A-25
- Combined domestic demands are based on the following:
    - 4 members per household
    - 137 GPCD (2013 Average for North Coast Hydrologic Region)
      Source: Pacific Institute: California Urban Water Use Map
    - Domestic peak demand multiplier = 1.8
      Source: Water Demands | Estimating and Variations; by R Sonowal
- Fire flow demands are based on the following:
    - All new construction to have approved sprinkler systems with a maximum sprinkled area of 2,500 sqft per building with Ordinary 1 hazard classification.
      Sprinkler demand = 0.13 gpm/sqft for a total of 325 gpm
      Source: NFPA 13 figure 11.2.3.1.1.
    - All new construction, to have approved sprinkler systems sprinkled, require a fire flow of 500 gpm at 20psi for a 1-hour duration at the hydrant.
      Source: NFPA 1 Fire Code 2021 Edition. Section 18.4.5.1 and Lake County Fire Marshall approval, see Appendix B
    - The largest of these values, 500 gpm at 20psi for a 1-hour duration, shall be the required fire flow.
      Source: NFPA 1 Fire Code 2021 Edition. Section 18.4.5.3.5

Model Development

The model consists of the additional water lines from the existing fire hydrant, labelled FH-1, located at 3009 Old Hwy 53, to 6 new hydrants, labelled FH-2 through FH-6, in the proposed Burns Valley Subdivision. All new water lines are modeled as 6" diameter C900 pipe. The input data for each node is included below in table 1 and a schematic diagram is included below figure 2.

Table 1: Input data

Node	Elevation	Number New Parcels Served	Combined Domestic Demand (GPM)
FH-1	1400	0	0.0
FH-2	1402	4	6.5
FH-3	1417	6	9.8
FH-4	1305	3	4.9
FH-5	1400	5	8.1
FH-6	1403	4	6.5

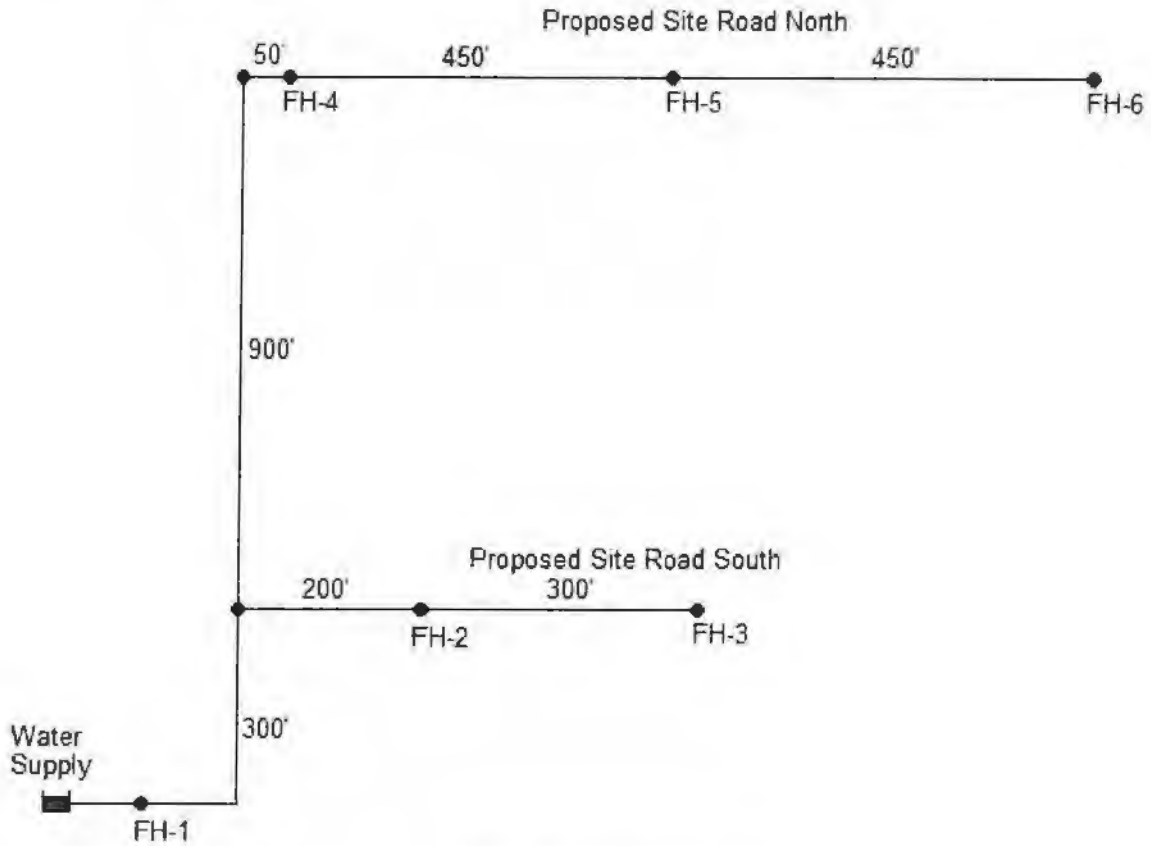


Fig 1: Project Area Layout

The worst-case pressures during fire flow situations will take place at FH-4 and FH-6 respectively. The results at these two nodes are presented below.

Results

During design fire flow events, 500gpm, the residual pressure at FH-3 was modelled as 29 psi. The residual pressure at FH-3 remains acceptable, above 20 psi, for flow rate up to approximately 750 gpm. FH-6 showed a residual pressure of 35 psi at the design fire flow rate of 500 gpm, and maintained an acceptable residual pressure up to a flow rate of approximately 580 gpm. The pressure flow curves for FH-3 and FH-6 are presented below in figure 3.

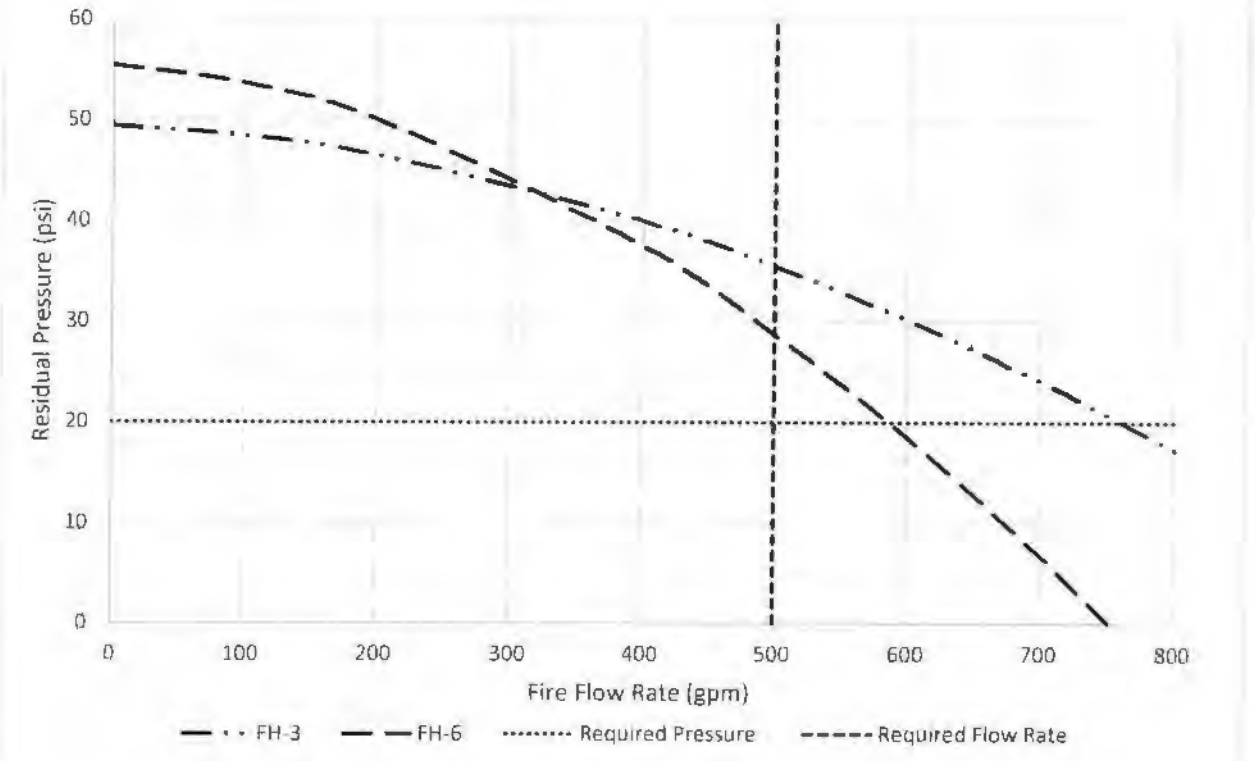


Figure 3: Residual pressures at FH-4 and FH-7 over various flow rates.

Conclusion

The proposed 6" diameter C-900 water distribution lines will be sufficient to meet the fire flow rates and pressures prescribed by the NFPA and California Fire Code.

APPENDIX A – HIGHLANDS WATER COMPANY DATA SHEET

HIGHLANDS WATER COMPANY
Mutual Water Utility
14580 Lakeshore Drive
Clearlake, California 95422
Plant Facility (707) 994-8676

Fire Hydrant Flow Data Record Sheet

Nearest HYDRANT LOCATIONS: *3009 Old Hwy 53*
3127 Old Hwy 53

Test Date: *4/13/2023*
Time: *11:10 AM*
Test Result:
Determined GPM: *900*
Static Pressure psi: *59*
Residual Pressure psi: *40*
Test Performed by: *Lowell Estep*

Associated Project Information Recv'd from Daniel /Whitchurch
Project Name: *Burns Valley Subdivision*
Address: *2890 Old Hwy 53*
Parcel # : *010-048-08*

Please Note: Information provided is indicative of the water supply characteristics in a particular area on the date and time as noted. Highlands Water Company does not guarantee that this data will be representative of the water supply characteristics any time in the future.

APPENDIX B – LAKE COUNTY FIRE PROTECTION DISTRICT FIRE MARSHALL COMMUNICATION

RE: Local Fire Code Amendments

Autumn Lancaster <ALancaster@lakecountyfire.com>
Thu 5/4/2023 10:49 AM
To: Daniel Gent <dpg@whitchurchengineering.com>
Cc: Jeff Laikam <jfl@whitchurchengineering.com>

Good Morning,
First and foremost thank you for reaching out about the required fire flow and getting this conversation started prior to the start of the project. I sincerely appreciate it.

This is acceptable fire flow for the project. I would like to note spacing of the hydrants to be 1,000 feet maximum with 5 hydrants in two cul-de-sacs this will be met.

If you have any more questions before plan submittal please do not hesitate to ask.
- Autumn Lancaster, LCFPD Fire Marshal

From: Daniel Gent <dpg@whitchurchengineering.com>
Sent: Wednesday, May 3, 2023 2:01 PM
To: Autumn Lancaster <ALancaster@lakecountyfire.com>
Cc: Jeff Laikam <jfl@whitchurchengineering.com>
Subject: Re: Local Fire Code Amendments

Hello Autumn Lancaster,

The purpose of this email is to request your feedback on design fire flows for the proposed the Burns Valley Subdivision on Old Hwy 53.

Background:
The proposed subdivision is located at 2890 Old Hwy 53, APN: 010-048-008. The proposal involves subdividing the 30 acre lot into 22 one- and two-family residential parcels, ranging in size from 1.25 acres to 2.7 acres. Access will be by two cul-de-sacs. The water distribution system will include 5 new fire hydrants in the interior of the development. All structures served by these hydrants are assumed to be sprinckled one- and two-family residences (The site currently has no structures and all new construction will be permitted according to the Ca Fire Code).

Codes & Standards:
The following requirements come from the NFPA 1 (2021 Ed)
18.4.5.1.1 The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire flow area that does not exceed 5000 ft2 (464.5 m2) shall be 1000 gpm (3785 L/min) for 1 hour.
18.4.5.1.2 A reduction in required fire flow of 75 percent shall be permitted where the one- and two-family dwelling is provided with an approved automatic sprinkler system.
18.4.5.1.5* The reductions in 18.4.5.1.2, 18.4.5.1.3, and 18.4.5.1.4 shall not reduce the required fire flow to less than 500 gpm (1900 L/min).
18.4.5.3.5 Required Fire Flow and Automatic Sprinkler System Demand. For a building with an approved fire sprinkler system, the fire flow demand and the fire sprinkler demand shall not be required to be added together. The water supply shall be capable of delivering the larger of the individual demands.

Feedback Request:
As I understand the NFPA Requirements listed above the water distribution system needs to be sized such that each project hydrant can deliver 500 gpm of fire flow with a residual pressure not less than 20 psi, and that this

requirement is subject to the approval of the authority having jurisdiction. Is the above mentioned fire flow with residual pressure requirement acceptable for this project?

Thanks for your time,

Daniel Gent E.I.T.

Engineer in Training

Whitchurch Engineering, Inc.

dpg@whitchurchengineering.com

WHITCHURCH ENGINEERING

www.whitchurchengineering.com

Fortuna Office:	*Eureka Office:*
610 9th Street	716 Harris Street
Fortuna, CA 95540	Eureka, CA 95503
(707) 725-6926	(707) 444-1420

Attachment D

Hydrological Storage Volume Summary

WHITCHURCH ENGINEERING

610 9th Street, Fortuna, CA 95540

716 Harris Street, Eureka, CA 95503

December 15, 2022

DANCO Communities
Arcata, CA

RE: Hydrological Storage Volume Summary
Old Highway 53 Subdivision
2890 Old HWY 53, Clearlake, CA
APN: 010-048-080

JN: DAN2201

To whom it may concern,

This letter includes a summary of preliminary hydrological calculations conducted to meet the Lake County and by extension City of Clearlake Storm Water Management Plan. The City of Clearlake required design storms include the two 24-hour storm events, the 10-year, and the 100-year.

The site was evaluated as 4 Drainage Management Areas (DMA), divided simply into parcels on the North side of Roads A and B, and parcels on the South side of Roads A and B. Each DMA included their respective north or south side of the road.

The proposed development results in an impervious area increase of less than 50%, therefore, runoff volume from the new, and/or replaced impervious surfaces, have been included in the analysis per SWRCB MS4 Regulation E.12.C.ii.b. The table below includes a summary of the pertinent design data.

Table 1: Hydrology Analysis Area, Flowrate, and Volume Summary

DMA	Area (Acres)	Pervious Area (Acres)	Impervious Area (Acres)	Impervious Area %	$Q_{10,\ 24\text{-hr}}$ (cfs)	$V_{10,\ 24\text{-hr}}$ (gal)	$Q_{100,\ 24\text{-hr}}$ (cfs)	$V_{100,\ 24\text{-hr}}$ (gal)
1 – Lots 1 Thru 7	9.71	8.66	1.04	10.75	0.42	35,300	0.63	52,580
2 – Lots 8 Thru 12	6.32	5.27	1.05	16.64	0.32	51,460	0.48	76,640
3 – Lots 13 Thru 18	7.84	6.91	0.93	11.82	0.34	28,110	0.51	41,870
4 – Lots 19 Thru 22	5.17	4.37	0.80	15.46	0.25	33,870	0.37	50,450
Total	29.04	25.22	3.82	13.16	1.33	148,740	1.99	221,550

There are significant areas of pervious surface coverage which can be used to store and infiltrate in place. A combination of drainage swales, storage/infiltration ponds, and metered outflows can be used to mitigate the increased volume and flow rate of rainwater runoff generated by this project to meet the standards of the City of Clearlake Storm Water management Plan.

If you have any questions in regard to this summary, please do not hesitate to contact me.

Sincerely,

Derek Long, PE
RCE# 85055

DCL/ntn

www.whitchurchengineering.com
Fortuna: (707) 725-6926
Eureka: (707) 444-1420

Attachment E

Traffic Analysis

August 23, 2023

Mr. Chris Dart
Danco Communities
5251 Ericson Way
Arcata, CA 95521

Focused Transportation Analysis for the Burns Valley Subdivision Project

Dear Mr. Dart;

As requested, W-Trans has prepared a focused transportation analysis for the Burns Valley Subdivision to be located at 2890 Old Highway 53 in the City of Clearlake. The purpose of this letter is to set forth the project's anticipated trip generation and the results of an analysis of potential transportation impacts based on criteria set forth in the California Environmental Quality Act (CEQA).

Project Description

The proposed subdivision would be located at 2890 Old Highway 53 in the City of Clearlake. The project as proposed includes a subdivision with 22 single family homes on a currently vacant parcel between State Route (SR) 53 and Old Highway 53. The project site as proposed would be accessed by two new cul-de-sac streets that would intersect Old Highway 53 on the east side. A preliminary site layout is enclosed for reference.

Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition, 2021, for Single Family Detached Housing (Land Use #210). Based on the application of these rates, the proposed project would be expected to generate an average of 207 trips per day, including 15 a.m. peak hour trips and 21 trips during the p.m. peak hour. These results are summarized in Table 1.

Table 1 – Trip Generation Summary

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Single-Family Housing	22 du	9.43	207	0.70	15	4	11	0.94	21	13	8

Note: du = dwelling unit

Given that the project would generate fewer than ten trips on any single movement at a critical intersection, an operational analysis does not appear to be warranted. Further, the intersections most likely to experience an adverse effect would be those on SR 53, which are under the jurisdiction of Caltrans, and Caltrans no longer has an operational standard.

Trip Distribution

The pattern used to allocate new project trips to the street network was determined based on historical turning movements in the study area, knowledge of the area and surrounding region, and anticipated travel patterns for residents of the project. Given the position of the project site in the northern part of the city, it is likely that the majority of project trips would be to and from destinations within the City of Clearlake southwest of the project

site. Therefore, a trip distribution of 80 percent to and from the south on Old Highway 53 with 20 percent to and from the north on Old Highway 53 was applied.

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. The project site is located in a rural part of the City and as a result, there are no dedicated pedestrian facilities in the project vicinity, nor are there any land uses within one-half mile of the project site that would be expected to draw pedestrian trips from the project. Residents walking within the project site itself would be able to use sidewalks as indicated on the preliminary site plan, or the low-volume, low-speed project streets.

Bicycle Facilities

The *Highway Design Manual*, Caltrans, 2019, classifies bikeways into four categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

There are currently no dedicated bicycle facilities in the immediate vicinity of the project site. According to the *2040 General Plan Update,* City of Clearlake, a Class III bikeway is proposed along the length of Olympic Drive.

Transit Facilities

There are no transit facilities in the vicinity of the project site so transit is not readily accessible. This is considered an acceptable condition given the type of project proposed and the location of the site. The proposed project would have no effect on existing or planned transit facilities; therefore, its impact would be considered less than significant.

Finding – The lack of existing dedicated pedestrian, bicycle, and transit facilities in the project vicinity is considered acceptable for the limited anticipated demand and the project would not include any components that would preclude the City's ability to implement future improvements for these modes; therefore, the project is consistent with City policy and plans and its impact would be therefore considered less than significant.

Vehicle Miles Traveled

The potential for the project to conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b) was evaluated based the project's anticipated Vehicle Miles Traveled (VMT).

Background and Guidance

Senate Bill (SB) 743 established VMT as the metric to be applied in determining transportation impacts associated with development projects. As of the date of this analysis, the City of Clearlake has not yet adopted a policy or thresholds of significance regarding VMT so the project-related VMT impacts were assessed based on guidance provided by 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 the

Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study (RBS), Fehr & Peers, 2020, prepared for the Lake Area Planning Council (LAPC). Many of the recommendations in the RBS are consistent with the OPR Technical Advisory.

VMT Impact

The OPR Technical Advisory recommends development of screening thresholds that can be applied to quickly identify projects that would be expected to have a less-than-significant VMT impact without conducting a detailed analysis. One of these screening criteria applies to "small projects". The RBS includes a list of small projects as defined for Lake County and residential projects with up to 22 units were identified as meeting the small project screening threshold. Therefore, because the proposed project includes 22 dwelling units, it can be presumed that its transportation impact on VMT would be less-than-significant.

It should be noted that while state law allows owners of single-family residences to construct an accessory dwelling unit (ADU) on their properties, ADUs are exempt from CEQA considerations so it would be unreasonable to consider them in the VMT analysis or analysis of any other CEQA topic areas. Further, no ADUs are proposed to be constructed as part of the project so it would be speculative to estimate whether or not any homeowners may decide to build an ADU on their properties in the future. For these reasons, ADUs were not analyzed as part of the proposed project.

Finding – The proposed project would meet the small project screening criteria identified in the Lake County Vehicle Miles Traveled Regional Baseline Study and therefore can be presumed to have a less-than-significant VMT impact.

Safety Issues

Stopping Sight Distance

At unsignalized intersections, a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Adequate time should be provided for the waiting vehicle to either cross, turn left, or turn right, without requiring the through traffic to radically alter their speed.

Sight distances along Old Highway 53 at the proposed street connections to "Road A" and "Road B" were evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distances for minor street approaches to intersections of public streets are based on corner sight distances, with more sight distance needed for making a left turn versus a right turn. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street is evaluated based on stopping sight distance criterion. Both corner sight distance and stopping sight distance are based on the approach speed of traffic on the major street.

For the posted speed limit of 40 miles per hour (mph) on Old Highway 53, the minimum corner sight distance needed is 445 feet for left turns and 385 feet for right turns. Field measurements were obtained to and from the position where a vehicle would wait at the locations of the proposed street connections and were determined to extend more than 500 feet to either direction from Street A. At Street B near the southern end of the project site, sight lines were measured to extend more than 500 feet to the north and approximately 250 feet to the south to a horizontal curve in the alignment of Old Highway 53. While this is less than the minimum corner sight distance needed for speeds of 40 mph, motorists approaching from this direction would be navigating a 90-degree bend so would be expected to be traveling well below 40 mph likely in the 15- to 25-mph range. For speeds of 25 mph, 150 feet of stopping sight distance is needed and 240 feet of corner sight distance is needed for right-turn movements, both of which would be provided so this condition would be considered acceptable.

Additionally, adequate following sight distance is available on the major street approaches to each intersection for a motorist to observe and react to a preceding motorist slowing or stopped waiting to turn into the project

streets. As a result, sight lines are adequate to accommodate all turns into and out of the project site. To preserve existing sight lines, any new signage, monuments, or other structures should be positioned outside of the vision triangles of a driver waiting on the minor street approaches. Any landscaping in the vision triangle should be lower than three feet tall for ground cover and tree canopies trimmed to be seven feet and above.

Finding – Sight lines are adequate on Old Highway 53 to accommodate all turns to and from the project streets.

Recommendation – To preserve existing sight lines, any new signage, monuments, or other structures should be positioned outside of the vision triangles of a diver waiting on the project street approaches. Landscaping planted in the vision triangle should be low-lying or above seven feet and maintained to remain outside the area needed for adequate sight lines.

Collisions

The collision history for the section of Old Highway 53 between Olympic Drive and SR 53 was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrate Traffic Records System (SWITRS) reports. For the five-year period from January 1, 2017, through December 31, 2021, there were three collisions reported along the 1.3-mile study segment, which translates to a calculated collisions rate of 2.41 collisions per million vehicle miles (c/mvm). This is above the average collisions rate for similar facilities statewide of 1.20 c/mvm, as indicated in *2018 Collision Data on California State Highways*, California Department of Transportation (Caltrans). The injury rate for the study segment of 0.0 percent was lower than the statewide average of 39.9 percent. Since there were only three collisions and they were dispersed along the segment no pattern of crashes could be determined so no remedial action appears appropriate. A copy of the collision rate calculation is enclosed.

Left-Turn Lane Warrants

The need for a left-turn lane on Old Highway 53 at the locations of the proposed project streets was evaluated based on criteria contained in the *Intersection Channelization Design Guide*, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985, as well as an update of the methodology developed by the Washington State Department of Transportation and published in the *Method For Prioritizing Intersection Improvements*, January 1997. The NCHRP report references a methodology developed by M. D. Harmelink that includes equations that can be applied to expected or actual traffic volumes to determine the need for a left-turn pocket based on safety issues.

All trips were conservatively routed to one of the proposed streets to determine if a left turn lane is warranted. Under a.m. and p.m. peak hour Existing plus Project volumes a left-turn lane is not warranted on Old Highway 53 at the proposed streets. Copies of the turn lane warrant analysis spreadsheets are enclosed.

Finding – A left-turn lane is not warranted at the proposed project streets.

Emergency Access

The proposed project would result in two new public streets that would be 36 feet wide, which is adequate to meet the minimum street width of 20 feet needed for emergency vehicles. The bulbs at the ends of these cul-de-sacs would have a radius of 45 feet from the center of the bulb to the face of curb, which is enough to meet the minimum radius of 43 feet set in the City of Clearlake's *Design and Construction Standards*, 2012. These standards are assumed to provide adequate space for emergency vehicles. Site access and circulation are therefore expected to function acceptably for emergency response vehicles.

Since all roadway users must yield the right-of-way to emergency vehicles when using their sirens and lights, the added project-generated traffic is expected to have a less-than-significant impact on emergency response times.

Finding – The proposed project would have a less-than-significant impact on emergency response times. Site access for emergency vehicles would be adequate assuming it is built to meet applicable design and construction standards.

Conclusions and Recommendations

- The proposed project would be expected to generate an average of 207 trips on a daily basis, including 15 trips during the morning peak hour and 21 trips during the evening peak hour.
- The lack of existing pedestrian, bicycle, and transit facilities is considered acceptable for the limited anticipated demand. The project would not conflict with any policies or plans so it would have a less-than-significant impact on transportation for these modes.
- The proposed project would meet the small project screening criteria identified in the Lake County Vehicle Miles Traveled Regional Baseline Study and therefore can be presumed to have a less-than-significant VMT impact.
- Sight lines along Old Highway 53 at the proposed street locations are adequate to accommodate all turns into and out of the project site.
- To maintain adequate sight lines, any new signage, monuments, or other structures should be kept out of the vision triangles at the project intersections. Further, any landscaping planted in the vision triangle should be placed and maintained to ensure that the area between three and seven feet from the pavement is foliage free.
- The segment of Old Highway 53 from Olympic Drive to SR 53 had an above-average collision rate for the five-year period evaluated, but with so few collisions dispersed along the segment no pattern was evident, so no remedial action is recommended.
- Left-turn lanes would not be warranted on Old Highway 53 at the proposed project streets.
- The proposed project would have a less-than-significant impact on emergency response times and access for emergency responders is anticipated to be acceptable assuming incorporation of appropriate design standards.

Thank you for giving W-Trans the opportunity to provide these services. Please call if you have any questions.

Sincerely,

William Andrews

William Andrews, EIT
Assistant Engineer

Dalene J. Whitlock

Dalene J. Whitlock, PE, PTOE
Senior Principal

REGISTERED PROFESSIONAL ENGINEER
DALENE J. WHITLOCK
TR001552
TRAFFIC
STATE OF CALIFORNIA

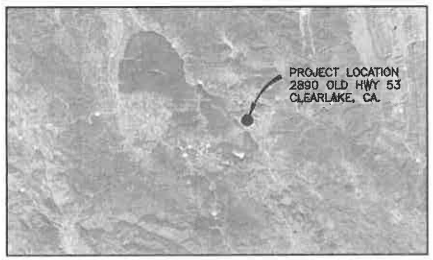
Cameron Nye

Cameron Nye, EIT
Associate Engineer

DJW/cn-wa/CLE031.L1

Enclosures: Conceptual Site Layout
Segment Collision Rate Calculations
Left-Turn Lane Warrant Spreadsheets

BURNS VALLEY SUBDIVISION
2890 OLD HWY 53, CLEARLAKE, CA. 95422
APN: 010-048-08



VICINITY MAP

NO SCALE

NORTH

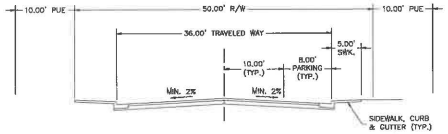
APPLICANT: THE DANCO GROUP
5251 ERICSON WAY
ARCATA, CA. 95521
(707) 822-9000

AGENT: WHITCHURCH ENGINEERING, INC.
610 9th, St.
FORTUNA CA. 95540
(707) 725-6826
JEFFREY LAIKAM P.E.
jtl@whitchurchengineering.com

SEWER: ON-SITE

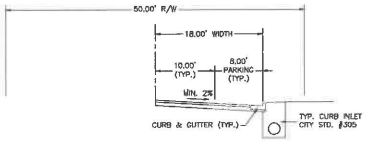
WATER: HIGHLANDS WATER DISTRICT

PROJECT DESCRIPTION:



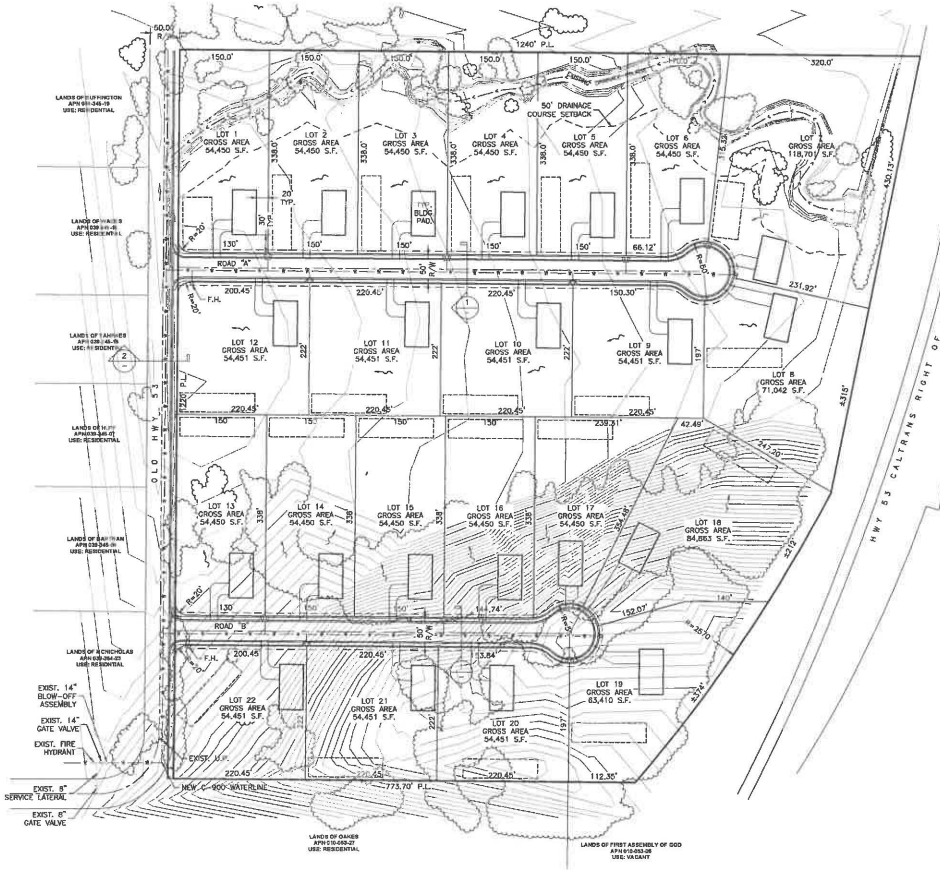
1/- TYP. NEW ROAD SECTION

SCALE: 1"=10'



2/- TYP. ½ WIDTH IMPROVEMENT TO OLD HWY 53

SCALE: 1"=10'



TENTATIVE MAP

SCALE: 1"=100'

NORTH

LEGEND

- TYPICAL 40'x75' BUILDING PAD
- TYPICAL LEACHFIELD (±4,000 S.F.)
- EXISTING CONTOURS AT 1' INTERVALS (EXTRACTED FROM MICHAEL BUTLER CIVIL ENGINEERING TENTATIVE SUBDIVISION MAP DATED 10/13/2006)
- EXISTING TREES
- SETBACKS/EASEMENTS
- PROPOSED FIRE HYDRANTS
- PROPOSED WATER LINES
- PROPOSED DOUBLE WATER SERVICE
- PROPOSED SINGLE WATER SERVICE
- DIRECTION OF SURFACE FLOW

STATEMENT: ALL EASEMENTS OF RECORD ARE SHOWN ON THE TENTATIVE MAP AND WILL APPEAR ON THE RECORDED MAP.

Lot Number	Gross Area (ft²)
1	54,450
2	54,450
3	54,450
4	54,450
5	54,450
6	54,450
7	118,701
8	71,042
9	54,451
10	54,451
11	54,451
12	54,451
13	54,450
14	54,450
15	54,450
16	54,450
17	54,450
18	84,863
19	63,410
20	54,451
21	54,451
22	54,451

LOT TABLE

PRELIMINARY

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.

1 INCH

REVISIONS	BY

PLAN REVIEW ONLY

WHITCHURCH ENGINEERING, INC.
610 9th Street Fortuna, California 95540
Phone (707) 725-6826

BURNS VALLEY SUBDIVISION
APN: 010-048-08
2890 Old Hwy 53, Clearlake, CA. 95422

TENTATIVE SUBDIVISION MAP

For: Burns Valley L.L.C.

Date	OCT 26 '22
Scale	AS NOTED
Design	JTL
Drawn	GKK
Job	DAN2201
Sheet	1

Roadway Segment Collision Rate Worksheet

Focused Transportation Analysis for the Burns Valley Subdivision Project

Location: Old Highway 53

Date of Count: Thursday, January 19, 2023
Average Daily Traffic (ADT): 510

Number of Collisions: 3
Number of Injuries: 0
Number of Fatalities: 0
Start Date: January 1, 2017
End Date: December 31, 2021
Number of Years: 5

Highway Type: Conventional 2 lanes or less
Area: Urban
Design Speed: ≤45

Segment Length: 1.3 miles
Direction: North/South

$$\text{Collision Rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times \text{Days per Year} \times \text{Segment Length} \times \text{Number of Years}}$$

$$\text{Collision Rate} = \frac{3 \times 1{,}000{,}000}{510 \times 365 \times 1.34 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Segment	**2.41 c/mvm**	**0.0%**	**0.0%**
Statewide Average*	**1.20 c/mvm**	**1.0%**	**39.9%**

Notes
ADT = average daily traffic volume
c/mvm = collisions per million vehicle miles
* 2019 Collision Data on California State Highways, Caltrans

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Old Highway 53 and Proposed Street
Study Scenario: AM Existing Plus Project

Direction of Analysis Street: North/South

Cross Street Intersects: From the East

Old Highway 53

Northbound Volumes (veh/hr)

Through Volume = 27

Right Turn Volume = 3

Northbound Speed Limit: 40 mph

Northbound Configuration: 2 Lanes - Undivided

Project Driveway

Old Highway 53

Southbound Volumes (veh/hr)

24 = Through Volume

1 = Left Turn Volume

Southbound Speed Limit: 40 mph

Southbound Configuration: 2 Lanes - Undivided

Northbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1027.6
Advancing Volume	Va =	30
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Northbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

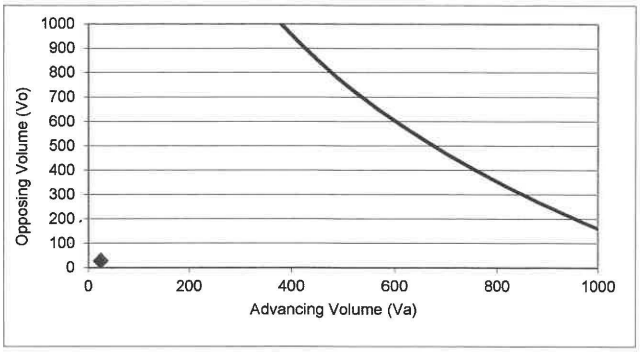
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	30
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Southbound Left Turn Lane Warrants

Percentage Left Turns %lt	4.0 %
Advancing Volume Threshold AV	1163 veh/hr

If AV<Va then warrant is met



◆ Study Intersection

——— Two lane roadway warrant threshold for: 40 mph

Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: Old Highway 53 and Proposed Street
Study Scenario: PM Existing Plus Project

Direction of Analysis Street: North/South

Cross Street Intersects: From the East

Old Highway 53

Northbound Volumes (veh/hr)

Through Volume = 31

Right Turn Volume = 10

Northbound Speed Limit: 40 mph

Northbound Configuration: 2 Lanes - Undivided

Project Driveway

Old Highway 53

Southbound Volumes (veh/hr)

25 = Through Volume

3 = Left Turn Volume

Southbound Speed Limit: 40 mph

Southbound Configuration: 2 Lanes - Undivided

Northbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	975.1
Advancing Volume	Va =	41
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Northbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	41
If AV<Va then warrant is met		-

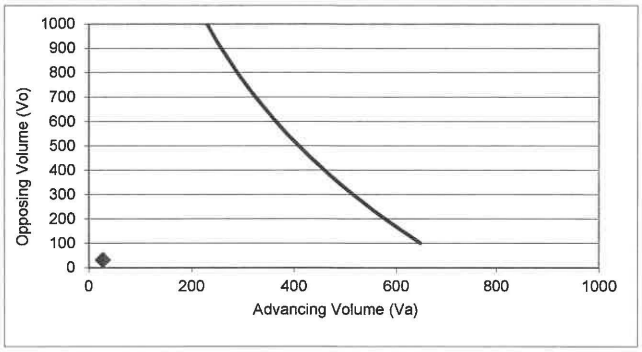
Right Turn Taper Warranted: **NO**

Southbound Left Turn Lane Warrants

Percentage Left Turns %lt 10.7 %

Advancing Volume Threshold AV 702 veh/hr

If AV<Va then warrant is met



◆ Study Intersection

——— Two lane roadway warrant threshold for: 40 mph

Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Attachment F

Initial Agency Comments

Attachment F

From: Huffer, Benjamin@Wildlife
To: Mark Roberts
Cc: Wildlife R2 CEQA
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Date: Thursday, January 5, 2023 3:18:26 PM
Attachments: image001.png

Good afternoon Mark,

Thank you for providing the Biological Resources Assessment (BRA). After reviewing the BRA I would suggest including in any future environmental documents at a minimum a habitat assessment to determine if Western Bumble Bee (WBB) habitat is present. If habitat for WBB is present within the project footprint, a WBB survey should be conducted to determine if the species is present and establish the project impacts to WBB. This is essential to incorporate adequate avoidance, minimization, and/or mitigation measures in the future CEQA document. As previously stated WBB is a candidate species and has the same protections as any other listed species under the California Endangered Species Act. If it is determined WBB habitat is present appropriate surveys should be conducted to ensure there is no take of WBB during project activities. Thank you for the opportunity to provide comments, and I look forward to reviewing any future documents.

Best regards,
Ben

Ben Huffer
Environmental Scientist
(916) 216-6253
1701 Nimbus Rd.
Rancho Cordova, CA 95670

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

From: Mark Roberts <mroberts@clearlake.ca.us>
Sent: Thursday, January 5, 2023 8:49 AM
To: Huffer, Benjamin@Wildlife <Benjamin.Huffer@Wildlife.ca.gov>
Cc: Wildlife R2 CEQA <R2CEQA@wildlife.ca.gov>
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52

Hi Ben,

This is a preliminary review of the project since it was just submitted and we are obtaining the first round of agency comments/concerns. Once the commenting period has ended, we will collect the comments received and begin the formal CEQA process, which will be circulated (once complete) at a later time. I have attached a copy of the Biological report for you to review.

Mark

From: Huffer, Benjamin@Wildlife <Benjamin.Huffer@Wildlife.ca.gov>
Sent: Wednesday, January 4, 2023 3:43 PM
To: Mark Roberts <mroberts@clearlake.ca.us>
Cc: Wildlife R2 CEQA <R2CEQA@wildlife.ca.gov>
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52

Hi Mark,

Thank you for your response. Is this a notification that an Initial Study (IS) is being prepared? If not and you have an IS, please send it to CDFW as soon as you can. With the information provided in the RFR, I cannot provide you with specific comments on the proposed project, as the information provided in the RFR is not sufficient and lacks specific studies that should be prepared in support of the CEQA document. I recommend that the future environmental document includes but is not limited to rare plant surveys (*Navarretia leucocephala ssp. Bakeri*, has been recorded within 1 mile of the project site) and a map created by a qualified biologist delineating impacts to wetlands and other habitat types, including vernal pools that could be present within the project footprint. We would also need surveys to determine the presence and potential project impacts to bats and Western Bumble Bee (*Bombus occidentalis*), among others. Please note that Western Bumble Bee is a candidate species and has the same protections as any other listed species under the California Endangered Species Act and could be present within the project footprint. Additionally, a Streambed Alteration Agreement may be necessary, as an arm of Burns Valley goes through the property and may be significantly impacted by project activities. I am happy to provide additional comments on any future environmental document regarding this project. Please let me know if you have any questions or concerns. Thank you.

Best regards,
Ben

Ben Huffer
Environmental Scientist
(916) 216-6253
1701 Nimbus Rd.
Rancho Cordova, CA 95670

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

From: Mark Roberts <mroberts@clearlake.ca.us>
Sent: Tuesday, January 3, 2023 10:12 AM
To: Huffer, Benjamin@Wildlife <Benjamin.Huffer@Wildlife.ca.gov>
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52

Hi Ben,

Our offices were closed lasty week due to the holidays. The packet is sent to you as a representative of Fish and Game and it allows you to review and provide comments on the project if you have any. If you have any concerns and/or comments in regards to fish and wildlife concerns, etc. If you do not have any comments/concerns upon review, you can let me know.

Mark

From: Huffer, Benjamin@Wildlife <Benjamin.Huffer@Wildlife.ca.gov>
Sent: Tuesday, December 27, 2022 2:42 PM
To: Mark Roberts <mroberts@clearlake.ca.us>
Subject: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52

Good afternoon Mark,

My name is Ben Huffer I am an Environmental Scientist with the California Department of Fish and Wildlife reviewing the RFR you submitted. I had a couple of questions I wanted to ask you about the packet and what specifically you need form me. I tried giving you a call, but the lines were busy, please feel free to call me back at 916-216-6253 to discuss the proposed project. Thank you.

Best regards,
Ben

Ben Huffer
Environmental Scientist
(916) 216-6253
1701 Nimbus Rd.
Rancho Cordova, CA 95670

California Department of Transportation

DISTRICT 1
P.O. BOX 3700 | EUREKA, CA 95502–3700
(707) 445-6600 | FAX (707) 441-6314 TTY 711
www.dot.ca.gov

January 12, 2023

1-LAK-53-3.92
SD 2022-01
APN: 010-048-08

Mr. Mark Roberts
Planning Department
City of Clearlake
14050 Olympic Drive
Clearlake, CA 95422

Dear Mr. Mark Roberts:

Thank you for giving Caltrans the opportunity to review and comment on the Initial Study for the Subdivision Map to create a 22-parcel lot. The lots would range in size from 1.25 acres to 2.75 acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53. The subdivision is located north of the intersection of Olympic Drive and State Route 53, at 2890 Old Highway 53, in the City of Clearlake. We have the following input:

The Lake County/City Area Planning Council (Lake APC) Senate Bill 743 Vehicle Miles Traveled (VMT) Regional Baseline Study defines the screening threshold for small projects as up to 22 residential units. Recent legislation to streamline the approvals and development of Accessory Dwelling Units, such as AB 2299 and SB 1069, put into question the allowable number of residences that could be constructed on a 22-lot subdivision. Lacking other constraints on development, the subdivision could result in 44 new residences, which would exceed the small project threshold. We request that the city consider requiring the project assessment to include further VMT analysis.

While VMT is focused on vehicle travel, the goal of reducing VMT growth focuses on changing development patterns (e.g., land use mix and density) together with providing more pedestrian, bicycle, and transit infrastructure. The subdivision is consistent with the low-density residential designation in the City of Clearlake's General Plan 2040, so to reduce VMT, the subdivision will need to promote an increase in walking and bicycling trips. The General Plan policies support new multimodal facilities along Old Highway 53 with the following language:

Page 2 of 194 of the Clearlake General Plan 2040 states:

Connectivity and Universal Access

Closely related to the vision of steady, incremental, sustainable growth is the desire of the community to improve its multi-modal connectivity. The near-downtown grid pattern should be continued and reinforced (which will also facilitate transit). Sidewalks should be designed for universal access and installed along all streets.

Page 29 of 194 of the Clearlake General Plan 2040 states:

Among the considerations in the design of new neighborhoods and infill of existing neighborhoods is the following:

• Their location relative to existing development. This relates to the continuity of the street and pedestrian system as a means for achieving a walkable community, as well as the character transition and the means of compatibility within and between developments.

Page 66 of 194 of the Clearlake General Plan 2040 states:

"Complete streets" are those designed to support safe, attractive, and comfortable access and travel for all users, whether in motor vehicles, on foot, on bicycle, or using the public transit. The City will require complete streets in all new neighborhoods and will improve existing streets to be more complete in accommodating bicycle and pedestrian movements, as funding is available. Improvements required for complete streets depend on the type of street. While all streets will be required to have sidewalks for pedestrians, the required bicycle improvements will vary.

The following General Plan policies also support the incorporation of non-motorized facilities into the scope of the project:

Policy LU 1.1.4
Walkability and good connectivity should be promoted through continuity of the street and pedestrian system, together with a compact community form.

Program CI 1.1.1.1
In accordance with the Complete Streets Act, new development shall construct and dedicate streets that accommodate the full range of locally available travel modes.

Policy CI 4.1.1
The City shall require sidewalks in new developments.

Program CI 4.1.1.1
New development shall construct and dedicate and/or contribute to a connected

bicycle/pedestrian network that is designed to promote travel to schools, parks, and other major destinations.

We request that the City consider requiring the addition of new sidewalks and bicycle lanes to the project frontage along Old Highway 53 as a condition of project approval. The improvements would provide non-motorized access from the subdivision to transit stops and commercial retail districts in the City, including the shopping center approximately 1.5 miles away, on Olympic Drive. Adding non-motorized facilities as a condition of project approval may help to mitigate for any VMT impacts.

Please contact me with questions or for further assistance with the comments provided at (707) 684-6879 or by email at: <jesse.robertson@dot.ca.gov>.

Sincerely,

Jesse Robertson
Transportation Planning
Caltrans District 1

HABEMATOLEL POMO
CULTURAL RESOURCES

January 09, 2023

City of Clearlake

Attn: Mark Roberts, Senior Planner
14050 Olympic Drive
Clearlake, CA 95422

RE: Burns Valley Subdivision Project, HP-20221227-01

Dear Mr. Mark Roberts:

Thank you for your project notification letter dated December 27, 2022, regarding cultural information on or near the proposed 2890 Old Hwy 53, Clearlake, Lake County. We appreciate your effort to contact us and wish to respond.

On behalf of the Koi Nation, the Habematolel Pomo Cultural Resources Department has reviewed the project and concluded that it is within the Aboriginal territories of the Koi Nation. Therefore, on behalf of the Koi Nation, we have a cultural interest and authority in the proposed project area and would like to initiate a formal consultation with the lead agency.

Koi Nation and the Habematolel Pomo Cultural Resources Department highly recommend that cultural monitors on-site during all ground disturbance activities. Please send project details, detailed ground disturbance plan, and the latest cultural resource study for this project prior to consultation.

Please contact the following individual to coordinate a date and time for the consultation meeting:

Lourdes Guillory, Executive Assistant
Habematolel Pomo of Upper Lake
Office: (707) 900-6931
Email: lguillory@hpultribe-nsn.gov

Please refer to identification number HP–20221227-01 in any correspondence concerning this project.

Thank you for providing us with the opportunity to comment.

Sincerely,

Robert Geary
Cultural Resources Director/Tribal Historic Preservation Officer

Distribution Date: 12/19/2022
Return by Date: 01/13/2023

City of Clearlake

14050 Olympic Drive, Clearlake, California 95422
(707) 994-8201 Fax (707) 995-2653

HWC Received 12/19/2022 KS

Agency Request for Review

Community Development Dept. Request for Review (RFR)

Local Departments	Regional Departments	State/Federal Departments	Tribal Organizations	Other
☐Building	☒ **LC Air Quality Mgmt**	☒ **Caltrans**	☒ Elem Indian Colony	☐ Cal Cannabis
☐Code Enforcement	☒ **Assessor/Recorder**	☐ CA Air Board	☐ Middletown Ranch.	☐ CA Dept PH
☒**Police Department**	☒ **Env Health**	☒ **CA Dept F&W**	☒ Koi Nation of NCA	☐ BCC
☒**Engineering**	☒ **Lake Co. Special Dist.**	☒ **USA Corps of Eng**	☒ NAHC	☐ CDFA
☒**Fire**	☐ LC Surveyor	☒ **US F&W Serv**	☒ HERC	
☒ **PG&E**	☐ LC Water Resources	☒ **Sonoma State**		
☐ Golden State Water	☒ **LC Tax Collector**	☐ CHP		
☐ Konocti Water	☐ LC Transit	☐ ABC		
☒ **Highlands Water**	☐ Lake Area Plng Cncl	☒ **CA Water Boards**		

Request: Please review the enclosed application packet material and return any comments no later than January 13th, 2023. Comments may be submitted via email: mroberts@clearlake.ca.us, or postage: Clearlake City Hall attn. Planning Department, 14050 Olympic Drive, Clearlake, CA 95422.

From: Mark Roberts
File: Subdivision Map Application, SD 2022-01 & Environmental Analysis, CEQA IS 2022-08
Applicant: DANCO Communities
Location: 2890 Old Highway 53; Clearlake, CA 95422
APN: 010-048-08
Zoning: "RR" Rural Residential

Project Description: The applicant is requesting approval of a Subdivision Map with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Subdivision Lot. The lots would range in size from 1.25 acres to 2.75 Acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53. Please Refer to attachment map for details.

Comment Below: *(you may provide comments on a separate sheet if necessary).*

No specific comments at this time.

Please Note: Should it be determined or agreed upon that a particular development is within the Highlands Water Company area of service, ALL items beginning with #1 thru #24 of the Highlands Water Checklist (attached page 2) MUST be completed prior to an installation of water service to a development.

Name: Jeff Dean

Date: 1/10/23

Highlands Water Company
14580 Lakeshore Drive
Clearlake, California 95422
(707) 994-2393

Initial Proposed Development Project
Supporting Information Sheet

Applicant/Developer- Please Complete and Submit this form to Highlands Water Company, physical location at 14580 Lakeshore Dr. in Clearlake, California. Alternate Submission may be done by emailing completed form to sarah@highlandswater.com with CC: to rick@highlandswater.com. Completed form may also be Faxed directly to Sarah at (707) 994-7654.

1) Name or Title Assigned to the Development Project:

2) Physical Address & APN# of Parcel(s) Associated with Development:

Physical Address	Parcel APN#
Physical Address	Parcel APN#
Physical Address	Parcel APN#
Physical Address	Parcel APN#

3) Name and Mailing Address of Legal Owner of Development Parcel(s):

Name: _____ Contact# _____

Mailing Address: _____

Other Contact Information: _____

4) Engineer Contact Information Responsible for Developer's Project:
(This will be Highlands Water Company main point of contact unless otherwise noted on this form)

Engineer's Name _____

Phone: _____ Cell: _____

Other Contact Information: _____

5) Description as to Type of Development [Commercial, Housing, Apts., Etcetera]. _____
Please forward parcel maps, design plans or any other layouts pertinent to the proposed development. Should the developer decide to move forward with intended project, Highlands will require 2 Full Size sets of Plans (Offsite & Onsite) to be Delivered or Mailed to: ATTN: Sarah / Highlands Water Company at 14580 Lakeshore Drive, Clearlake CA 95422.

(Attach Additional Sheets if needed)

HIGHLANDS WATER COMPANY

14580 Lakeshore Drive
Clearlake, California 95422
(707) 994-2393

DEVELOPMENTS - WATER SERVICE CHECKLIST

Development Project Name: _____

* *The Below Designated Items Represent Steps Required by the Developer to Complete*

*		1	Initial Developer/Proposed Development Project Information Sheet
*		2	Date Received 2 Full Size copies of Site Plan from the Developer: (Plan MUST include Fire Dept. Approved Fire Flow)
		3	Send Site Plan to Engineer for Task Order to Run the Model for Fireflow Determinations
		4	Receive Task Order from Engineer to Determine if Any Off-Site Requirements are Necessary
		5	Add Ten Percent (10%) to Task Order and Bill Developer
		6	Received Payment from the Developer for Off-Site Task Order
		7	Sign Off-Site Task Order and Send to Engineer
		8	Received Recommendations for Condition of Approval from Engineer
		9	Highlands Water Company Pays Engineer for Review of Off-Site Plans
		10	Send "Conditions of Approval" (Will Serve) to Developer (Developer Signs Off)
*		11	Received Signed "Conditions of Approval" from Developer
*		12	Developer Submits Complete Plans Showing On-Site and Off-Site Improvements
		13	Send Complete Plans to Engineer for Task Order
		14	Receive Task Order from Engineer to Review Complete Plans
		15	Add Ten Percent (10%) to Task Order and Bill Developer
*		16	Payment by Developer Made Payable to Highlands Water Co. for Task Order
		17	Sign Task Order and Send to Engineer
		18	Receive Completed Prints Signed by Engineer on Behalf of the Highlands Water Company
		19	Highlands Water Company Pays Engineer for Review of Completed Plans
		20	Return Signed Completed Plans to Developer
*		21	Developer Completes Required Improvements (To Specs)
*		22	Developer Conveys Mains, Right-of-Ways, Easements, Etc.
*		23	Developer Applies for Meter Set(s)
*		24	Developer Pays the Meter fee(s)
		25	Highlands Water Co. Provides Developer with Meter(s) for Developer to do the Installation
*		26	Developer's Completion Date of Project: _____

Note: Rates Subject to Change. Please refer to our website at www.highlandswater.com for the most recent rates and charges associated with Water Service Connections. Please attach a separate sheet for any comments or questions you wish to submit. Submissions may be directed to Jeff@highlandswater.com with CC: to sarah@highlandswater.com and rick@highlandswater.com

* ***Please Review HIGHLANDS WATER COMPANY CONDITIONS and SPECIFICATIONS***

HIGHLANDS WATER COMPANY

14580 Lakeshore Drive
Clearlake, California 95422
(707) 994-2393

DEVELOPMENTS - WATER SERVICE CHECKLIST

Development Project Name:

*			***The Below Designated Items Represent Steps Required by the Developer to Complete***
*	X	1	Initial Developer/Proposed Development Project Information Sheet
*		2	Date Received 2 Full Size copies of Site Plan from the Developer: (Plan MUST include Fire Dept. Approved Fire Flow)
		3	Send Site Plan to Engineer for Task Order to Run the Model for Fireflow Determinations
		4	Receive Task Order from Engineer to Determine if Any Off-Site Requirements are Necessary
		5	Add Ten Percent (10%) to Task Order and Bill Developer
		6	Received Payment from the Developer for Off-Site Task Order
		7	Sign Off-Site Task Order and Send to Engineer
		8	Received Recommendations for Condition of Approval from Engineer
		9	Highlands Water Company Pays Engineer for Review of Off-Site Plans
		10	Send "Conditiopns of Approval" (Will Serve) to Developer (Developer Signs Off)

Instructions on How to Use this Form:

In the above example:

*	X	Line #1 tells us that someone/developer has sent an initial inquiry/request for investigating water service for a possible development
*		Line #2 (Yellow Highlighted) Indicates the Next Step in the Process that Needs to be completed (in this case, the developer's engineer needs to send 2 Full Size copies of the development Site Plan)

From: Ryan Lewelling
To: Mark Roberts
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Date: Wednesday, January 4, 2023 11:51:35 AM
Attachments: image001.png
image002.png

Mark,

This Assessor's Office review of proposed Subdivision Map 2022-01, CITY OF CLEARLAKE REDEVELOPMENT AGENCY, APN 010-048-080-000, has the following comments:

- No Tax Rate Area conflicts identified
- No property taxes due or assessed; coded as non-taxable
- Ownership confirmed per doc #1999004156
- Draft subdivision map reviewed. Please provide GIS shapefile or CAD dataset following City approval of project
- Development located adjacent to Old Hwy 53; two 50-foot roadways with 50ft cul-de-sac noted for access to lots
- Proposed sewage leach fields noted as being located 50ft from creek that drains to Clear Lake, 30ft from building pads

Please proceed accordingly.

Ryan Lewelling
Cadastral Mapping Specialist
707-263-2302 | *Ryan.Lewelling@LakeCountyCA.gov*

From: Mark Roberts [mailto:mroberts@clearlake.ca.us]
Sent: Monday, December 19, 2022 12:13 PM
Subject: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Importance: High

Good Afternoon,

You are receiving this Request for Request (RFR) Packet as an applicant is requesting approval of a Subdivision Map (SD 2022-01) with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Lot Subdivision located at the above noted address. The lots would range in size from approximately 1.25 to 2.75 Acres in size. The development would include two (2) 50-foot rights-of-ways located off Old Highway 53.

Please review the attached packet and provide comments no later than January 13th, 2023. If you do not have any comments/concerns, please respond to this email stating you have no concerns/comments.

If you have any questions, please let me know.

Sincerely,

Mark Roberts

Senior Planner

Mark Roberts | *Senior Planner*
City of Clearlake
14050 Olympic Drive | Clearlake, CA 95422
707-994-8201

Please Note: Building Permit and Land Use Applications will not be accepted via email and must be submitted in person. Applications submitted via email will no longer be accepted or acknowledged.

From: Cara Salmon
To: Mark Roberts
Cc: Vance Ricks
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Date: Wednesday, December 21, 2022 11:36:07 AM
Attachments: image001.png
image002.png
Cities - SM PM review checklist-Circa 2002.pdf

Good morning Mark. The County Surveyors Office wouldn't have any comments to a City Subdivision RFR, however, this seems like the appropriate time to let you know what our office will need for filing your City Subdivision Map. I've attached an older letter and checklist of requirements. I'm sure we are a long way off from filing, but please keep our checklist in mind as you get closer. Thank you & Merry Christmas.
Cara

From: Mark Roberts [mailto:mroberts@clearlake.ca.us]
Sent: Monday, December 19, 2022 12:13 PM
Subject: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Importance: High

Good Afternoon,

You are receiving this Request for Request (RFR) Packet as an applicant is requesting approval of a Subdivision Map (SD 2022-01) with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Lot Subdivision located at the above noted address. The lots would range in size from approximately 1.25 to 2.75 Acres in size. The development would include two (2) 50-foot rights-of-ways located off Old Highway 53.

Please review the attached packet and provide comments no later than January 13th, 2023. If you do not have any comments/concerns, please respond to this email stating you have no concerns/comments.

If you have any questions, please let me know.

Sincerely,

Mark Roberts

Senior Planner

Mark Roberts | *Senior Planner*
City of Clearlake
14050 Olympic Drive | Clearlake, CA 95422
707-994-8201

Please Note: Building Permit and Land Use Applications will not be accepted via email and must be submitted in person. Applications submitted via email will no longer be accepted or acknowledged.

Distribution Date: 12/19/2022
Return by Date: 01/13/2023

SR000 4967

City of Clearlake

14050 Olympic Drive, Clearlake, California 95422
(707) 994-8201 Fax (707) 995-2653

Agency Request for Review

Community Development Dept. Request for Review (RFR)

Local Departments	Regional Departments	State/Federal Departments	Tribal Organizations	Other
☐Building	☒ **LC Air Quality Mgmt**	☒ **Caltrans**	☒ Elem Indian Colony	☐ Cal Cannabis
☐Code Enforcement	☒ **Assessor/Recorder**	☐ CA Air Board	☐ Middletown Ranch.	☐ CA Dept PH
☒**Police Department**	☒ **Env Health**	☒ **CA Dept F&W**	☒ Koi Nation of NCA	☐ BCC
☒**Engineering**	☒ **Lake Co. Special Dist.**	☒ **USA Corps of Eng**	☒ NAHC	☐ CDFA
☒**Fire**	☐ LC Surveyor	☒ **US F&W Serv**	☒ HERC	
☒ **PG&E**	☐ LC Water Resources	☒ **Sonoma State**		
☐ Golden State Water	☒ **LC Tax Collector**	☐ CHP		
☐ Konocti Water	☐ LC Transit	☐ ABC		
☒ **Highlands Water**	☐ Lake Area Plng Cncl	☒ **CA Water Boards**		

Request: Please review the enclosed application packet material and return any comments no later than January 13th, 2023. Comments may be submitted via email: mroberts@clearlake.ca.us, or postage: Clearlake City Hall attn. Planning Department, 14050 Olympic Drive, Clearlake, CA 95422.

From: Mark Roberts
File: Subdivision Map Application, SD 2022-01 & Environmental Analysis, CEQA IS 2022-08
Applicant: DANCO Communities
Location: 2890 Old Highway 53; Clearlake, CA 95422
APN: 010-048-08
Zoning: "RR" Rural Residential

Project Description: The applicant is requesting approval of a Subdivision Map with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Subdivision Lot. The lots would range in size from 1.25 acres to 2.75 Acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53. Please Refer to attachment map for details.

Received
DEC 19 2022
Environmental Health

Comment Below: *(you may provide comments on a separate sheet if necessary).*

See attached memorandum

Name: Ina Rubin

Date: 12/21/22

COUNTY OF LAKE
Health Services Department
Environmental Health Division
922 Bevins Court
Lakeport, California 95453-9739
Telephone 707/263-1164
FAX 707/263-1681

Jonathan Portney
Health Services Director

Craig Wetherbee
Environmental Health Director

MEMORANDUM

DATE: December 21, 2022

TO: Mark Roberts Senior Planner

FROM: Tina Dawn-Rubin, Environmental Health Aide

RE: SD 2022-01; CEQA IS 2022-08
Subdivision Map Application

APN: 010-048-08 2890 Old Highway 53, Clearlake

Lake County Division of Environmental Health (EH) has on file for the subject parcel:
APN: 010-048-08 – On October 17, 2022, our office received applications for 14 site evaluations (soils test) in which field inspections are still pending; 8 site evaluations (soils test) were performed in 2005 for a proposed subdivision; a 1991 site evaluation (soils test)**;** a 1991 well permit (WE 589) for a domestic well; a 1991 well permit (WE 593A) for a well abandonment for an improperly equipped well.

The applicant must meet the EH requirements regarding Onsite Wastewater Treatment System (OWTS) and potable water.

Environmental Health will require a site evaluation (soils test) to be completed on each of the proposed parcels to ensure an Onsite Wastewater Treatment System (OWTS) can be installed on each parcel before final subdivision map is approved.

From: Autumn Lancaster
To: Mark Roberts
Cc: Willie Sapeta; Marc Hill; pbleuss@kelseyvillefire.com
Subject: Request for Review Old Hwy 53
Date: Tuesday, December 20, 2022 8:45:57 AM

Good Morning,
We received the request for review Old Hwy 53 Development of 22 Subdivision lots-
Our only comment at this time is that they follow all current applicable California Fire Codes and Standards.
Hope you've had a great weekend,
Autumn Lancaster

From: Lori Baca
To: Mark Roberts
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Date: Tuesday, December 20, 2022 8:46:53 AM
Attachments: image004.png
image001.png

Mark,

Parcel 010-048-080 is outside of any Special Districts service area, no impact.

Happy Holidays!

Lori A. Baca
Customer Service Supervisor
Lori.Baca@lakecountyca.gov
Office Number (707) 263-0119
Fax (707) 263-3836

From: Mark Roberts [mailto:mroberts@clearlake.ca.us]
Sent: Monday, December 19, 2022 12:13 PM
Subject: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Importance: High

Good Afternoon,

You are receiving this Request for Request (RFR) Packet as an applicant is requesting approval of a Subdivision Map (SD 2022-01) with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Lot Subdivision located at the above noted address. The lots would range in size from approximately 1.25 to 2.75 Acres in size. The development would include two (2) 50-foot rights-of-ways located off Old Highway 53.

Please review the attached packet and provide comments no later than January 13th, 2023. If you do not have any comments/concerns, please respond to this email stating you have no concerns/comments.

If you have any questions, please let me know.

Sincerely,

Mark Roberts

Senior Planner

Mark Roberts | *Senior Planner*
City of Clearlake
14050 Olympic Drive | Clearlake, CA 95422
707-994-8201

Please Note: Building Permit and Land Use Applications will not be accepted via email and must be submitted in person. Applications submitted via email will no longer be accepted or acknowledged.

From: Steven Phillips
To: Mark Roberts
Cc: Lori Baca; Scott Harter; Scott Hornung
Subject: RE: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Date: Friday, December 30, 2022 2:44:37 PM
Attachments: image004.png
image003.png

Mark,

Since this project is located outside of the area where we provide sanitary sewer service Special Districts does not have any comments on this project. Please contact Lake County Environmental Health regarding on-site septic system questions or requirements.
Thanks,

Steve Phillips
Utility Systems Compliance Coordinator

Lake County Special Districts
230 N. Main Street
Lakeport, CA 95453
Phone: (707) 263-0119
Fax: (707) 263-3836
steven.phillips@lakecountyca.gov

From: Mark Roberts [mailto:mroberts@clearlake.ca.us]
Sent: Monday, December 19, 2022 12:13 PM
Subject: Request for Review (RFR) for Proposed Subdivision located at 2890 Old Highway 52
Importance: High

Good Afternoon,

You are receiving this Request for Request (RFR) Packet as an applicant is requesting approval of a Subdivision Map (SD 2022-01) with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Lot Subdivision located at the above noted address. The lots would range in size from approximately 1.25 to 2.75 Acres in size. The development would include two (2) 50-foot rights-of-ways located off Old Highway 53.

Please review the attached packet and provide comments no later than January 13th, 2023. If you do not have any comments/concerns, please respond to this email stating you have no concerns/comments.

If you have any questions, please let me know.

Sincerely,

Mark Roberts

Senior Planner

Mark Roberts | *Senior Planner*
City of Clearlake
14050 Olympic Drive | Clearlake, CA 95422
707-994-8201

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
1400 Valley House Drive, Suite 210
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
https://nwic.sonoma.edu

January 13, 2023 File No.: 22-0963

Mark Roberts, Senior Planner
City of Clearlake
14050 Olympic Drive
Clearlake, California 95422

re: SD 2022-01 and IS 2022-08 / APN: 010-048-08 at 6653 and 2890 Old Highway 53 / DANCO Communities

Dear Mark Roberts,

Records at this office were reviewed to determine if this project could adversely affect cultural resources. **Please note that use of the term cultural resources includes both archaeological sites and historical buildings and/or structures. The review for possible historic-era building/structures, however, was limited to references currently in our office and should not be considered comprehensive.**

Project Description:

The applicant is requesting approval of a Subdivision Map with corresponding environmental analysis (CEQA – Initial Study) to allow the development of a 22 Subdivision Lot. The lots would range in size from 1.25 acres to 2.75 Acres in size. The development would include two (2) 50 foot right of ways located off Old Highway 53.

Previous Studies:

XX Study #13515 (Flaherty 1992) and Study #23490 (Flaherty 1999), which cover the proposed project area, identified no cultural resources within the proposed project area *(see recommendation below)*.

Archaeological and Native American Resources Recommendations:

XX The proposed project area has the possibility of containing unrecorded archaeological sites. Due to the passage of time since the previous surveys and the changes in archaeological theory and method since that time, we recommend a qualified archaeologist conduct further archival and field study for the entire project area to identify any unrecorded archaeological resources, including those that may show no signs or indicators on the surface.

XX We recommend that the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at (916) 373-3710.

____ The proposed project area has a low possibility of containing unrecorded archaeological site(s). Therefore, no further study for archaeological resources is recommended.

Built Environment Recommendations:

XX Since the Office of Historic Preservation has determined that any building or structure 45 years or older may be of historical value, if the project area contains such properties, it is recommended that prior to commencement of project activities, a qualified professional familiar with the architecture and history of Lake County conduct a formal CEQA evaluation.

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

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

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at http://www.chrisinfo.org.

If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely,

Bryan Much
Coordinator

From:	Roberta Lyons
To:	Alan Flora; Mark Roberts
Cc:	Donna Mackiewicz; Deb Sally
Subject:	Comments on prosed subdivision
Date:	Thursday, January 12, 2023 12:31:40 PM
Attachments:	Comments re Clearlake Subdivision proposal.docx

Hi Mark,
I've attached my comments on the proposed subdivision on Old Highway 53. I've also attached an image of the flowing intermittent creek that flows into Burns Valley Creek that I took a couple of days ago. Then, I've attached images from 1983 when Burns Valley Creek flooded. The pictures are near where Austin's resort once stood along with some other buildings that have since been torn down. They are across the street (sort of) from City Hall. I was surprised Alan when you said there weren't any records from the floods in Clearlake. I have numerous images of that 1983 flood as we owned the Clearlake Observer at that time and covered the flood. It was really something. I don't have any of the intermittent creek but I would wager it was over-flowing it's banks. As you will see, any areas near the smaller creeks were inundated. Molesworth flooded many parts of the area between Olympic and Austin. I know this was a long time ago, but I think as the recent rains have indicated - we don't know what we are going to be facing. I'm copying Deb on this as she is commenting for the Sierra Club, and Donna Mackiewicz who is my co-conservation chair for Redbud Audubon.

Thank you!
Roberta

Comments re: Subdivision Map Application, SD 2022-01 and Environmental Analysis, CEQA IS 2022-08

Submitted by:
Redbud Audubon Society
PO Box 5780
Clearlake, CA 95457
To Mark Roberts, Planner City of Clearlake

Dear Mr. Roberts,
As Conservation co-chair for the Redbud Audubon Society of Lake County, I'm commenting on our concerns regarding the subdivision proposed near Old Highway 53 in the City of Clearlake.

On a whole we do not oppose the entire development but thoughtful changes to the proposed plan could be made. In looking at the City of Clearlake's General Plan objectives, it appears this project does not comply with the objectives. This project is not preserving wildlife habitat or open space nor does it result in connection corridors for wildlife (Objective CO 4.2).

Nor does it comply with Objective CO 4.3 of maintaining diverse and natural landscape to preserve the visual integrity of the landscape and provide habitat conditions for native vegetation and plants (paraphrased.)

What is the solution? A redesign of the subdivision following a Conservation Design objective. This would include excluding or reducing lots along the "intermittent," waterway; clustering the houses in cul de sac type situations, reducing lot size, and providing a significant pathway through the development and not allowing impassable fencing for wildlife.

The intermittent creek flowing along the edge of the property that is being suggested to be included in individual lots is a bad idea. I've enclosed an image of the creek running during our current time of heavy rains, but certainly not the heaviest rains we will possibly be seeing. As the Sierra Club comments point out, septic and leach field contamination is a real probability if houses are placed too close to this waterway. This waterway could be designated as a park for the development. It could be restored with more sloped banks and native wetland vegetation that would reduce erosion and danger of flooding into the adjacent houses.

The treed area could also be seen as a wildlife/park area with some removal for fire safety but not clear-cutting to make way for 2 or 3 story mega-houses. I would think developers would be open to the idea of an attractive, nature friendly, community that could be marketed as such.

I realize these are broad comments that need to be narrowed down to more specifics, but I have been faced with time constraints (as everyone, I know) and wanted to deliver my initial comments before tomorrow's deadline.

Thank you for considering my concerns
Roberta Lyons, Redbud Audubon Society Conservation Co-Chair


NOBLE
HIGHLANDS
REALTY
(707) 994-8291
Jim's
Automotive


FLOODED
CITY OF CLEARLAKE

SIERRA CLUB
Lake Group

Attention:Mark Roberts
Planner, City of Clearlake

Re: Subdivision Map Application, SD 2022-01 & Environmental Analysis, CEQA IS 2022-08
Date: January 6, 2023

Dear Mr. Roberts,

The Sierra Club Lake Group has some concerns about this project that we believe need to be addressed before this project goes further. I have addressed the issues in the order of importance of impacts.

The seasonal creek (intermittent drainage area) located in and along the north side of the property carries a fair amount of water during rain events. There was water running it during the most recent storms. It is a tributary to Burn's Valley Creek which is the main waterway that enters the lake within the city boundaries. It fits the description of Natural Surface Water as given in 14-1.3 a.18 of the Storm Water Management Ordinance. The Ordinance states that "discharge of pollutants to storm water will be reduced to the maximum extent practicable through the implementation of BMPs designed to protect water quality and requirements of the Municipal Storm Water Permit".

Having septic system leach fields on each of the northern lots (# 1-7) that extend to within seventy-five (75) feet of the waterway does not conform to county recommendations and is likely to result in increased amounts of nitrogenous waste entering the creek as Non-Storm Water Discharge. Contaminants are likely to eventually enter the lake next to Austin Park. This would add to the sediment as well as algal blooms and unwanted vegetation that would then lead to obstacles and odors that deter people from using Austin Park. This park is the focal point of the area's cultural events and therefore should not be degraded. The water quality in our area has a huge impact on its viability as a tourist destination. Unless the developer can relocate the leach fields to give at least a 75 foot setback from the creek, possibly by decreasing the number of lots, they must be required to use engineered septic systems.

The application states that no loss of stream side vegetation is expected at this time. Because the creek and its riparian zone is part of each of the lots, 1-7, along the northern border of the project, it is likely that stream side vegetation will be impacted when the lots are developed and occupied, unless there is a restriction imposed on the buyer of each lot that can be enforced. Loss of vegetation along the creek will result in increased sediment entering the waterway and ultimately Clear Lake. There should be a deed restriction on each of the seven properties that requires that that space be maintained as open space by the owners. Alternatively, the lot size could be decreased or plan altered to eliminate the seasonal creek and its riparian area from the lots. Furthermore, the City of Clearlake General Plan, Chapter 6: Open Space, Policy OS 6.1.1, states that " The City should establish and preserve buffers between developed areas and forested areas, fields, stream corridors, wetlands, and other open spaces."

SIERRA CLUB
Lake Group

The Special-Status Wildlife section of the Biological Resources Assessment states that there is Indian Milkweed located along portions of the intermittent drainage area. Because Monarch Butterfly caterpillars feed on this plant, the project design should incorporate a 25 foot setback around milkweed habitat. The BRA also states that pre-construction surveys should be conducted by a qualified biologist within one week prior to the onset of construction. Protecting this area is in line with the City of Clearlake General Plan, Objective CO 4.1: Protect all state and federally listed endangered and threatened species. This is one more reason to remove the drainage area/seasonal creek from lots 1-7.

Additionally, Burns Valley Creek is a historic spawning area for the Clear Lake Hitch, also known as chi, the name used by the local indigenous people. Protecting a potential site for this and other indigenous fish to be re-introduced could add to the area's potential for ecotourism and bring back a culturally important fish to the Pomo tribes in our area.

There is also concern about flooding along Burns Valley Road in heavier rain events. Degradation of the water holding capacity of the soil by vegetation removal could result in increased runoff to the creek and into the drainage ditch along the west side of the project which is along the east side of Old Highway 53. There is already a history of water overflowing this drainage ditch and entering the roadway. The curb and gutter to be put in would have to be designed to handle large amounts of flow.

The Tree Ordinance adopted by the City of Clearlake in Municipal Code 18-40 suggests that mature trees that belong to any of six varieties of oak tree or any designated heritage tree "enhance the aesthetic qualities of the community" and thereby are valuable. There are many trees that fit this description on the project site. Removal of these trees should be kept to an absolute minimum by requiring a biological survey to identify trees that should be saved. Oversight to ensure compliance to only permitted removal and specified mitigation is also necessary.

The Special-Status Wildlife section of the BRA states that all ground disturbing activity should be completed between September 1st and January 31st to minimize impacts on nesting birds. A pre-construction nesting bird survey should be completed within 14 days of the start of construction by a qualified biologist. We request that this be adhered to.

The View and Vista will be changed dramatically for neighbors in the area. Some residents consider the relatively dark sky in the area to be of immense value for their astronomical enjoyment. Fixtures that restrict upward-directed light and have low color temperature bulbs are required. We request that the number be minimized to decrease light pollution. Any houses built there are also required to utilize similar lighting. Enforcement of these regulations is essential.

Additionally, the daytime view from the houses across the road from the development will be altered significantly with the removal of trees. The treed areas add to the natural beauty of the area. Mature trees are known to increase residential property values. If a large number of the trees are removed, there will be no visual or sound barrier between the current neighbors and the highway from that direction.

SIERRA CLUB
Lake Group

This project does not appear to fulfill the Community Development Plan in providing additional low and medium income housing. There is no indication in the document that the developer plans to build out the lots. Building costs may result in an inability to sell the lots leaving a minimally developed subdivision for a long period. This would decrease the rural beauty of the area by removing an essential open space element along what is arguably the most scenic access road and one of the most frequented walking areas in the city. If this project moves forward, the applicant must demonstrate a commitment to build out the lots within a reasonable period of time.

Respectfully,
Deb Sally
Chair, Sierra Club Lake Group

From: Dave Swartz
To: Mark Roberts
Subject: Danco Subdivision Flood Determination
Date: Thursday, August 24, 2023 8:37:52 AM
Attachments: image003.png

Hi Mark,
The subject project lies within a Zone D area of FEMA which is undetermined by FEMA as to any flooding impacts. Experience and testimony and study to date on this water shed have shown that the creek north and adjacent to the project, which I call Miller Creek, does not overtop the creek bank nor the roadway culverts at Old Hwy 53. Fortunately in Dec. 2022 we experienced a near 100 year storm event, and so we got to witness first hand the drainage system and impacts city wide. Based on this information, but lacking an official FEMA study and recommendation, I would treat this area similar to an AE zone area, and condition the map to require the building pads for the homes to be a minimum of 2 feet above the top of bank of the existing creek (Miller Creek) on the north site of the project, as measured perpendicular from the creek extending toward the lot pads. This would need to be certified by a licensed surveyor.

Does not require flood insurance.

David L. Swartz, PE, PLS, QSD/P
Consulting City Engineer
City of Clearlake

voice 530-682-9832
swartz@cecusa.net

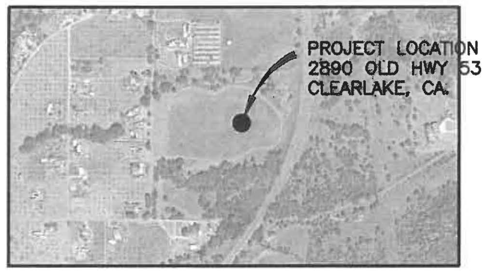
Attachment G

Tentative Subdivision Map

BURNS VALLEY SUBDIVISION

2890 OLD HWY 53, CLEARLAKE, CA. 95422

APN: 010-048-080



VICINITY MAP

NO SCALE

NORTH

APPLICANT: THE DANCO GROUP
5251 ERICSON WAY
ARCATA, CA. 95521
(707) 822-9000

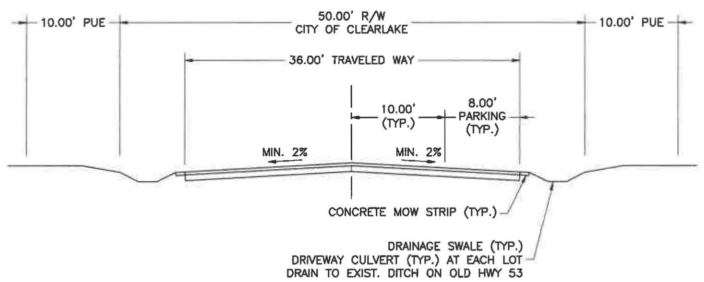
AGENT: WHITCHURCH ENGINEERING, INC.
610 9th. St.
FORTUNA CA. 95540
(707) 725-6926
JEFFREY LAIKAM P.E.
jtl@whitchurchengineering.com

SEWER: ON-SITE

WATER: HIGHLANDS WATER DISTRICT

PROJECT DESCRIPTION:

PREPARE TENTATIVE MAP TO INCLUDE: TOPOGRAPHIC CONTOURS, LOT LAYOUTS, OVERALL LOT DIMENSIONS, AND NEW ROADS, TO BEGIN THE MAJOR SUBDIVISION PROCESS AND PROVIDE A MAP TO BE USED FOR CEQA, PLANNING, AND ANY REQUIRED REPORTS TO SUBDIVIDE THE PROJECT SITE (APN: 010-048-008) INTO 22 RESIDENTIAL LOTS WITH IMPROVEMENTS INCLUDING A SINGLE FAMILY RESIDENCE, SEPTIC SYSTEM, AND STANDARD UTILITIES.



1 TYP. NEW ROAD SECTION

SCALE: 1"=10'

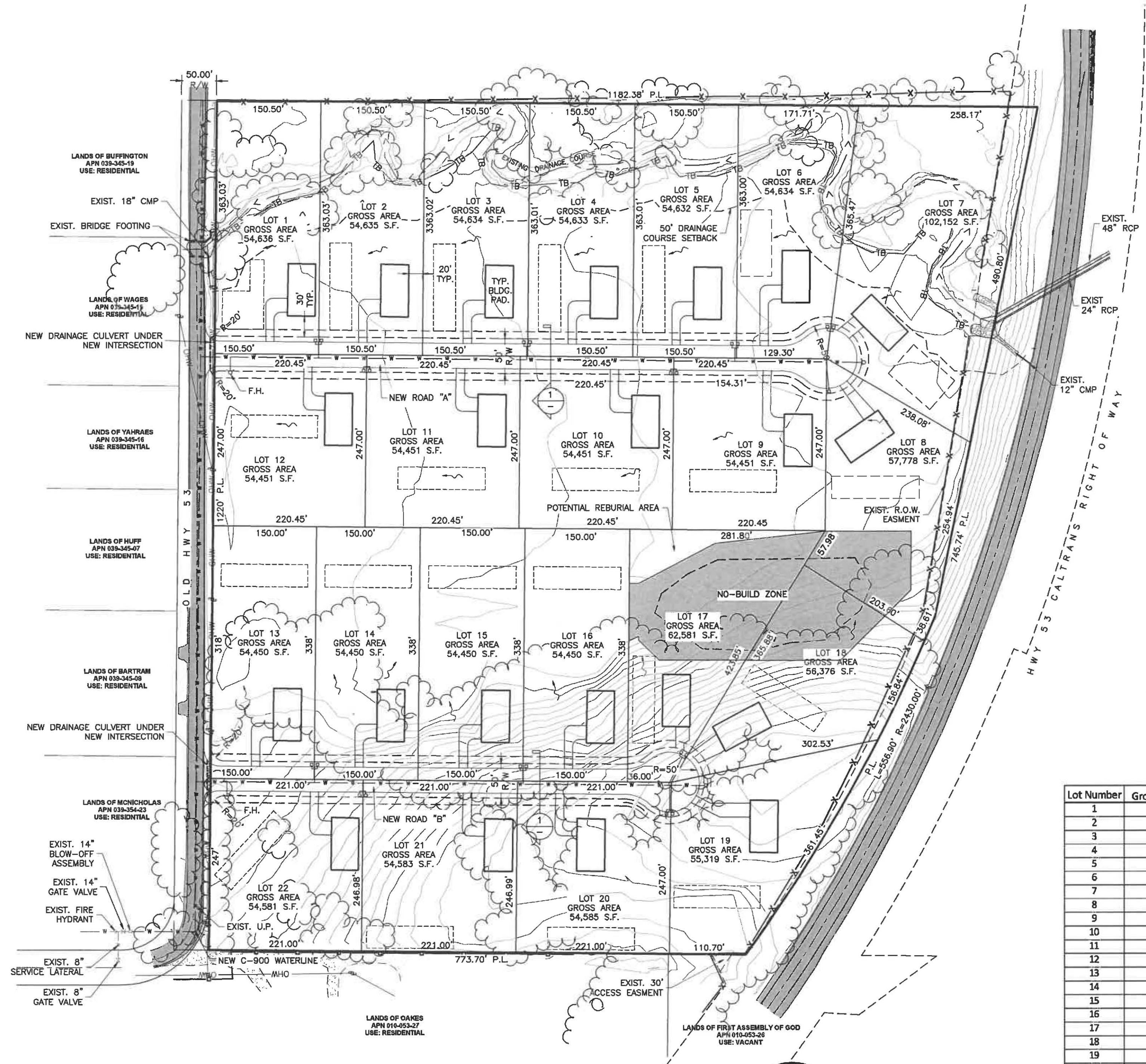
NOTES:

PROPERTY LINES AND EASEMENTS FOR APN 010-048-08 ARE BASED ON THE SURVEY PERFORMED BY MUNSELLE CIVIL ENGINEERING DATED NOVEMBER 1, 2022 AND BOOK 32, OF SURVEYS, PAGE 49 AND DOES NOT CONSTITUTE A BOUNDARY SURVEY.

THE LOCATION OF ALL PROPERTY LINES AND EASEMENTS MUST BE VERIFIED PRIOR TO CONSTRUCTION

ADJACENT PROPERTY LOT LINE LENGTHS AND BEARINGS ARE ASSUMED OR BASED ON RECORD INFORMATION

ALL KNOWN EASMENTS SHOWN



TENTATIVE MAP

SCALE: 1"=100'

NORTH

LEGEND

- TYPICAL 40'x75' BUILDING PAD
- TYPICAL LEACHFIELD (±4,000 S.F.)
- EXISTING CONTOURS AT 2' INTERVALS (EXTRACTED FROM TOPOGRAPHIC SURVEY DEVELOPED BY MUNSELLE CIVIL ENGINEERING NOV. 2022)
- EXISTING TREES
- EXIST. PROPERTY BOUNDARY
- NEW PROPERTY LINE
- SETBACKS/EASEMENTS
- PROPOSED FIRE HYDRANTS
- PROPOSED WATER LINES
- PROPOSED DOUBLE WATER SERVICE
- PROPOSED SINGLE WATER SERVICE
- DIRECTION OF SURFACE FLOW
- TB — EXIST. DRAINAGE COURSE TOP OF BANK
- OHW — EXIST. OVER HEAD WIRES
- ROAD CENTER LINE
- EXIST. FENCE
- FLOW LINE
- NO BUILD ZONE

STATEMENT: ALL EASEMENTS OF RECORD ARE SHOWN ON THE TENTATIVE MAP AND WILL APPEAR ON THE RECORDED MAP.

Lot Number	Gross Area (ft^2)
1	54,636
2	54,635
3	54,634
4	54,633
5	64,632
6	54,634
7	102,152
8	57,778
9	54,451
10	54,451
11	54,451
12	54,451
13	54,450
14	54,450
15	54,450
16	54,450
17	62,581
18	56,376
19	55,319
20	54,585
21	54,583
22	54,581

LOT TABLE

PRELIMINARY

THESE PLANS ARE ORIGINALLY PRINTED ON 22"x34" PAPER.

1 INCH

This drawing or drawing set shall not be used for construction unless a jurisdictional stamp (County, City, State, Federal) has been issued on the drawing, stating "FOR PERMIT" or similar verbiage, a wet signed professional engineer's stamp, and permit documents have been issued for the project.

REVISIONS	BY

PLAN REVIEW ONLY

WHITCHURCH ENGINEERING, INC.
610 9th Street Fortuna, California 95540
Phone (707) 725-6926

BURNS VALLEY SUBDIVISION
2890 Old Hwy 53, Clearlake, CA 95422
APN: 010-048-08

TENTATIVE SUBDIVISION MAP
For: Burns Valley L.L.C.

Date	JUN 23 '23
Scale	AS NOTED
Design	JTL
Drawn	FMT
Job	DAN2201
Sheet	1