INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

CASTLEWOOD COUNTRY CLUB
GOLF PRACTICE RANGE PROJECT

PREPARED FOR

COUNTY OF ALAMEDA

COMMUNITY DEVELOPMENT AGENCY
224 W. WINTON AVENUE
HAYWARD, CA 94544

PREPARED BY

JULY 2013

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ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

Environmental Checklist Form

Prepared Pursuant to the California Environmental Quality Act (CEQA)

A. PROJECT DESCRIPTION

1. **Project Title:** Castlewood Country Club Practice Range

2. **Project location**: Castlewood Drive, south side, 200 feet west of Pleasanton-Sunol Road
   Assessor's Parcel Numbers: 946-3760-002-00
   946-3760-012-01
   946-3760-012-02

3. **Project sponsor's name and address**: Castlewood Country Club Corporation
   707 Country Club Circle
   Pleasanton, CA 94566

4. **General Plan Designation:** Water Management

5. **Zoning:** "A" (Agriculture)

6. **Project Description:**

On land owned by the Castlewood Country Club south of its Valley Golf Course, the Country Club proposes to construct a practice range and associated putting green for use by members and guests. The facility would be located adjacent to the existing 18th tee of the Valley Course which is one of Castlewood's two 18-hole golf courses. With about 7.6 acres, the project site covers the southernmost portion of parcel 946-3760-1-2, together with parcels 946-3760-2, 946-3760-12-2, and 946-3760-12-1. Currently most of the project site serves as a maintenance area for the Valley Course, with staging and storage of materials and equipment, disposal of green material and other wastes, and as a green nursery for replacement turf and other plants. This site is vegetated with some mature trees, non-native grasses and other herbaceous species. The Project location is shown in **Figures 1 and 2**.

The current maintenance-related activity for which the Project site has been used was selected for this purpose because it was available and convenient to the maintenance superintendent. These activities would be absorbed at various locations elsewhere within the two active golf courses. There is adequate "lay down" area around the two courses to meet most of the storage needs, and replacement space for green nursery and mulch areas are already being developed to accommodate the relocation of functions from the Project site.

As illustrated in **Figure 3**, the proposed practice facility would involve construction of a golf course practice area with tees, a fairway, sand bunkers and greens. There would be two stormwater retention basins along the eastern boundary to capture excess irrigation; a cart path turn-around and parking area; and a gravel-surfaced maintenance road running along the eastern boundary parallel to the

railroad track. The perimeter of the fairway would be landscaped with a mixture of native and non-native tree and shrub species.

The parcel is well-suited for this proposed use as it is wide enough to provide for a variety of target greens set at varying distances from the teeing ground while also being of sufficient length to satisfy the needs of even the longest hitters. Its proximity to the existing Valley Course clubhouse is also a benefit to its use at this location.

Practice facility hours would be from 7:00 a.m. to dusk on days when the Valley Course is open. The teeing ground would provide for 14 – 16 individual hitting areas and would feature a curved, or rounded, leading edge in order to direct golf shots to the center of the range as much as is practicable depending on skill level. The proposed practice facility would be used by Castlewood Country Club members and their guests only; it would not be open to the public. Automobiles would be parked at the existing parking area near the Valley Course clubhouse and golf carts would be used for the 400-yard trip to and from the clubhouse and the new practice facility. These carts would park along the perimeter of a 100' diameter turnaround that would be 16' wide, allowing for a 12' travel way with 4'wide golf carts parked in nose to tail fashion along the curbed perimeter. The permeable gravel surface access cart path would be widened and enhanced to accommodate emergency vehicles up to 75,000 lbs.

Staff would set up the facility in the morning and replenish the practice ball supply and drinking water throughout the day as needed. At the end of the day the range would be cleared of balls which would be cleaned for re-use. The practice range area would be cleaned and the tee line would be repositioned for the next day of use. Other maintenance would include regular irrigation and periodic mowing, fertilizing and aeration of the turf.

The approximate12-week construction phase of the project would consist of disking and removal of existing vegetation prior to grading. The majority of the existing vegetation consists of non-native grasses and weedy material. There are several large existing trees that would be preserved and would be integral to the design of the facility. Siting the project within the gently sloping terrain would not require extensive earthmoving. Upon completion of initial grading, subsurface drainage pipes would be installed, daylighting at two on-site bio-retention basins along the eastern edge of the site. The retention basins would be planted with appropriate wetland-type plant material. Following the installation of drainage infrastructure, a computer-controlled valve-in-head state-of-the art irrigation system would be installed consistent with the County's Water Efficient Landscape Ordinance. Upon system completion, finish grading would be followed by the seeding of the majority of the facility with turf seed, with sodding where needed.

7. Surrounding Land Uses and Setting:

The project site is located in the Castlewood area of Alameda County, southwest of the City of Pleasanton. The Project lies between the Arroyo de Laguna and Foothill Road to the west and the Union Pacific Railroad right of way, Pleasanton Sunol Road, and Interstate 680 to the east.

8. Other public agencies whose approval may be required: None

Figure 1. Regional Location

Figure 2. Site Location

Figure 3. Site Plan

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐	Aesthetics	☐	Agriculture and Forest Resources	☒	Air Quality
☒	Biological Resources	☐	Climate Change and Greenhouse Gas Emissions	☒	Cultural Resources
☐	Geology /Soils	☐	Hazards & Hazardous Materials	☐	Hydrology and Water Quality
☐	Land Use and Planning	☐	Mineral Resources	☐	Noise
☐	Population and Housing	☐	Public Services	☐	Recreation
☐	Transportation and Traffic	☐	Utilities / Service Systems	☐	Mandatory Findings of Significance

C. LEAD AGENCY DETERMINATION:

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.

Signature

July 2, 2013
Date

D. EVALUATION OF ENVIRONMENTAL EFFECTS:

The Environmental Checklist and discussion that follows is based on sample questions provided in the CEQA Guidelines (Appendix G) which focus on various individual concerns within 17 different broad environmental categories, such as air and water quality, biological resources, climate change, cultural resources, land use, public services, noise and traffic (and arranged in alphabetical order). The Guidelines also provide specific direction and guidance for preparing responses to the Environmental Checklist. The sample questions are meant to be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential environmental impacts that are not listed in the checklist must also be considered. The sample questions are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

Each Checklist question requires a "yes" or "no" reply to indicate if the analysis or assessment (or an available reference document) shows that the project will or will not have a potentially significant environmental impact on the subject aspect of the environment. However, there are three possible types of "no" responses, including: "NO: Less Than Significant with Mitigation", which means that potentially significant impacts would clearly be avoided or reduced to an acceptable level by changes to the project or mitigation measures that the project proponent and the Lead Agency have agreed to; "NO: Less Than Significant Impact", which means that while there may have been concerns about possible impacts that require analysis, the "threshold of significance" is not exceeded and the impact is not significant; and "NO: No Impact", which means that for clearly evident reasons documented by a map, reference document, the nature of the project or the setting, the specific kind of environmental impact addressed by the question is not possible or would be nearly insignificant. The following describes in more detail the four different possible answers to the questions in the Checklist, and the types of discussions required for each response:

a) YES: Potentially Significant Impact. Checked if a discussion of the existing setting (including relevant regulations or policies pertaining to the subject) and project characteristics with regard to the environmental topic demonstrates, based on substantial evidence, supporting information, previously prepared and adopted environmental documents, and specific criteria or thresholds used to assess significance, that the project will have a potentially significant impact of the type addressed by the question.

   CEQA requires that if the analysis prompted by the Checklist results in a determination that the project will have one or more potentially significant environmental impacts (and the project proponent does not agree to changes or mitigation measures that would assure the subject impact can be avoided or reduced to less than significant levels, an environmental impact report (EIR) is required. In such instances, the discussion may be abbreviated greatly if the Lead Agency chooses to defer the analysis to preparation of the EIR. However, if the analysis indicates that all such impacts can be avoided or mitigated to less-than-significant levels, a Mitigated Negative Declaration can be prepared and this column will not be used for any question.

b) NO: Less Than Significant With Mitigation. Checked if the discussion of existing conditions and specific project characteristics, also adequately supported with citations of relevant research or documents, determine that the project clearly will or is likely to have particular physical impacts that will exceed the given threshold or criteria by which significance is determined, but that with the incorporation of clearly defined mitigation measures into the project, that the project applicant or proponent has agreed to, such impacts will be avoided or reduced to less-than-significant levels.

c) NO: Less Than Significant Impact. Checked if a more detailed discussion of existing conditions and specific project features, also citing relevant information, reports or studies, demonstrates that, while some effects may be discernible with regard to the individual environmental topic of the question, the

effect would not exceed a threshold of significance which has been established by the Lead or a Responsible Agency. The discussion may note that due to the evidence that a given impact would not occur or would be less than significant, no mitigation measures are required.

d) NO: No Impact. Checked if brief statements (one or two sentences) or cited reference materials (maps, reports or studies) clearly show that the type of impact could not be reasonably expected to occur due to the specific characteristics of the project or its location (e.g. the project falls outside the nearest fault rupture zone, or is several hundred feet from a 100-year flood zone, and relevant citations are provided). The referenced sources or information may also show that the impact simply does not apply to projects like the one involved. A response to the question may also be "No Impact" with a brief explanation that the basis of adequately supported project-specific factors or general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a basic screening of the specific project).

The discussions of the replies to the Checklist questions must take account of the whole action involved in the project, including off-site as well as on-site effects, both cumulative and project-level impacts, indirect and direct effects, and construction as well as operational impacts. Except when a "No Impact" reply is indicated, the discussion of each issue must 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, with sufficient description to briefly explain how they reduce the effect to a less than significant level.

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) of the Guidelines). 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.

1. AESTHETICS Would the project:	Potentially Significant Impact	NO: Less Than Significant with Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Have a substantial adverse effect on a scenic vista?				x
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				x
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				x
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				x

Setting

The Project site is located southwest of the City of Pleasanton in an unincorporated area of Alameda County (**Figures 1 and 2**). The eastern edge of the project site is the Union Pacific Railroad right of way; the western edge is adjacent to the Arroyo de la Laguna. Historically, the project site has served as a maintenance area for golf course operations. Land use goals, objectives and policies governing the Project site are provided in the East County Area Plan (ECAP), an element of the Alameda County General Plan. ECAP requires the protection of sensitive ridgelines, the maintenance of community separators largely in open space, and the protection and maximization of views of prominent visual features. A list of sensitive ridgelines, community separators and viewsheds is provided in the land use chapter of the ECAP.

The Project site sits at the foot of the Pleasanton Ridge and is surrounded by less prominent foothills to the east, and Interstate 680, an important transportation corridor connecting the Tri-Valley area with Fremont, San Jose and the greater South Bay area. The interstate, the railroad right of way, and Foothill and Pleasanton-Sunol Roads all orient generally on a north - south axis. The Castlewood residential community reaches from the wooded slope below Pleasanton Ridge to the Valley Golf course located just north and west of the Project site. Elevations at the Project site range from 290 – 305 feet, while the top of the Union Pacific Railroad right of way grade ranges from 307 to 312 feet, and the centerline elevation of Pleasanton-Sunol Road ranges from 302 to 303 feet. The higher grade of the railroad right of way effectively screens the site from the road. Construction of the golf practice facility would not involve any structures. Interstitial wooded areas west of the I-680, between the various roads and rights of way, and east of Foothill Road all serve to screen the Project from the view of the casual traveler.

Impacts

a) Scenic Vistas

Would the Project:

Have a substantial adverse effect on a scenic vista?

The ECAP identifies a number of ridges that are to be protected from development that would result in structures becoming visible above the ridgeline. While the view from the valley floor up towards the Pleasanton Ridge is not specifically called out in the ECAP as a protected scenic vista, the ECAP policies can be construed as having that intent. The Project site is not located on a protected ridgeline; the nearest

protected ridgelines are the Pleasanton, Main, and Sunol Ridges. No structures are proposed as part of the Project and therefore the Project would not encroach upon or be visible above a ridgeline. Golf practice activities at the proposed Project would not affect views of these ridgelines. In light of the Project location and ECAP policies that are applicable to the Project site, the proposed Project would have ***no impact*** with respect to scenic vistas.

b) Scenic Resources

Would the Project:

Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no significant scenic resources on the 7.6-acre Project site such as rock outcroppings or historic buildings. Most of the large Valley Oaks and other trees in the vicinity are located in areas that border the Project site and would therefore not be affected. The few larger trees on the site itself would remain. Mature wooded areas bordering all vehicular and railroad rights of way would continue to screen most views of the project from Foothill Road. The raised grade of the adjacent railroad right of way blocks the view of the Project area from Pleasanton Sunol Road. The level site has no permanent structures and is located under the field of view from motorists on Interstate 680. The project would have ***no impact*** with respect to scenic resources.

c) Visual Character and Quality

Would the Project:

Substantially degrade the existing visual character or quality of the site and its surroundings?

The Project would not change or substantially degrade the existing visual character of the site and its surroundings. The disturbed site has been used for equipment storage and materials preparation for golf course operations. The proposed practice range activities would not adversely affect the surrounding rural residential uses or the visual character of the site and therefore there would be ***no impact*** regarding degradation of the visual character and quality of the site or its surroundings.

d) Light and Glare

Would the Project:

Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

There are no structures on The Project site and no on-site lighting. No structures or lighting or reflective materials of any kind are proposed. Use of the facility would end at dusk. In the event lights were to be added in the future they would be downward directed in a manner to avoid impacting motorists or adversely affecting views in the area. The proposed Project would have ***no impact*** regarding lighting or glare effects.

Mitigation Measures: None

2. AGRICULTURE AND FOREST 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:	YES: Potentially Significant Impact	NO: Less Than Significant with Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				x
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
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))?				x
d) Result in the loss of forest land or conversion of forest land to non-forest use?				x
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				x

Setting

The Project proposes a golf practice facility on the Project site. There are no permanent structures on the site and none are proposed. The site is partially wooded and partially open and not in agricultural use. The site is not forest and there is no forest on nearby lands. The site has a General Plan land use designation of *Water Management*, and is classified into the "A" (Agricultural) District.

Impacts

a - b**) Convert Farmland or Williamson Act Conflict**

Would the Project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is not in agricultural use, is not designated as Farmland by the California Department of Conservation and is not under a Williamson Act contract. There would be ***no impact*** related to the potential loss of farmland or conflict with Williamson Act procedures.

c- d**) Potential Rezoning and/or Loss of Forest or Timberland to Non-Forest Use**

Would the Project:

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)) or

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The Project site is not designated forest land or timberland, nor is it currently forested or used for forest resource purposes. There would be ***no impact*** related to the potential loss of forest or timber resources.

e) Other Changes That Could Result in Farmland Conversion

Would the Project:

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?

The Project would not involve any other changes that could result in conversion of farmland to a nonagricultural use or forest to non-forest use. There would be ***no impact*** related to conversion of farmland.

Mitigation Measures: None

3. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant with Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			x	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		x		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			x	
d) Expose sensitive receptors to substantial pollutant concentrations?			x	
e) Create objectionable odors affecting a substantial number of people?			x	

Setting

Weather in the Pleasanton area is characterized by mild year round temperatures, warm - sometimes hot - dry summers, and precipitant fall, winter and spring months. From June to October, thermal inversion conditions occur between 85 and 95 percent of the time during afternoons, which concentrate pollutants into the local atmosphere. There are no monitoring stations located in Pleasanton. Levels of air quality in this part of Alameda County can be inferred from ambient air quality measurements conducted by the Bay Area Air Quality Management District (BAAQMD) at its nearby monitoring station on Old First Street in Livermore. Data from this monitoring stations show that the primary regional sources of pollution are emissions from automobiles, aircraft and various industrial processes. Pollutants generated in automobile exhaust include carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO), and hydrocarbons (organics) and particulates (PM_x). The most serious pollutant in the Pleasanton area is ozone (a form of oxidant), which is not directly emitted, but is the secondary pollutant formed from a series of reactions involving hydrocarbons, nitrogen oxides, and sunlight.

Regulatory Setting

Bay Area Air Quality Management District

The project is located within the nine county San Francisco Bay Area Air Basin and therefore within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD enforces rules and regulations regarding air pollution sources and is the primary agency preparing the regional air quality plans mandated under state and federal law.

The nonattainment status in the region is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

The most recent adopted update to the Clean Air Plan (CAP) was completed in 2010. The 2010 CAP applies control measures to stationary sources, mobile sources, and transportation control measures. The CAP is an ozone plan and also includes attainment planning for particulate matter (PM10) as an informational item.

BAAQMD also provides a document titled *California Environmental Quality Act Air Quality Guidelines* ("Guidelines"), which provides guidance for consideration by lead agencies, consultants, and other parties evaluating air quality impacts in the San Francisco Bay Area Air Basin conducted pursuant to CEQA. The document provides guidance on evaluating air quality and GHG impacts of development projects and local plans, determining whether an impact is significant, and mitigating significant impacts.

BAAQMD's updated CEQA Guidelines including thresholds of significance were adopted on June 2, 2010.[1] On March 5, 2012 the Alameda County Superior Court issued a judgment finding that BAAQMD had failed to comply with CEQA when it adopted its 2010 Thresholds. The court did not determine whether the Thresholds were valid on the merits, but found that the adoption of the Thresholds was a project under CEQA. The court issued a writ of mandate ordering BAAQMD to set aside the Thresholds and cease dissemination of them until BAAQMD had complied with CEQA.

The 2010 Thresholds are more conservative than the previous 1999 version and have been used in this analysis for a conservative determination of impact significance.

Alameda County Climate Change Leadership Strategy Resolution

The project is located in Alameda County. On June 6, 2006 the Alameda County Board of Supervisors unanimously adopted a resolution establishing a County Climate Change Leadership Strategy. This resolution commits the County to reduce its contribution of climate-changing gases such as carbon dioxide. Key elements of the strategy include:

- Conduct a GHG emissions inventory and forecast;
- Establish County GHG emissions reduction targets;
- Develop an implementation plan to meet the County GHG reduction targets;
- Implement the plan;
- Monitor and review progress;
- Require a collaborative cross-agency approach to develop and implement plans to achieve greenhouse gas reduction targets and to prepare for future effects of global warming;
- Provide administrative oversight for the effort and establish the cross-agency Sustainability Executive Committee a cross-agency Climate Action Team;
- Require that agencies and associated entities should actively participate in meeting GHG reduction targets;
- Require that global warming mitigation and adaptation strategies will be integrated into key County planning processes, budgeting, and training when possible or appropriate;

[1] Bay Area Air Quality Management District. June 2, 2010. News Release http://www.baaqmd.gov/~/media/Files/Communications%20and%20Outreach/Publications/News%20Releases/2010/ceqa_100602.ashx.

- Require that the County of Alameda share urgent concerns and key things learned with businesses, the public, and other government agencies (e.g., EBMUD); and

- Encourage other local governments throughout the United States to adopt a similar resolution.

The project is subject to the overall goals of the resolution.

Impacts

a) Consistency with Clean Air Plan

Would the project:

Conflict with or obstruct implementation of the applicable air quality plan?

The Project site is subject to the Bay Area Clean Air Plan (CAP), first adopted by the Bay Area Air Quality Management District (BAAQMD) in 1991 to meet state requirements and those of the Federal Clean Air Act. As required by state law, updates are developed approximately every three years. The plan is meant to demonstrate progress toward meeting the ozone standards, but also includes other elements. The latest update to the plan, which was adopted in September 2010, is called the Bay Area 2010 Clean Air Plan. The plan includes the following:

a) Updates the recent Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement "all feasible measures" to reduce ozone;

b) Provide a control strategy to reduce ozone, particulate matter (PM), Toxic Air Contaminants (TACs), and greenhouse gas emissions (GHG) in a single, integrated plan;

c) Review progress in improving air quality in recent years; and

d) Establish emission control measures to be adopted or implemented in the 2010-2012 timeframe.

A project would be judged to conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the growth assumptions of the CAP related to population, employment or regional growth in Vehicle Miles Traveled. The County's General Plan designations and future land use types and intensities, including those of the East County Area Plan, were accounted for when the BAAQMD's CAP and the most recent update (Bay Area Ozone Strategy) were prepared. Because the proposed Project is consistent with the ECAP, the Project would be consistent with land use projections used to develop the latest CAP. The Project, therefore, would be consistent with the CAP and have a ***less than significant*** impact of any conflict with the CAP.

b-c) Violate Air Quality Standards

Would the Project:

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

Construction of the Project would involve the use of trucks, backhoes and other heavy grading equipment for disking and removal of vegetation, site grading, installation of irrigation systems and drainage pipes, and seeding and sod placement for tee boxes, fairways and putting greens. Although construction activities would be temporary, they would have the potential to cause both nuisance and health-related air quality impacts.

Particulate matter (PM_{10}) is the pollutant of greatest concern associated with dust. If uncontrolled, PM_{10} levels downwind of actively disturbed areas could possibly exceed State standards. In addition, dust fall on adjacent properties could be a nuisance.

Construction impacts would also be a source of exhaust emissions from construction equipment and vehicles, which contribute to regional emission levels.

BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a proposed Project could result in potentially significant emissions impacts. If all of the screening criteria are met by a proposed Project, it can be confidently determined that the Project would be below threshold levels without the need to perform a detailed quantification of the Project's emissions. BAAQMD lists a screening size of 67 acres for a park use, the closest category of land use to the proposed Project. The active portion of the 10.3-acre Project site is 7.6 acres and therefore would not be anticipated to result in emissions of criteria pollutants over threshold levels[2] during the construction period. However, because construction emissions were required to analyze the impact on sensitive users below, the results have been included here as well. The Project would have a significant environmental impact if it would exceed BAAQMD's emission rate thresholds of any criteria pollutant, as shown in **Table 1.**

TABLE 1: BAAQMD CRITERIA POLLUTANT THRESHOLDS OF SIGNIFICANCE

Pollutant	**Construction-Related**	**Operational-Related**	
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NOX	54	54	10
PM10	82 (exhaust only)	82	15
PM2.5	54 (exhaust only)	54	10
PM10/PM2.5 (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Source: BAAQMD Adopted Air Quality CEQA Thresholds of Significance - May 2011			

Construction emissions for the Project were computed using the URBEMIS2007 model. Construction was assumed to occur over an approximately 12-week period (beginning early September 2013). The URBEMIS inputs and results are included in **Attachment A**. Emissions from construction are summarized in **Table 2**.

2 Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2011, Table 3-1.

Table 2: Average Daily Regional Air Pollutant Emissions, Construction
(Unmitigated Pounds per Day)

Description	ROG	NO_X	PM_{10} *	$PM_{2.5}$ *
Project Construction	2.58	20.61	0.99	0.91
2010 BAAQMD Thresholds	*54*	*54*	*82*	*54*

* Applies to exhaust emissions only, not fugitive dust.

Source: Lamphier-Gregory compiled URBEMIS results included as Attachment A.

Construction-period emissions levels are below BAAQMD thresholds, as presented in **Table 1**. However, BAAQMD recommends implementation of construction mitigation measures to reduce construction-related emissions for all projects, regardless of the significance level of construction-period impacts. These basic measures are included in Mitigation Measure Air-1, below and would further reduce construction-period criteria pollutant impacts.

Earth-moving activities can also result in fugitive dust, which contributes to particulate matter levels. Unmitigated average daily construction-period dust emissions of 16.78 $PM_{2.5}$ and 76.00 PM_{10} have been calculated using the URBEMIS2007 model (calculation sheets can be found in Attachment A). BAAQMD does not have a threshold of significance for fugitive dust impacts, but instead regards fugitive dust impacts as mitigated if appropriate management practices are implemented, as outlined in Mitigation Measure Air-1.

Mitigation Measure

Air-1: **Basic Construction Management Practices.** The Project shall demonstrate proposed compliance with all applicable regulations and operating procedures prior to issuance of demolition, building or grading permits, including implementation of the following BAAQMD "Basic Construction Mitigation Measures".

a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) All vehicle speeds on unpaved roads shall be limited to 15 mph.

e) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

The BAAQMD significance thresholds for construction dust impacts are based on the appropriateness of construction dust controls. With implementation of the Basic Construction Mitigation Measures listed in Mitigation Measure Air-1, impacts related to construction period emissions would be considered ***less than significant*** with mitigation. Because construction-period emissions do not exceed applicable criteria pollutant significance thresholds, additional construction mitigation measures would not be required to mitigate impacts.

Air Pollutants from Operational Activities

Impact Air-2: **Operational Emissions.** The Project would result in increased emissions from additional vehicles traveling to the site. However, the Project is below applicable threshold levels and the impact would be considered ***less than significant***.

Emissions from operation of the Project could cumulatively contribute to air pollutant levels in the region. These air pollutants include ROG and NOx that affect ozone levels (and to some degree – particulate levels), and PM_{10} and $PM_{2.5}$.

BAAQMD lists an operational criterion pollutant screening size of 439 acres for a city park use, the closest-related type of use listed in relation to the proposed golf practice facility. At 7.6 acres, the proposed Project is well below this screening size and therefore not anticipated to result in emissions of criteria pollutants over threshold levels during operations.[3] Regular maintenance of the facility would involve weekly grass mowing with the heaviest of possible equipment being a Toro 4700D rough mower. Mowing would be done prior to 8:00 a.m. In addition, fertilizing would be done on an as-needed basis during course closure days. Additionally, since use of the practice facility would be limited to Club members and their guests, it is unlikely that the new facility would result in significantly greater numbers of vehicles traveling to the Country Club and therefore, the majority of projected emissions for such a use would be occurring today and not an effect of the Project. Therefore, the Project would have a ***less-than-significant*** impact on operational criteria pollutants and regional air quality.

Carbon Monoxide

BAAQMD presents the separate operational screening level that localized carbon monoxide concentrations should be studied at affected intersections where traffic is increased to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where mixing is substantially limited, such as in a tunnel). This screening level represents the volume of traffic at which a significant impact related to carbon monoxide would be possible. There are no heavily trafficked intersections in the vicinity of the Project site and traffic volumes on I-680 are well below threshold levels.[4] Therefore, the Project would not affect

[3] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2011, Table 3-1.

[4] Traffic volumes on I-680 between Sunol and Bernal were below 10,000 vehicles per day in 2011. http://traffic-counts.dot.ca.gov/

intersections with traffic volumes at which CO concentrations would be a concern and the impact related to carbon monoxide emissions is ***less than significant***.

d) Sensitive Receptors

Would the Project:

Expose sensitive receptors to substantial pollutant concentrations?

For the purpose of assessing impacts of a proposed Project on exposure of sensitive receptors to risks and hazards, the threshold of significance is exceeded when the project-specific cancer risk exceeds 10 in one million or the non-cancer risk exceeds a Hazard Index of 1.0 and ambient PM2.5 increases greater than 0.3 micrograms per meter squared annual average. Examples of sensitive receptors are places where people live, play or convalesce and include schools, hospitals, residential areas and recreation facilities.

Toxic Air Contaminants (TACs) are a defined set of airborne pollutants that may pose a present or potential hazard to human health (cancers or acute or chronic non-cancerous effects). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air, and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). The California Air Resource Board (CARB) reports that recent air pollution studies have shown an association that diesel exhaust and other cancer-causing toxic air contaminants emitted from vehicles are responsible for much of the overall cancer risk from TACs in California. Particulate matter emitted from diesel-fueled engines (diesel particulate matter or DPM) was found to comprise much of that risk. In August, 1998, CARB formally identified DPM as a TAC. Fine particulate matter (PM2.5), a component of DPM as well as originating from other sources, is considered by the Bay Area Air Quality Management District (BAAQMD) to be the biggest contributor to public health impacts in this air basin.

As a construction project that would convert a golf course maintenance yard to a golf practice facility for approximately 16 driving positions, with minimal change to traffic, the project would not be considered to have substantial emissions during operation, nor would it be considered a sensitive use.

Construction activity that uses traditional diesel-powered equipment such as bulldozers, backhoes, graders, front end loaders and other forms of earth moving equipment would result in the emission of DPM, including fine particulate matter. However, construction activities do not require a permit from BAAQMD as an emissions source. Due to the variable nature of construction activity, the generation of Toxic Air Contaminant (TAC) emissions would be temporary, especially considering the short amount of time such equipment would be required for this project (10 - 12 weeks, or 2 - 2.5 months), resulting in limited exposure of sensitive receptors to substantial concentrations.

BAAQMD recommends assessment of community risks and hazards within a 1,000 foot radius of a project boundary. The closest sensitive receptors to the Project site are the residents who live along Foothill Road to the west of the proposed practice facility. There are seven homes in that area of which the closest is approximately 220 feet from the grading limit.

The modeling of carcinogenic or chronic health risks is based upon long-term exposure and becomes inaccurate when used for shorter durations. The intended shortest duration for these modeling techniques is nine years. However, in reality, the local air districts in California are frequently assessing risk from

short term activities related to construction, mitigation of contaminated soils, and so forth. BAAQMD has adopted the recommendations of the California Office of Environmental Health Hazard Assessment (OEHHA) and recommends use of the models for down to a minimum of 2 years of exposure.

Following is a qualitative discussion of potential health risks, for which the accepted analytical models would not be accurate because the 2.5 months of construction activity for the Project would be so much shorter than the minimum 2 year period assumed in the models. Consequently, actual potential risks from the proposed Project are presumed to be minimal.

BAAQMD has provided Screening Tables for Air Toxics Evaluation During Construction (BAAQMD, Version 1.0, May 2010) to estimate the potential for significant air quality health risk impacts associated with construction activity based on general project characteristics, such as type and size and includes worst-case and conservative assumptions. The table is specifically not intended to be used for projects substantially different from the residential, commercial and industrial projects included. Therefore, the table cannot be used for directly for this project. A brief comparison is included below for discussion purposes.

The smallest project included in this screening table is construction of a 5 unit residential project on 1.7 acres. This includes site preparation and paving as well as building construction. The screening table reports that under worst-case conditions, there is the potential for significant health risk if a sensitive receptor is located within 95 or 100 meters (up to 328 feet) of such a construction site.

The duration of this construction project would be approximately 2.5 months, at most, which is considerably shorter than that able to be accurately modeled from a health risk perspective. As discussed above, BAAQMD used construction period durations of at least 2 years for this screening table. While it is inappropriate to use this table to quantify an approximate risk for such a different project than those listed, it stands to reason that emissions and the resultant health risks from this shorter 2.5 month exposure period would be substantially less than emissions over a 2 year period.

Given that the exposure duration would be shorter than that able to be accurately modeled and substantially shorter than projects in BAAQMD's screening table, it can reasonably be assumed that the potential health risk from construction-period emissions would be ***less than significant***.

e) Objectionable Odors

Would the Project:

Create objectionable odors affecting a substantial number of people?

During construction diesel-powered vehicles and equipment would create odors that some may find objectionable. These odors would be temporary and not likely to be noticeable much beyond the Project site's boundaries. Landscape installation at the end of the construction phase will necessitate the use of bulk distribution of mulch and compost, however any odors created by such activity should be minimal and fleeting. The Project would not contain any major sources of odor during the operational period. For these reasons, the potential for objectionable odor impacts is considered ***less than significant***.

Mitigation Measures: None

4. BIOLOGICAL RESOURCES Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		×		
b) Have a substantial adverse effect on any riparian, aquatic or wetland habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?			×	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				×
d) Interfere substantially with the movement of any 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?				×
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?				×
g) Result in conversion of oak woodlands that will have a significant effect on the environment?			×	

Introduction

The information and conclusions presented below are based on the findings of three biological surveys conducted at the Project site by qualified biologists in early 2013. The primary report, entitled Biological Resources Assessment Proposed Practice Area Castlewood Country Club Alameda County, California, was prepared by Leslie Zander, principal biologist with Zander Associates, and is dated March 13, 2013. This report (the "Zander Report") is included at **Attachment B** at the end of this Initial Study. A second investigation for special status plant species was conducted by Zander in early April 2013. The results of that survey are presented in a letter report, included herein as **Attachment C**. The third survey was conducted by Karen Swaim, Swaim Biological, Inc. and involved four daytime visits and a night visit that investigated for the presence of special status animals. The Swaim report is included herein as **Attachment D**.

Setting

The Project involves conversion of approximately 7.6 acres of the 10.4-acre project site for use as a golf practice facility. Currently golf course maintenance activities occupy most of the project site. These activities include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. The area is relatively flat and occupies the zone to the east of the top of bank of the Arroyo de la Laguna. Over the years, maintenance activities have disturbed the site. Portions of the Arroyo and associated riparian areas are within the bounds of Castlewood Country Club property, but the project proposes a minimum 100 foot setback from the top of bank.

The riparian woodland adjacent to the arroyo and lining its eastern bank, vegetated with mature tree specimens of Large Valley Oak (*Quercus lobata*) Coast Live Oak (*Quercus agrifolia*), California Buckeye (*Aesculus californica*) and willow (*Salix* app.), lies outside of the project boundary. Eastward from the arroyo, a dense stand of coyote brush (*Baccharis pilularis*) gives way to disturbed areas vegetated with hemlock (*Conium maculatam*), star thistle (*Centaurea solstitialis*), and invasive stinkweed (*Dittrichia graveolens*). Oak trees also occur in the eastern portion of the project area, and a line of coast live oaks grow linearly outside of the property along the Union Pacific railroad right of way.

The disturbed portion of the Project area provides habitat suitable for a variety of wildlife species, from avian species such as the Golden-crowned Sparrow (*Zonotrichia atricapilla*), Northern Mockingbird (Mimus polyglottos), American crow (*Corvus brachyrnchos*), mourning dove (*Zenaida macroura*), to mammals like the black tailed jackrabbit (*Lepus californicus*), raccoon (*Procyon lotor*) and opossum (*Didelphimorphia sp.*), and reptiles such as western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), and northern alligator lizard (*Elgaria coeruleus*). The arroyo and adjacent riparian woodland would be expected to provide favorable habitat for birds associated with riparian zones, and mammals such as mule deer (*Odocoileus hemionus*) and grey foxes (*Urocyon cinereoargenteus*). While large oaks in riparian corridors might normally offer nesting sites for raptors such as the red-tailed hawk, red-shouldered hawk and Cooper's hawk, long term sustained disturbance from human activity may render this area less than favorable for such species. While none of the above was observed during a field visit, all of these species might be expected to occur within the Project area.

Regulatory Setting

Biological resources in the Project area include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), National Marine Fisheries Service (NMFS), and other resource organizations, including the California Native Plant Society. Biological resources are protected under the federal and state Endangered Species Act, and additional regulations described below.

The Federal Endangered Species Act (ESA) protects fish and wildlife species and their habitats that have been identified by the USFWS or the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) as threatened or endangered. Endangered refers to species, subspecies, or distinct population segments that are in danger of extinction through all or a significant portion of their range. Threatened refers to species, subspecies, or distinct population segments that are likely to become endangered in the near future. A list of special-status species that have been found in the USGS Quadrangle for Niles (Alameda County) is provided in Appendix A of this report.

California implemented the California Endangered Species Act (CESA) in 1984. The Act prohibits the take of endangered and threatened species, but habitat destruction is not included in the state's definition of take. Under CESA, take is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include harm or harassment. CDFG administers the act and authorizes take through either Section 2080.1 (for species listed under ESA and CESA) or Section 2081 agreements (except for species designated as fully protected). Regarding rare plant species, CESA defers to the California Native Plant Protection Act of 1977, which prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. Special-status species, including California protected species, with the potential to occur in the study area are presented in Table 2, below.

The project area involves about 7.6 acres in an unincorporated portion of Alameda County, California located South of the City of Pleasanton and as mapped on the USGS Niles Quadrangle. The level of prior site disturbance coupled with the dominance of non-native invasive species such as yellow star thistle,

stinkweed, the presence of special status plant species, and those plants that provide critical food sources for special status animal species, would not be expected to be present.

Impacts

a) Special-Status Wildlife and Plant Species

Would the Project:

> *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The biological resource assessment for the Project site is based on a query of the California Natural Diversity Database (CNDDB), National Wetlands Inventory Maps (USFWS, 2010), orthorectified aerial photography, the online U.S, Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey, and the East Alameda County Resource Conservation Strategy (ICF 2010). A reconnaissance-level site visit conducted by a Zander Associates Biologist on January 31, 2013. In addition, Karen Swaim of Swaim Biological conducted a reconnaissance-level survey of the project site on March 4, 2013, specifically regarding potential habitat for Alameda whipsnake and California red-legged frog.

Based on a CNDDB special-status species one-mile radius search, the biological habitats near the Project site were determined to have historically supported special-status animal species. The California tiger salamander (CTS) and long-horn fairy shrimp are associated with vernal (seasonal) wetland features. Red-legged frogs (RLF) were also identified, and these are associated with more-permanent wetlands. Both CTS and RLF can also use upland areas as well as wetlands for parts of their life-cycle. There is no suitable habitat for any of these species at the project site.

Plants

A list of special status plant species known from this area of Alameda County is provided in the included table. The presence of non-native invasive species such as yellow star thistle and hemlock renders the occurrence of most of these species unlikely. The occurrence of four plant species, bent-flowered filleneck (*Amsinckia lunaris*), big-scale balsamroot (*Balsamorhiza macrolepis*), Diablo helianthella (*Helianthella castanea*), and royal Jacob's ladder (*Polemonium carneum*), could not be rejected without an additional growing season field survey. This survey was completed on April 25, 2013, a time coinciding with the blooming period for all four targeted species. None of the four target species were found in the project area. The majority of the herbaceous plants found were hemlock, star thistle, and stinkweed. This survey confirmed the absence of these four special status species, in addition to the remainder of species rejected based on the lack of suitable habitat.

As stated in the Zander Report, "No special status plant species are expected to occur in the project area. All but four of the plants considered are found in habitats not present on the site. The presence/absence of the four species found in more generalized habitats can be confirmed through appropriately-timed surveys during the blooming period; an April survey would address all species in this case. None of these plants is federally or state listed so if found, they can be salvaged and relocated outside of the project area without any required authorization."

Impact Bio-1: Disturbance of the Project site for construction of the proposed golf practice facility could potentially harm special status plant species, if determined to be present on the Project site. This is a ***potentially significant impact***.

The recommendation in the Zander Report called for subsequent site surveys of the Project site to determine whether special status plant species were present. In April 2013, Zander Associates conducted a follow-up survey of the site and determined that no special status plant species were present. [5]

Mitigation No mitigation is required.

Animals

Several special status animal species known to occur within a five-mile radius of the project area include the following:

- Steelhead trout (*Oncorhynchus mykiss*). Federal Status - Endangered; Steelhead are known to occur in the Alameda Creek watershed. Downstream barriers may preclude the inhabitation by this species of this section of the arroyo. The project limit outside of the 100 foot setback from the top of bank should further preclude any deleterious effects on the riparian area and steelhead trout specifically.

- Callippe Silverspot Butterfly (Speyeria callippe callippe). Federal Status – Endangered; State Status – None. Occurrence of silverspot populations have been reported from northwestern Contra Coast County to the Castro Valley area of Alameda County. Three primary habitat requirements of the silverspot are:

  - Grasslands supporting the required larval food plants (Johnny jump-up – *Viola spp.*)

  - Hilltops near suitable habitat for mate location; and

  - Nectar plants, which can occur in grasslands, oak woodlands, riparian areas or disturbed areas.

  During the January plant survey, at which time the foliage of the larval food plants would be visible and distinctive, no plants of the species *Viola* were observed in the project area. This lack of suitable habitat and the lack of verified reported occurrences of the species in the area makes it unlikely that callippe silverspot would be found in the project area.

- California Tiger Salamander (Ambystoma californiense) Federal Listing Status: Threatened; State Listing Status: Threatened.

- California Red-legged Frog (*Rana draytonii*) Federal Status – Threatened; State Status – Species of Special Concern.

- Western Pond Turtle (*Emys marmorata*). Federal Status – None; State Status – Species of Special Concern

- Pacific Pond Turtle - Federal Status - None; State Status - Species of Special Concern

- Alameda Whipsnake (also known as the Alameda Striped Racer; *Masticophis lateralis euryxanthus*). Federal Status – Threatened; State Status – Threatened.

[5] Letter from Leslie Zander, Zander Associates to Martin Inderbitzen, April 29, 2013. This document can be found as **Attachment C** to this Initial Study.

- Pallid Bat (Antrozous pallidus). Federal Status – None; State Status – Species of Special Concern.

The two special status animal species that could potentially use habitats in the vicinity or could possibly disperse through the project area include the federally listed California red-legged frog and the western pond turtle, a California Species of Special Concern. It is unlikely that either the California tiger salamander or Alameda whipsnake would be found on the property due to the lack of suitable habitat, level of site disturbance, and isolated nature of the area from known occupied habitat. There are potential nesting sites for birds-of-prey and other migratory birds in the large trees in and around the project area and bats could roost in the trees lining the Arroyo.

Impact Bio-2: Project construction activities could result in harm to special status animal species including the pallid bat and nesting birds. Such impacts would be considered ***potentially significant***.

As noted previously, the investigation by Zander for special status animals was supplemented by further site surveys conducted by Swaim Biological in March and early April 2013. The Swaim Report[6] reached the following conclusions regarding the foregoing species:

California Tiger Salamander: not present

California Red Legged Frog: not present

Alameda Whipsnake: not present

Pacific Pond Turtle: potentially present in the Arroyo

The summary of the Swaim report stated:

> The project is not expected to have any significant impact on any of the listed target species, ASR, CTS, CRLF if the avoidance and minimization measures provided in Appendix E are implemented. Impact to the PPT is not expected to be significant due to the planned set back distance from the top of the bank of Arroyo de la Laguna and the overall availability of upland habitat in the area.

The recommendations contained in the Swaim Report form the basis of Mitigation Bio-2, below.

Mitigation Bio-2: **Avoidance and Minimization**. The Project applicant shall engage a qualified biologist to undertake the following avoidance and minimization measures to reduce the risk of take related to California Red Legged Frog (CRLF), Alameda Whipsnake (ASR) and Pacific Pond Turtle (PPT):

1. Work activities that are ground disturbing, should be completed during dry weather between April 1 and November 1.
2. Within 24 hours prior to the start of construction activities or vegetation clearing, the work areas will be surveyed for the CRLF and ASR.
3. If a CRLF or ASR is encountered during preconstruction surveys or during construction activities, work will stop until appropriate corrective measures

[6] Letter report from Karen Swaim, Swaim Biological, Inc., to Leslie Zander, Zander Associates, entitled, *Results of Habitat Assessment for Special Status Reptiles and Amphibians at the Proposed Castlewood Practice Facility Project Site in Pleasanton, Alameda County, California, April 26, 2013.* **Attachment D**.

have been completed or it has been determined that the frog or snake will not be harmed. Any sightings will be immediately reported to U.S. Fish and Wildlife Service by telephone at 916-414-6600 and the California Department of Fish and Wildlife. If PPT are encountered the California Department of Fish and Wildlife shall also be contacted.

4. Exclusionary fencing should be installed around the boundary of the construction zone immediately following completion of the pre-construction survey. The fencing should be sufficient to keep frogs from moving into this zone and to restrict construction equipment from moving beyond the designated work area.

5. Prior to construction activities, an environmental training session (tailboard) will be provided for all construction personnel. This training will include a description of the CRLF, ASR, WPT and their habitats, the measures that are being implemented during the project to conserve the species, and the boundaries within which the project may be accomplished (i.e. work areas).

6. A qualified biological monitor will be onsite for all work activities during clearing and grubbing and make daily inspections thereafter.

7. Cut vegetation will be chipped immediately or moved outside of the work area to ensure no potential cover for listed species is present in work areas.

8. Where practical and safe to do so, vehicle speed will be limited to 15 mph on access routes and roadways.

9. Movement of heavy equipment will be confined to existing roadways and designated access routes to minimize habitat disturbance. No construction activities, parking, or staging of materials will occur outside of designated areas. Environmentally sensitive areas should be marked with flagging or fencing.

In addition, Mitigation Bio-2 includes the following additional measures to avoid or minimize potential impacts to nesting birds and Pallid bats.

Nesting birds

If construction activities are initiated after August 1 and before January 15 (outside of the typical nesting season for the birds-of-prey and migratory birds that may nest in the project area), then pre-construction surveys for active nests are not be necessary. If activities are initiated before August or after January, then pre-construction surveys for active nests within a certain radius of proposed activities shall be undertaken. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then a no-disturbance buffer zone shall be created around the nest until the young have fledged as determined through monitoring. The size of the buffer zone and types of construction activities to be restricted within the zone will be determined through consultation with the CDFW. Once the young have fledged, the buffer zone can be abandoned and construction activities can resume in the vicinity.

Pallid Bat

If any large trees along the edge of the project area bordering the Arroyo are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting Pallid bats no more than 14 days prior to the anticipated date of tree removal. Trees that contain cavities should be thoroughly investigated for evidence of bat activity. If Pallid bats are found, the tree shall not be removed until a qualified biologist can assure that the bats have vacated the roost.

Resulting Level of Significance:

Implementation of Mitigation Bio-2 would reduce potential impacts to special status animals, including CRLF, ARS/AWS, WPT, PPT, nesting birds and Pallid Bats to a level of ***less than significant***

b) Riparian Habitat/Sensitive Natural Communities/

Would the Project:

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 US Fish and Wildlife Service?

The Zander Report states that although "…the parcel in which the project is proposed includes portions of the Arroyo de la Laguna and associated riparian habitat, project facilities will not encroach into the creek channel or into the riparian habitat." Based on this professional assessment, potential impacts to riparian habitat or sensitive natural communities are considered ***less than significant***.

c) **Wetlands and Waters of the U.S**.

Would the project:

Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

According to the Zander Report, the National Wetlands Inventory maps show four relatively large excavated freshwater ponds on the Project site. There is currently no evidence of these ponds on the property and according to the project applicant the ponds were likely mapped when the site was used for quarrying. A review of available historic aerial photographs shows no signs of these ponds on the property dating back to 1993. During the Zander biological reconnaissance survey in January 2013, Zander did not observe any areas with a predominance of wetland vegetation or indicators of surface ponding or soil saturation (e.g. cracked soils, algal matting, vegetation matting) in the project area. Zander concludes that no wetland or riparian habitats would be affected by the project.[7] ***No impact***.

d) Movement of Species

Would the Project:

[7] Zander Report, p. 7.

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?

As stated above, the Project would not affect steelhead trout or other fish species. Potential impacts to nesting birds would be mitigated to a less than significant level through implementation of Mitigation Bio-2. Accordingly, impacts related to the potential interference with the movement of migratory wildlife species are considered ***less than significant***.

e) Local Policies/Tree Ordinance/Conservation Plan

Would the Project:

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

Alameda County does not have an ordinance that would govern or restrict the removal of trees on the Project site. Relevant provisions in the East County Area Plan are provided in the following Policy 110.

Policy 110: The County shall require that developments are sited to avoid or, if avoidance is infeasible, to minimize disturbance of large stands of mature, healthy trees and individual healthy trees of notable size and age. Where healthy trees will be removed, the County shall require a tree replacement program which includes a range of tree sizes, including specimen-sized trees, to achieve immediate visual effect while optimizing the long-term success of the replanting effort.

Compliance with conditions of approval on permits required for the construction of the Project would result in compliance with Policy110 of the ECAC and therefore impacts related to conflicts with applicable tree preservation policies would be reduced to a level of ***less than significant.***

f) Conflicts with Habitat Conservation Plan

Would the project:

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There is no Habitat Conservation or Natural Community Conservation Plan in effect that applies to the Project site. ***No impact***.

g) Conversion of Oak Woodlands

Would the project:

Result in conversion of oak woodlands that will have a significant effect on the environment?

There are oak trees along the banks of the Arroyo and along the east edge of the Project site adjacent to the railroad tracks, as indicated in Figure 2 of the Zander Report. Some of these oak trees would be removed during construction of the Project. Given the character of the biological resources found at the Project site, as described in the Zander and Swaim reports, the clusters of oak trees do not constitute an oak woodland. The impact related to the loss of the oak trees therefore is considered ***less than significant***.

Mitigation Measures: None

5. CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			×	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			×	

Setting

In addition to the air pollutants discussed in the Air Quality section, other emissions may not be directly associated with adverse health effects, but are suspected of contributing to "global warming". Global warming has occurred in the past as a result of natural processes, but the term is often used now to refer to the warming predicted by computer models to occur as a result of increased emissions of greenhouse gases (GHG).

The Global Warming Potential (GWP) concept is used to compare the ability of each GHG to trap heat in the atmosphere relative to carbon dioxide (CO2), which is the most abundant GHG. CO2 has a GWP of 1, expressed as CO2 equivalent (CO2e). Other GHGs, such as methane and nitrous oxide are commonly found in the atmosphere at much lower concentrations, but with higher warming potentials, having CO2e ratings of 21 and 310, respectively. Other trace gases, such as chlorofluorocarbons and hydro-chlorofluorocarbons, which are halocarbons that contain chlorine, have much greater warming potential. Fortunately these gases are found at much lower concentrations and many are being phased out as a result of global efforts to reduce destruction of stratospheric ozone. In the United States in 2008, CO2 emissions accounted for about 85 percent of the GHG emissions, followed by methane at about 8 percent and nitrous oxide at just under 5 percent.[8]

Senate Bill 97—Modification to the Public Resources Code

Pursuant to Senate Bill 97, the California Natural Resources Agency reviewed and adopted the amendments to the CEQA Guidelines on December 30, 2010 prepared and forwarded by the Governor's Office of Planning and Research (OPR). The Amendments became effective on March 18, 2010, including the addition of the above GHG emissions environmental topic and checklist items.

AB 32 and the Air Resource Board's Climate Change Scoping Plan

In 2006, the governor of California signed AB 32, the Global Warming Solutions Act, into legislation. The Act requires that California cap its GHG emissions at 1990 levels by 2020.

On December 11, 2008, the California Environmental Protection Agency Air Resources Board (ARB) adopted its *Climate Change Scoping Plan* (Scoping Plan), which functions as a roadmap of ARB's plans to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 million metric tons (MMT), or approximately 30 percent, from the state's projected 2020 emissions

[8] *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2008*. U.S. EPA. April 15, 2010, Table 2-1: Recent Trends in U.S. Greenhouse Gas Emissions and Sinks.

level of 596 MMT of CO_2e under a business-as-usual scenario. The Scoping Plan also breaks down the amount of GHG emissions reductions ARB recommends for each emissions sector of the state's GHG inventory. While ARB has identified a GHG reduction target of 15 percent for local governments themselves, it has not yet determined what amount of GHG emissions reductions it recommends from local government land use decisions. However, the Scoping Plan does state that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emission sectors. The measures approved by ARB must be enacted by 2012. As of April 2010, 14 ARB regulations had been approved, including all nine Discrete Early Actions, which will provide a reduction of approximately 78 MMTCO2e in 2020 (almost 50% of the goal).[9]

Bay Area Air Quality Management District

The Project site falls within the San Francisco Bay Area Air Basin and therefore under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD provides a document titled *California Environmental Quality Act Air Quality Guidelines* ("Guidelines"), which provides guidance for consideration by lead agencies, consultants, and other parties evaluating air quality impacts in the San Francisco Bay Area Air Basin conducted pursuant to CEQA. The document includes guidance on evaluating and mitigating greenhouse gas emissions impacts.

BAAQMD updated these Guidelines in coordination with adoption of new thresholds of significance on June 2, 2010.[10] These were revised and adopted again in May 2011.[11] This GHG analysis is consistent with the adopted thresholds and the May 2011 Guidelines and recommended methodologies.

Impacts

a) Greenhouse Gas Emissions

Would the project*:*

> *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Similar to the analysis for Air Quality impacts, the Project was compared to BAAQMD screening criteria for operational greenhouse gas emissions associated with a city park, which is the closest type of land use provided in the BAAQMD CEQA Guidelines compared with the proposed golf practice facility. As it relates to greenhouse gas emissions, the screening level provided in this table for a city park is 600 acres,[12] considerably larger than the 7.6-acre Project.

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[9] California Air Resource Board, *AB 32 Scoping Plan Implementation Update,* April 22, 2010, accessed at http://www.arb.ca.gov/board/books/2010/042110/10-4-1pres.pdf

[10] Bay Area Air Quality Management District, June 2, 2010. News Release http://www.baaqmd.gov/~/media/Files/Communications%20and%20Outreach/Publications/News%20Releases/2010/ceqa_100602.ashx

[11] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines,* May 2011.

[12] Ibid., Table 3-1.

BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions, but given the relatively small size of the Project and fact that it is below all other screening levels, it can reasonably be concluded that GHG emissions would be well below significance levels.

In addition, the proposed facility would be available for the use of members and guests only, resulting, most likely, in only a minor increase in vehicle trips compared with members' use of the golf club without the proposed facility. Transport from the Valley Clubhouse Staging area will be through the use of the electric carts provided by the facility. The WELO-compliant landscape will realize a drought-resistant border at the perimeter of the site. Such plantings typically require minimal resources in terms of water and fertilizer, for which the energy required for transport and, in the case of fertilizer, synthesis, can be a significant contributor to greenhouse gas emissions. Additionally, such landscapes typically require less shearing and removal of green waste exhibited with traditional landscapes, requiring less energy input for maintenance equipment and transportation. Water consumption from greens and fairways would be minimized through the use of efficient irrigation planning and techniques.

For the foregoing reasons, the Project impact related to greenhouse gas emissions would be ***less-than-significant***.

b) Consistency with Greenhouse Gas Reduction Plans.

Would the project:

> *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

In June 2011, the Alameda County Board of Supervisors approved in principle the Alameda County (Unincorporated Areas) Community Climate Action Plan (CCAP) for the unincorporated areas of Alameda County, including the Fairview area where the Project is located. This 10-year plan is intended to help reduce greenhouse gas emissions from Alameda County by approximately 15% by 2020 through a variety of measures and policies for new development, transportation improvements, encouragement of renewable energy, energy and water efficiency improvements and green infrastructure. The Climate Action Plan is not considered to be fully implemented because it must first be analyzed under the California Environmental Quality Act (CEQA). (Environmental analysis was ongoing at the time this report was prepared.) The proposed Project would not directly relate to the measures in the Climate Action Plan, which focus largely on regional improvements to public transit, bicycle and pedestrian connectivity and use, development in denser transit-oriented and mixed-use areas, and integration of and incentives for community-wide energy- and water-efficiency, renewable energy, water conservation and waste reduction.

The Project would be consistent with the East County Area Plan. Therefore, the Project's impact related to consistency with GHG reduction plans would be ***less-than-significant***.

Mitigation Measures: None

6. CULTURAL RESOURCES Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				x
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?		x		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		x		
d) Disturb any human remains, including those interred outside of formal cemeteries?		x		

Setting

The Project site is in a disturbed area that has been used for activities accessory to the maintenance of the Castlewood golf facilities. There are no structures on the site. Historically this site was part of the Phoebe Hearst Estate, and its location adjacent to the Arroyo places it in an area of "high" archaeological sensitivity, based on the four-part scale in the County's book, *Archaeology in Alameda County: A Handbook for Planners*, 1976, that ranges from "minimal" and "moderate" to "high" and "extreme." (See **Figure 4**) For the level of sensitivity noted, it is reasonable to plan for the possibility that any excavation work performed on the site might unearth important archaeological or historical remains that were previously undiscovered.

The East County Area Plan (ECAP) includes policies and programs that address historic and archaeological resources. Relevant excerpts from the ECAP are as follows:

Policies

Policy 136: The County shall identify and preserve significant archaeological and historical resources, including structures and sites which contribute to the heritage of East County.

Policy 137: The County shall require development to be designed to avoid cultural resources or, if avoidance is determined by the County to be infeasible, to include implement appropriate mitigation measures that offset the impacts.

Implementation Programs:

Program 59: The County shall require a background and records check of a project area if a project is located within an extreme or high archaeological sensitivity zone as determined by the County. If there is evidence of an archaeological site within a proposed project area, an archaeological survey by qualified professionals shall be required as a part of the environmental assessment process.

In accordance with the foregoing policies and implementation programs of the ECAP, and because the site is classified as having a "high" archaeological sensitivity in the County's *Handbook*, a records search request was submitted to the Northwest Information Center (NWIC) at Sonoma State University, part of the California Historic Resources Information System (CHRIS) to determine whether the site has been the subject of prior archaeological surveys. The results of the record search are described in a letter from the

NWIC dated June 14, 2013 which indicates that the Project area contains no recorded archaeological resources and no addresses or listings on historic inventories of historic buildings or resources. However, the report also stated that the Project area is located on Holocene-age stream terrace deposits which have the potential for overlying buried archaeological deposits. Given the potential for buried archaeological material, along with the general environmental and cultural setting, there is a moderately high potential of identifying unrecorded Native American resources in the proposed project area. A copy of the NWIC letter is included as part of this Initial Study as Attachment E.

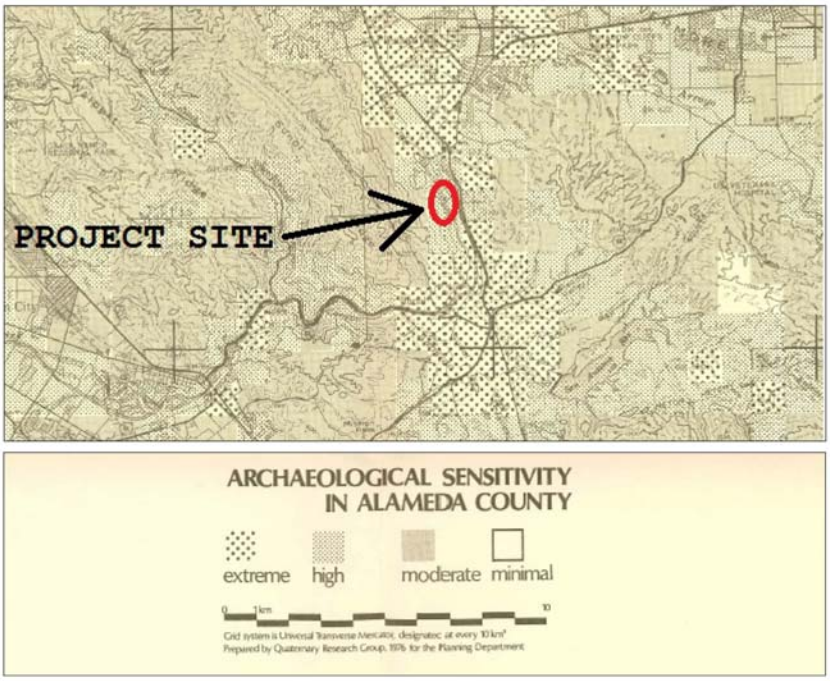

Figure 4. Archaeological Sensitivity

a) Historical Resources

Would the Project:

Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

There are no structures on the Project site, and no historical record of there ever having been structures on the site. Therefore, with respect to historical resources, there would be ***no impact***.

b-c) Archaeological & Paleontological Resources

Would the Project:

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A significant impact would occur if ground-disturbing activities (e.g., grading, excavation, etc.) associated with project construction would disturb, damage, or destroy previously unknown buried prehistoric or historic features and deposits that could be considered significant resources.

The grading necessary to prepare the site for the facility will involve a total cut of approximately 4,000 cubic yards over the entire 7.6 acre Project site, with all soil to be distributed over the same site. The depth of excavation will be generally within a half foot to a foot and a half, with no more than two feet of depth at any location. As indicated in the letter from the NWIC, disturbance of the site to this limited depth could encounter sensitive archaeological resources.

Impact Cultural-1: **Disturbance of Unidentified Archaeological or Paleontological Prehistoric Resources.** Because of the proximity of the Project to the Arroyo, and consistent with the comments in the NWIC letter, there is a possibility that buried archaeological resources may be discovered and/or disturbed during grading and related construction activities. Site preparation, grading, and construction activities could adversely impact previously undiscovered paleontological or archeological resources. This is a ***potentially significant*** impact.

Consistent with Recommendation 2 as set forth in the NWIC letter, implementation of the following mitigation measure would reduce potential impacts to undiscovered archeological resources to a less-than-significant level under CEQA.

Mitigation Measures

Cultural-1a: **Construction Crew Cultural Resource Training.** Prior to the beginning of construction, the applicant shall engage a qualified professional archaeologist to conduct a cultural resources training session for construction crew members. Information should be provided to construction personnel about the legal requirements relating to the discovery of buried cultural resources or buried human remains, as well as information useful in identifying historic and prehistoric cultural material, and the procedures to follow should cultural resources or buried human remains be encountered during Project excavations.

Cultural-1b: **Construction Activity, Evaluate Find and Implement Mitigation.** In accordance with CEQA Guideline §15064.5 (f), should any previously unknown paleontological, historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable soils, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching, or other on-site excavation(s), earthwork within 100 feet of these materials shall be stopped until a qualified professional archaeologist has an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary to protect the resource, as detailed below.

(A) According to CEQA Section 15126.4 avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic sites direct that adverse effects to historic sites shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.

(B) Avoidance can include, but is not limited to, the following options:

1. Planning construction to avoid the historic site.

2. Incorporation of sites within parks, green space, or other open space.

3. Capping the historic site with a layer of chemically stable soil before construction. Capping the historic site would include installation of a water permeable protective barrier that is covered with a 3-ft.-thick layer of chemically stable soil before constructing non-intrusive facilities on the site. Excavation for landscaping, irrigation or any other purpose shall be limited to the soil layer above the water permeable protective barrier. If the soil layer cannot accommodate all planned underground utilities, a thicker soil layer may be used to cover the site.

4. Deeding the site into a permanent conservation easement.

(C) If avoidance of any previously undiscovered site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the Project. Data recovery shall be conducted by a professional archaeologist in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

Resulting Level of Significance

Implementation of mitigation measures Culture-1a and 1b will reduce the impacts associated with possible disturbance of currently unidentified paleontological resources, prehistoric or historic archaeological resources at the Project site to a level of ***less than significant***.

d) Human Remains

Would the project:

Disturb any human remains, including those interred outside of formal cemeteries?

A significant impact would occur if ground-clearing or ground-disturbing activities associated with site preparation, grading, and construction activities could disturb human remains, including those interred outside of formal cemeteries.

Impact Cultural-2: **Disturbance of Unidentified Human Remains.** Although not anticipated, human remains may be identified during site-preparation and grading activities. The potential to disturb human remains, including specifically, Native American remains, is a ***potentially significant*** impact.

The potential to uncover human remains exists in locations throughout California. Implementation of the following mitigation measure would reduce potential adverse impacts to human remains.

Mitigation Measure

Cultural-2: **Halt Construction Activity, Evaluate Remains and Take Appropriate Action in Coordination with Native American Heritage Commission.** Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human

remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties, including the appointment of Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

Resulting Level of Significance

Implementation of Mitigation Culture-2 will reduce the impacts associated with possible disturbance of human remains at the Project site to a level of ***less than significant***.

7. GEOLOGY AND SOILS Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Expose people or structures to 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?				×
b) Result in substantial soil erosion or the loss of topsoil?				×
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				×
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				×
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				×

Setting

As indicated in the Project description, the Project site has served as a storage and staging area for maintenance activities associated with the Castlewood Golf Course. There are no structures on the site and there is no evidence of historical construction activity.

The soils map of the area (**Figure 5**) shows that soils on site include Yolo loam and Zamora silt loam, the former consisting of about 1½ feet of loam on 2½ feet of fine sandy loam, the latter about 1½ feet of silty clay loam over 2½ feet of heavy clay loam over clay loam. Both soil types exhibit good drainage. As the project proposes no structures, compaction of soils to render suitable building pads would be unnecessary.

Regulatory Setting

The California Legislature passed the Alquist-Priolo Earthquake Fault Zoning Act in 1972 to mitigate the hazard of surface faulting to structures for human occupancy (CDMG, 1997). The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Local agencies must regulate most development in fault zones established by the State Geologist. Before a project can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, the city or county with jurisdiction must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active or potentially active faults. The project under consideration proposes no structures.

Impacts

Would the project:

a) *Expose people or structures to 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?

The Project site is located within the Niles Quadrangle as mapped by the California Geologic Survey, about a half mile east of the Calaveras Fault. Project construction would involve clearing and grubbing, followed by moderate grading and excavation, installation of irrigation and drainage infrastructure and finally placement of sod and/or grass seed, and construction of sand traps and putting greens; no structures would be built on the site. Members and guests will be allowed to use the practice facility from 7:00 a.m. until dusk. No lighting for nighttime use is proposed. Facility maintenance workers would complete their work in the morning, prior to the arrival of users. Because the Project would not involve the construction of any structures, potential impacts relating to earthquake fault rupture, strong seismic ground shaking, seismic related ground failure or liquefaction would not be a concern and there would be ***no impact***.

iv) Landslides?

Currently the site is fairly level and the resulting slopes will be gradual and landscaped. The topography of surrounding terrain is also level. For this reason, the site is not subject to potential impacts from landslides, and adjacent properties are not subject to potential landslide impacts from the site. The risk of impact associated with landslides at the site is low given the lack of slope on the Project site and surrounding area and therefore there would be ***no impact*** regarding landslides.

b -d) Soil Erosion, Loss of Topsoil, Unstable and/or Expansive Soils

Would the Project:

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of roadway improvements, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

The flat terrain at the Project site would minimize the possibility of soil erosion, despite the proposed site grading to prepare the site for the proposed golf practice facility. The site will be graded so that stormwater will drain by gravity to a bio-retention area adjacent to the railroad right of way. During project construction, the project proponent will water areas where soil is exposed at least two times daily

to reduce the dispersion of dust (per Mitigation Measure Air-1) which will also help prevent erosion or the loss of topsoil.

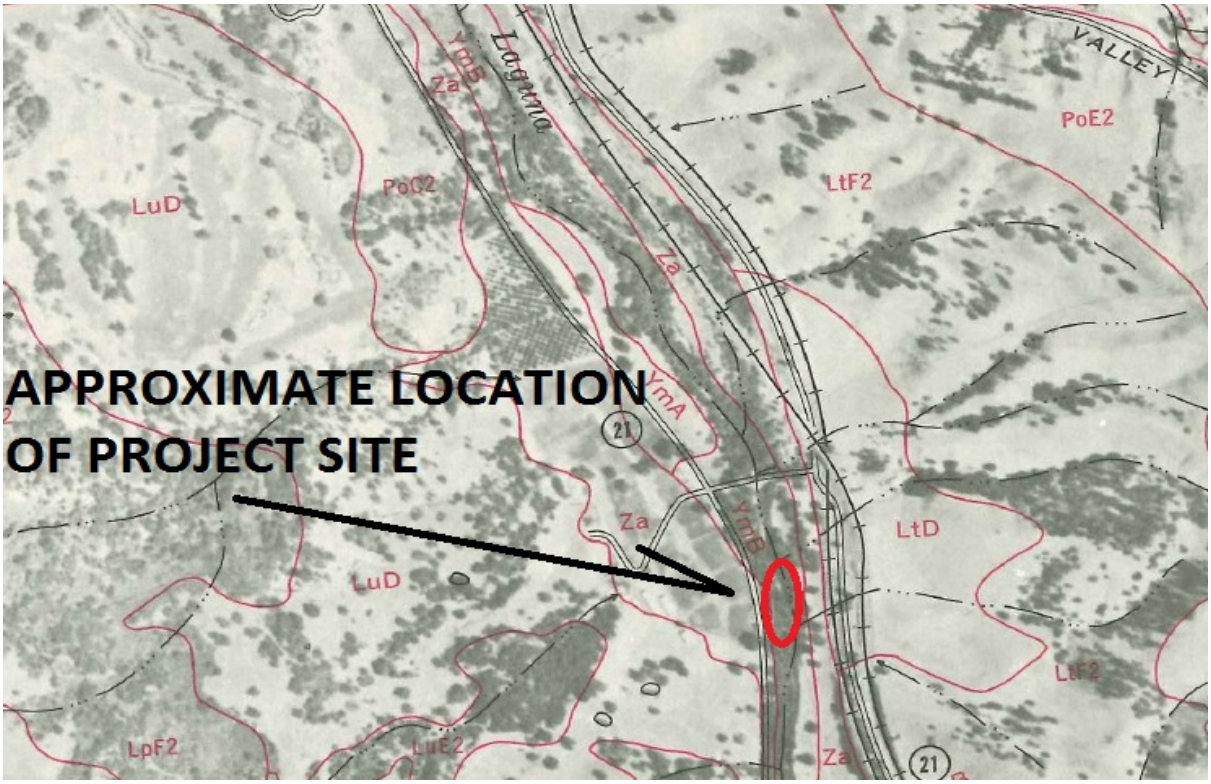

Figure 5. Site Geology

The natural soils on the Project site (see **Figure 5**) are predominantly Zamora silt loam (0 to 3 percent slopes) on the east portion of the site, and a Yolo loam on the western portion of the site. The erosion hazard of both of these soil types in cultivated areas is slight (*Soil Survey*, 1966). They are not likely to have expansive soils, or be subject to landslide, lateral spreading, subsidence, liquefaction or collapse. The risk of impacts associated with soils at the site is low given the gentle sloping nature of the terrain in the project area and therefore are considered to have ***no impact***.

e) Septic Tanks

Would the project:

> *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

The Project would not involve the construction of any restrooms or use of potable water and consequently there would be wastewater generated at the practice facility. Users would return via golf cart to the main Clubhouse for use of restroom facilities. Fresh potable water (ice water) would be brought to the site daily in 5-gallon jugs by the maintenance crew and replenished as necessary during the course of each daily use. As a consequence there would be ***no impact*** regarding potential degradation of soils that may be incapable of supporting the use of septic systems, or adverse effects or groundwater from septic systems.

Mitigation Measures: None

8. HAZARDS AND HAZARDOUS MATERIALS Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			×	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			×	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				×
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				×
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				×
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				×
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				×
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				×

Setting

The proposed practice facility is situated within a 10.4-acre parcel in the southeastern portion of the Castlewood Country Club property, south of Castlewood Drive and between the Union Pacific Railway tracks and the Arroyo de la Laguna. The Project site is currently used for golf course maintenance activities that include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. Maintenance activities take place on the relatively flat terrace east of the top of bank of the Arroyo de la Laguna. As a result of these activities, there are dirt access roads and areas of topsoil disturbance throughout the parcel.

Impacts

a) Public Hazard Through the Routine Use or Disposal of Hazardous Materials?

Would the Project:

Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the Project, as well as ongoing use by Club members and their guests, or the activities of the maintenance crew, may involve the use and disposal of potentially hazardous materials, including fuels, lubricants, adhesives, sealers, fertilizers, pesticides, herbicides, and other materials commonly used in construction and maintenance of golf courses and related practice facilities. However, all chemical applications are reported monthly to the Alameda County Department of Agriculture under the California

Department of Pesticide Regulations. All EPA registered chemicals applied on the golf courses are site-specific to greens, tees and fairways and follow all State and Federal label requirements. An inspection by the County of Alameda is also performed annually and a Restricted Materials Permit is thereby obtained and recorded with the County. Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health Administration is responsible for developing and enforcing workplace safety standards and ensuring worker safety in the handling and use of hazardous materials. In light of the requirement for compliance with Federal, State and local regulation and oversight of hazardous materials, the potential threat to public health and safety or the environment from hazardous materials transport, use or disposal would be ***less than significant***

b) Potential for Upset or Release of Hazardous Wastes

Would the project:

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?

Construction of the Project, as well as ongoing use of the practice facility may involve the use and disposal of potentially hazardous materials, including fuels, lubricants, fertilizers, herbicides or pesticides or other materials commonly used in the maintenance of golf courses. With required compliance with Federal, State and local regulation and oversight of hazardous materials, the potential threat to public health and safety or the environment from upset and accident conditions involving the release of hazardous materials would be ***less than significant***.

c) Hazards Near Schools

Would the Project:

Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no schools in proximity to the Project site. As discussed above, the proposed use would not involve the handling or transportation of significant amounts of hazardous materials, and any such use would be subject to applicable Federal, State and local health and safety regulations. There would be ***no impact*** regarding hazards near schools.

d) Hazards From a Listed Hazardous Site

Would the Project:

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?

The Project site is not included on the list referenced above (Cortese List).[13] ***No impact***.

13 http://www.envirostor.dtsc.ca.gov/public/search.asp?PAGE=11&CMD=search&ocieerp=False&business_name=&main_street_number=&main_street_name=&city=&zip=&county=&branch=&status=ACT%2CBKLG%2CCOM&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&cleanup_type=&npl=&funding=&reporttype=CORTESE&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST&federal_superfund=&state_response=&vol

e-f) Proximity to Airport Plan or Private Air Strip

Would the Project:

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?

f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

The Project site is not located within an airport land use plan or within two miles of a public or private use airport. There is ***no impact*** in this regard.

g) Emergency Response

Would the Project:

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed design of the golf practice facility includes construction of a service road capable of supporting fire-fighting equipment. There would be no residences or other structures at the facility. As the only land use on the site, the facility would not operate after dark. The construction and operation of the Project would not impair the implementation of or physically interfere with an adopted emergency response or evacuation plan. Therefore, there would be ***no impact***.

h) Wildland Fire Hazards

Would the Project:

Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The California Department of Forestry and Fire Protection (CalFIRE) Fire and Resource Assessment Program (FRAP) identify areas of significant fire hazard based on fuels, terrain, weather and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, determine the requirements for special building codes designed to reduce the ignition potential of buildings.

The Project site is located within a High Fire Hazard Severity Zone.[14] One of the primary purposes is to provide direction to homeowners regarding fuel modification around buildings to create a defensible space for firefighters and to protect houses from wildfires. Wildland-Urban Interface Fire Area Building Standards establish minimum standards for materials and material assemblies, including roof coverings, fire resistive wall and ceiling-floor assemblies, wall finish materials, fire and non-fire related hardware, insulating products, fire doors, fire dampers, electrical appliances and devices.

However, since there would be no structures or other flammable materials that would be built or installed at the Project site as part of the Project (aside from landscaping), the restrictions and regulations attendant

untary_cleanup=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&display_results=&pub=&hwmp=False&permitted=&pc_permitted=&ORDERBY=upper%28business_name%29&next=Next+50; accessed 6/4/2013.

[14] California Department of Forestry and Fire Protection, Fire Hazard Severity Zones in State Responsibility Areas (SRA), Alameda County, November 2007, http://frap.cdf.ca.gov/webdata/maps/alameda/fhszs_map.1.jpg, viewed June 4, 2013.

to a location within a High Fire Severity Zone are not applicable. There would be ***no impact*** regarding wildland fires.

Mitigation Measures: None

9. HYDROLOGY AND WATER QUALITY Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Violate any water quality standards, conflict with water quality objectives, fail to meet waste discharge requirements, significantly degrade any surface water body or groundwater, or adversely affect the beneficial uses of such waters, including public uses and aquatic, wetland and riparian habitat?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site (i.e. within a watershed)?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff (e.g., due to increased impervious surfaces) in a manner which would result in flooding on- or off-site (i.e. within a watershed)?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems due to changes in runoff flow rates or volumes?			X	
f) Result in a significant increase in pollutant discharges to receiving waters (marine, fresh, and/or wetlands) during or following construction (considering water quality parameters such as temperature, dissolved oxygen, turbidity, and typical stormwater pollutants such as heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?			X	
g) Result in an increase in any pollutant for which a water body is listed as impaired under Section 303(d) of the Clean Water Act?				X
h) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
i) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
j) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
k) Inundation by seiche, tsunami, or mudflow?				X

Setting

The proposed Practice facility is situated within a 10.4-acre parcel in the southeastern portion of the Castlewood Country Club property, south of Castlewood Drive and between the Union Pacific Railway tracks and the Arroyo de la Laguna. This portion of the property is currently used for golf course maintenance activities that include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. The currently active portion of the Project site is the relatively flat terrace eastward of the top of bank of the Arroyo de la Laguna. As a result of these activities, there are dirt access roads and areas of topsoil disturbance throughout the parcel.

The parcel includes portions of the Arroyo de la Laguna and its associated riparian habitat, but the proposed Project area is situated a minimum of 100 feet beyond the top of bank, within the areas disturbed for maintenance activities. In some areas, the banks of the Arroyo de la Laguna are near vertical slopes that rise approximately 30 feet from the active channel to the top of bank. In other areas there is a relatively broad primary terrace between the active channel and the top of bank.

Impacts

a, f-g) Degradation of Water Quality/Violation of Standards

Would the Project:

a) Violate any water quality standards, conflict with water quality objectives, fail to meet waste discharge requirements, significantly degrade any surface water body or groundwater, or adversely affect the beneficial uses of such waters, including public uses and aquatic, wetland and riparian habitat?

f) Result in a significant increase in pollutant discharges to receiving waters (marine, fresh, and/or wetlands) during or following construction (considering water quality parameters such as temperature, dissolved oxygen, turbidity, and typical stormwater pollutants such as heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)?

g) Result in an increase in any pollutant for which a water body is listed as impaired under Section 303(d) of the Clean Water Act?

No structures or other forms of habitable space would be constructed as part of the proposed practice facility and therefore there would be no wastewater generated by its use. Aside from minimal drinking water brought daily in 5-gallon jugs for users of the facility, the primary water usage would be for irrigation. The irrigation system would be designed to provide only the amount of water that would be needed and absorbed by the turf on the tee boxes, fairways and greens. In the unlikely event that irrigation (or rainfall) exceeds what can be absorbed into the site, surplus run-off would flow to the site's two stormwater bio-retention basins where it would percolate downward into the soil. The proposed grading plan, irrigation system and the infrastructure for handling stormwater, including the two bio-retention basins would function so as to avoid or prevent stormwater or irrigation flows off-site.

In terms of potential impacts to water quality as a result of regular use of fertilizers and pesticides, data from the Castlewood Country Club is not available. However, studies of this issue have been conducted in recent years in concert with the rapid growth and expansion in the number of golf courses in the US and in response to a rising level of concern regarding environmental effects of golf courses. For example, a study that evaluated the impacts of fertilizer and pesticide applications on surface water quality at a Pacific Northwest golf course reached the following conclusions:

- No evidence of significant impacts on surface water quality from fertilizer applications;

- no fungicides or insecticides were detected in surface water exiting the golf course; and,

- Of the 104 active ingredient-specific pesticide analyses performed during the two-year study period, only one pesticide (triclopyr) was detected and only in the surface water exiting the golf course [Unlike Castlewood or the proposed practice facility, the golf course in the study had a creek running through it]. The concentration of triclopyr detected (0.1 µg L-1) was compared to toxicity data for a variety of aquatic species (i.e., mallard ducks, rainbow trout, *Daphnia magna*). The results of this evaluation revealed that the level detected was over six orders of magnitude lower than the LC50 for the most sensitive species listed (rainbow trout = 117 mg L-1), indicating that the concentration detected was not toxicologically significant.

The overall conclusion of the study stated:

> *Regardless of the fertilizer or pesticide product applied, the time of year, and individual product transport potential, intensive water quality monitoring failed to detect nutrient output or toxicologically significant pesticide output from the golf course into surface water. Based on the results of this investigation, management practices used at this golf course, which were typical of high-maintenance golf courses in the Pacific Northwest, had no significant impact on surface water quality.*[15]

The conclusions of just one study are not an adequate basis on which to predict potential water quality impacts at the proposed practice facility. However, the current level of governmental regulation, oversight and monitoring of the materials used on golf courses suggest that potential impacts to water quality would not be significant.

In the case of the Castlewood Country Club, all chemical applications are reported monthly to the Alameda County Department of Agriculture under the California Department of Pesticide Regulations. The golf course superintendent holds both a category (B) – Landscape Maintenance and (F) – Aquatic license with the State Dept. of Pesticide Regulations, licenses which are required to be renewed every two years through on-going education and laws and regulations seminars. All EPA registered chemicals applied on the golf courses are site specific to greens, tees and fairways and follow all State and Federal label requirements. In inspection by the County of Alameda is also performed annually and a Restricted Materials Permit is thereby obtained and recorded with the County. Compliance with applicable rules and regulations regarding the selection and use of potentially harmful materials, as is the practice at Castlewood Country Club, would indicate that potential impacts to water quality would be ***less than significant.***

b) Groundwater Supplies and Recharge

Would the Project:

> *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

[15] Michael S. Hindahl, Eric D. Miltner, Thomas W. Cook and Gwen K. Stahnke, *Surface Water Quality Impacts From Golf Course Fertilizer And Pesticide Applications,* International Turfgrass Society Research Journal Volume 11, 2009, found at http://www.nwturfgrass.net/enewsletter/newsletters-09/sept/sept-09-linked-documents/GC%20Surface%20Water%20Q%20ITSRJ.pdf.

The question of what impact the proposed golf practice facility might have on groundwater resources requires a description of the sources and uses of water by the County Club and how this relates to the history of groundwater extraction and recharge in the broader Livermore/Amador Valley area.

Historically, and under most conditions, all the water used by the Castlewood Country Club comes from groundwater pumping at the Bernal Wells in Pleasanton. As described in greater detail in the Utilities section of this Initial Study, the source of groundwater is the aquifer at Bernal. The San Francisco Public Utilities Commission (SFPUC) holds certain rights to extract water from the aquifer. Pursuant to legal agreements with the Country Club dating back to 1911, the SFPUC is obligated to provide the Club with up to 105.2 million gallons (MG) of water annually. Historically, this water entitlement has been more than sufficient to meet annual (and Maximum Daily Demand) requirements. As indicated in the Utility section discussion, groundwater usage at the Country Club peaked in 2011 when a total of 50.5 MG was delivered, or approximately 48 percent of the Club's entitlement. Annual water demands at the Country Club are relatively constant, and thus using the 2011 usage data as a gauge, the existing entitlements and water rights that are held by the Club with respect to the SFPUC Bernal Wells are likely be more than sufficient to meet annual needs indefinitely. It should also be noted that the water agreements with the SFPUC provide that in the event groundwater resources might temporarily (or permanently) become constrained, such that the full entitlement of 105.2 MG might not be available from the Bernal Wells, the SFPUC would be obligated to replace groundwater extraction deficiencies with water from the SFPUC's Hetch Hetchy system. Based on the foregoing discussion, there appears to be sufficient capacity under the water agreements and entitlements to meet the additional 8- 10 MG of irrigation water that is estimated for the proposed practice facility.

The increased need for irrigation of the proposed golf practice facility needs also to be assessed in the context of complex resource management responsibilities of the Zone 7 Water Agency, the discussion of which follows.

The management and oversight of ground and surface water resources in the Pleasanton/Livermore area are the responsibility of the Zone 7 Water Agency, a public agency created by area voters in 1957 as a spin-off from the Alameda County Flood Control and Conservation District. Over its 56-yer history, Zone 7 has achieved great success in its ability to deliver reliable annual water resources to meet the increased demands of the area's rapidly growing suburban population while also being able to supply water to the area's commercial, industrial, and agricultural users. Zone 7 has been able to manage water use while at the same time implementing measures to control against flooding and improving water quality standards. While Zone 7 is the over-arching water management agency, the actual delivery of water to end-users is carried out primarily by four other entities, referred to by Zone 7 as its 'retailers.' These include the cities of Livermore and Pleasanton (who deliver retail water to local residents and businesses), the Dublin San Ramon Services District (DSRSD) which delivers retail water to customers in Dublin and San Ramon, and California Water Service Company (Cal Water). Cal Water is the agency that pumps the water from the Bernal Wells and delivers it to the Castlewood Country Club and surrounding residents.

Over 90 percent of all water used within Zone 7 comes from the State Water Project's (SWP) South Bay Aqueduct which traverses the eastern portion of Alameda County. Zone 7's water rights were negotiated with the State Department of Water Resources when the State Water Project and the South Bay Aqueduct projects were being conceived in the early 1960s. Zone 7 uses SWP water directly to meet treated water demands from municipal and industrial customers—both wholesale and retail—and untreated water demands from agricultural customers. Water from the SWP is stored in aboveground reservoirs such as Lake Del Valle and in the vast underground aquifers in the Livermore Valley Groundwater Basin. As

such, SWP water is used to artificially recharge the local groundwater basin. Aquifer storage of surface water supplies is a major component of Zone 7's water supply reliability efforts.[16]

The 2011 Water Supply Evaluation (WSE) issued by Zone 7 is the source of much of the information in this Initial Study regarding water supply and usage.[17] The 2011 WSE states that total water demand in Zone 7 in 2009 was 51.7 acre feet[18] (AF). Zone 7 overlies the Livermore Valley Groundwater Basin which extends from the Pleasanton Ridge east to the Altamont Hills and from the Livermore Uplands north to the Tassajara Uplands. The portion of the Livermore Valley Groundwater Basin that contains high-yielding aquifers and good quality groundwater is called the Main Basin, which is composed of four sub-basins including the Bernal sub-basin from which water is provided to Castlewood.

The Main Basin has an estimated storage capacity of 254,000 AF and receives an average natural recharge of approximately 13,400 AF annually through percolation of rainfall, natural stream flow and irrigation waters, and inflow of subsurface waters. Before the construction of the SWP in the early 1960s, groundwater was the sole water source for the Livermore-Amador Valley. The resource has gone through several periods of extended withdrawal and subsequent recovery. In the early 1960s, when approximately 110,000 AF of groundwater was extracted, the Main Basin reached its historical low of 128,000 AF. The Main Basin was then allowed to recover from 1962 to 1983 by recharging the aquifer with imported surface water via streams and by regulating municipal pumping by contractually establishing Groundwater Production Quotas with local retailers, including Cal Water. Extractions of ground water vary from year to year but Zone 7 limits the amount so as not to get below the historical low of 128,000 AF. Thus the operational storage in the basin is about 126,000 AF.

It is estimated that the proposed golf practice facility will require 8 - 10 MG annually for irrigation. This amount equates to 27.5 acre feet, or less than 1 percent of the groundwater allowed to be taken from the Main Basin. The water demands for the Project - when added to Castlewood's other water requirements - would remain well within the 105.2 MG (or 466 AF) annual entitlement limit and would represent a small percentage of the groundwater extraction limits established by Zone 7. For these reasons, the effect on groundwater resources is considered ***less than significant***.

c) Alteration of the Existing Drainage Pattern

Would the Project:

> *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

As indicated in the grading plan (**Figure. 6)**, the Project proposes minimal changes to the existing topography of the site. There would be no grading or site disturbance activities within 100 feet of the top of bank at the Arroyo de la Laguna and thus there would be no change to the hydrologic functioning of the Arroyo as a result of the Project. As indicated elsewhere, stormwater on the Project site would either be absorbed into the soil through pervious surface materials (e.g., grass at the tee box area, the fairway and greens, sand in the sand traps or the gravel on the access road and service road) or, as in major storm

[16] Zone 7 Water Agency, *2011 Water Supply Evaluation, A Risk-Based Approach To Evaluating Zone 7's Water Supply System,* found at: http://www.zone7water.com/images/pdf_docs/water_supply/wse-2011-final.pdf

[17] Ibid.

[18] One acre foot (AF) of water is the amount required to cover one acre with water one foot deep, or approximately 325,851 gallons.

events, would flow into the bio-retention basins proposed along the eastern edge of the site, adjacent to the Union Pacific Railroad tracks. There would be no alteration to the course of the Arroyo and no reason to anticipate changes in erosion or siltation of waters, on or off site. Any impacts related to drainage, erosion or siltation would be ***less than significant***.

Figure 6. Grading Plan

d-e) Exceed Storm Drainage Capacity and Flooding

Would the Project:

d) Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems due to changes in runoff flow rates?

Hydrological studies prepared by the Project applicant for the proposed golf practice facility indicate that in minor storm events, 100 percent of rainfall on the site would be absorbed into the ground through percolation through pervious surfaces. In major storm events, when rainfall exceeds the ability of the site to absorb more water, the surplus would become runoff which, in accordance with the proposed grading and drainage plan, would gravity flow over the surface of the site or through underground collection pipes and be directed to the two bio-retention basins. The capacity of the basins has been determined based on the need to retain surplus flows occurring in a maximum 100-year storm event. Stormwater would be retained in the basins and would slowly enter groundwater as it percolates its way downward through the bottom of the basin. The design of the system is such that no amount of the surplus stormwater flows would leave the site; all stormwater flows would be contained on site and would be the source of groundwater recharge. No flooding on or off site is anticipated. ***No impact***.

h-k) Flooding Hazards, Seiche, Tsunami or Mudflows

Would the project:

h) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

i) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

j) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

k) Inundation by seiche, tsunami, or mudflow?

No residences or other structures would be built on the Project site and therefore none would be affected by potential future flooding of the Arroyo de la Laguna or other water courses and none would affect or impede flood flows. Neither people nor structures would be exposed to risk of loss due to flooding as no structures are on the site currently and no structures are proposed. Given the nearly flat topography of the Project site and its distance from both San Francisco Bay and other major water bodies, the risk of loss related to potential seiche, tsunami or mudflows would be essentially zero. ***No impact.***

Mitigation Measures: None

10. LAND USE AND PLANNING Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Physically divide an established community.				×
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				×
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				×

Setting

a) The site is outside the County's Urban Growth Boundary that was established by the voters of Alameda County in 2000 (Measure D). The East County Area Plan (ECAP), a portion of the Alameda County General Plan, provides goals and policies for this area. The project site is within the Water Management Land Use Designation, which allows for public use areas and those uses that are compatible with arroyos and watershed lands. The Agricultural zoning classification (designated as "A") allows for an outdoor recreation facility as a conditional use, for consideration by the Board of Zoning Adjustments. The proposed Project does not require a General Plan Amendment, rezoning approval, or change of land use to accommodate this project.

Impacts:

a) Physical Division of Community/Land Use Compatibility

Would the project:

Physically divide an established community?

The Project site is vacant undeveloped land, part of the Castlewood County Club grounds but not actively used except for storage of golf course maintenance materials. The site sits between a low-density residential are to the west and the Union Pacific Railroad tracks and Interstate 680 to the east. The proposed project would not divide an established community. Because the Arroyo de la Laguna and the railroad right of way isolate the project site from nearby residential uses and the general community, no established community will be physically divided as a result of this project. Therefore, there is ***no impact*** in this regard.

b) Land Use Plan or Policy Conflict

Would the project:

Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

The 7.6 acre project site is located within an unincorporated area characterized by the Castlewood Country Club which includes two 18-hole golf courses, tennis courts and a clubhouse, surrounding open space and low density residential uses along Foothill Road, south of Castlewood Drive. Agricultural,

horse boarding, and outdoor recreational uses are common ancillary uses for many homes in the low density large lot residential community in the project vicinity.

Under the ECAP, the General Plan Land Use Designation is Water Management. Policies associated with this designation address land use issues that are not relevant to the proposed Project, such as minimum parcel size for residential use (100 acres), Floor Area Ratio (maximum .01 FAR), residential density (e.g. one single family home per parcel) and provisions related to sand and gravel quarries and reclaimed quarry lakes.

Land use provisions more specifically related to the proposed golf practice facility are found in the County's zoning ordinance for sites that have an "Agricultural" zoning designation. As noted above, the applicable zoning provisions require a Conditional Use Permit for "outdoor recreation facility" which is a category consistent with the proposed Project. A Conditional Use Permit for an outdoor recreation facility would be granted by the Board of Zoning Adjustments (BZA) upon the making of specified findings that the Project:

A. Is required by the public need;

B. Will be properly related to other land uses and transportation and service facilities in the vicinity;

C. If permitted, will under all the circumstances and conditions of the particular case, [not] materially affect adversely the health or safety of persons residing or working in the vicinity, or be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood; and

D. Will [not] be contrary to the specific intent clauses or performance standards established for the district, in which it is to be located.[19]

General Plan Policies: Below are several policies excerpted from the ECAP. By preserving open space land for an outdoor recreational use, the project meets important ECAP objectives.

Policy 50: The County shall promote the location of community facilities near major transportation corridors and within existing downtown areas.

The Project would consist of a golf practice facility near a major transportation corridor but not within a downtown area. The Project would be partially consistent with this policy.

Policy 101: The County shall encourage public water management agencies to explore recreational opportunities on watershed lands, particularly reclaimed quarries, where recreational use would not conflict with watershed protection objectives.

The Project would create an outdoor recreational facility on watershed lands in a manner that would not conflict with watershed protection policies. The project would be consistent with this policy.

Zoning District: The subject property is classified into the "A" (Agricultural) district which conditionally allows for an outdoor recreation facility.

The Project is consistent with the land uses allowed within the A district and the criteria for approval of a CUP can be satisfied.

[19] Alameda County Code of Ordinances, Section 17.54.130.

The proposed land use is compatible with the land use designation, and the zoning classification allows for a variety of uses including the project as proposed. The project would be limited by conditions of CUP approval and therefore there is ***no impact*** in this regard.

c) Conservation Plan

Would the project:

Conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is not subject to a habitat conservation plan or a natural community conservation plan. There is **no impact** in this regard.

Mitigation Measures: None

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

Setting

The East County Area Plan (ECAP) does not identify any regionally or locally-important mineral resources on the proposed Project site. However, there are mineral resources nearby in the form of sand and gravel (aggregates) that are actively being quarried at several locations south of the Project site, in the Sunol area of Alameda County.

Impacts

a-b) Mineral Resources

Would the Project:

a) Result in the loss of availability of a known mineral resource?

b) *Result in the loss of availability of a locally important mineral resource?*

Despite the proximity to active sand and gravel quarry operations not far from the Project site, the geology and soils at the site do not indicate the presence of valuable mineral resources. Further, the proposed Project involves only improvements to the surface of the site (golf tee area, fairways, greens, sand traps, etc.) and therefore implementation of the Project would not preclude future extraction of mineral resources in the event such were determined to be present. For these reasons, the potential impacts on mineral resources would be considered ***less than significant***.

Mitigation Measures: None

12. NOISE Would the project result in:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			x	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				x
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			x	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				x
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				x
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				x

Setting

The existing land use at the Project site and the surrounding area consists of very low density large-lot residential homes and the Castlewood County Club with its two 18-hole golf courses. The source of the loudest noise in the vicinity of the Project site is traffic on the I-680 freeway which is approximately 600 feet east of the Project site. Figure 7 in the ECAC shows that at least the eastern edge of the Project site would be within the 60+ dB LDN noise contour associated with traffic noise on I-680. The Union Pacific Railroad tracks, which are adjacent to the Project site and lie between it and the freeway, are in active use by both daily commuter passenger trains (the Altamont Commuter Express, or ACE) and by freight trains and are therefore a source of noise. Ambient noise levels at the Project site will be high because of the nearby freeway.

Impacts

a-d) Construction and Operational Noise or Vibration

Would the Project result in:

a) *Exposure of persons to or generation of noise levels in excess of local standard?*

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Temporary Construction Noise

Site clearing, grading and other construction-related activities would temporarily generate noise above ambient levels. However, the Project applicant and contractors would be subject to the County's Noise Ordinance which recognizes that construction activities, while temporary, can be noisy. The ordinance exempts construction-related noise from the County's noise standards provided the construction noise occurs only between 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on weekends.[20] Compliance with the County's noise restrictions during the proposed a 10-12-week (2.5 months) construction period would result in construction-related noise impacts being ***less than significant*** and no mitigation would be required.

No pile driving or other source of significant ground-borne vibration would be required for the Project. Therefore, the Project would have ***no impact*** with regard to ground borne noises or vibration.

Operational Noise

When the practice facility is in use, noise sources would include golf clubs striking teed-up golf balls, the noise of electric-powered golf carts, and the once-per week use of grass mowing and other maintenance equipment. Day-to-day use of the golf practice facility, which would operate only during daylight hours, would not generate noise above ambient levels, particularly given the proximity to the I-680 freeway and the commuter and freight trains. Noise impacts resulting from the operation of the facility would be ***less than significant***.

e) Airport or Private Airstrip

Would the Project:

e) *For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?*

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

The site is not located within two miles of a public airport or private airstrip, therefore, there is ***no impact*** in this regard.

Mitigation Measures: None

[20] Alameda County General Ordinance Code, Section 6.60.70 (E).

13. POPULATION AND HOUSING Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				×
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				×
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				×

Setting

The Project involves development of a golf practice facility for day-use only; no residences or other forms of structures would be constructed, and use of the facility would be limited to members of the Castlewood Country Club and their guests during daylight hours only. There are no residential uses existing or planned for the Project site or the area around it.

Impacts

a) Population Growth

Would the Project:

> *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The Project does not involve development of new housing or businesses and would not involve or require extension of any public roads to serve the Project. The Project would have ***No Impact*** on population growth.

b-c) Displacement of Housing and/or People

Would the Project:

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element?

c) displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element?

The Project site is currently used as a maintenance area with no residential uses. Implementation of the Project would create a golf practice facility; no structures would be built and the facility would be used only during daylight hours. The Project would not displace existing housing or people and ***no impact*** would occur in this regard.

Mitigation Measures: None

14. PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Fire protection?				×
b) Police protection?				×
c) Schools?				×
d) Parks?				×
e) Other public facilities?				×

Setting

The Project site is a 7.6-acre portion of the 450-acre Castlewood County Club located in unincorporated Alameda County southwest of the City of Pleasanton. The site is currently used as a staging site for storage of materials used in the maintenance of the two 18-hole golf course. Fire protection services are provided by the Alameda County Fire Department. Police services are provided by the City of Pleasanton and the Alameda County Sheriff's Office. The Project site is located within the Pleasanton Unified School District but the Project would not involve the development of additional residences or result in additional school age population in the area.

Impacts

a-e) Public Services

Would the Project:

Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

a) Fire protection?

b) Police protection?

c) Schools?

d) Parks?

e) Other public facilities?

As noted, the proposed golf practice facility would be a day-use only facility for members of the Castlewood Country Club and their guests. No structures would be constructed on the Project site. The Project would not involve a use that would generate increased demands for fire or police services or have an effect on public schools or parks. The Project would have ***no impact*** on public services.

Mitigation Measures: None

15. RECREATION Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
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?				X
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Setting

The Project site is a 7.6-acre portion of the Castlewood County Club located in unincorporated Alameda County southwest of the City of Pleasanton. The site is currently used as a staging site for storage of materials used in the maintenance of the Club's two 18-hole golf courses. No residences would be involved in the Project, only a new golf practice area for driving, chipping and putting. The facility would be open only during daylight hours and available only to Club members and their guests.

Impacts

a-b) Accelerated Physical Deterioration of Facilities/Effect of New or Expanded Facilities

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?

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

The Project involves the creation of a new recreational facility but it would be available only to members of the Castlewood Country Club and their guests. As indicated in this Initial Study, construction of the facility would not have an adverse effect on the environment. The Project would not affect existing neighborhood or regional parks or other recreational facilities because it does not increase local housing or population. Use of the proposed golf practice facility at Castlewood Country Club may reduce the use of or demand for comparable public facilities at neighborhood or regional parks where golf practice opportunities are offered. ***No impact***.

Mitigation Measures: None

16. TRANSPORTATION Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				×
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				×
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				×
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				×
e) Result in inadequate emergency access?				×
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				×

Setting

Castlewood Country Club is located on a 450-acre site at the base of the Pleasanton Ridge, immediately west of Interstate 680 southwest of the City of Pleasanton. The country club has been in existence since 1925 and offers its members the use of two 18-hole golf courses, tennis courts, aquatic center and a clubhouse for dining and socializing. The club is surrounded by a single-family residential community of some 190 single-family homes which were built generally between the 1930s and 1990s. The Club and the proposed practice facility site are accessed via I-680 and by local roads including Foothill Road, Castlewood Drive and Sunol Boulevard. Since the proposed practice facility would be available only to Club members and their guests, and not open to the public, its effect in terms of increased vehicular trips to the County Club would be limited.

Impacts

a-b) Traffic Plans and Congestion Management

Would the Project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The East County Area Plan includes a number of transportation-related policies directed at what local and regional government can or should do to improve local and regional transportation facilities and reduce congestion. Polices related to private development focus on "major projects" which are defined as residential developments containing 500 housing units or more or non-residential projects containing 500,000 square feet or more of building space. The proposed Project is neither of these and is only a minor expansion of recreational opportunities available to Castlewood Country Club members and their guests. The project represents minimal change from the existing uses at the Country Club or at the Project site itself. Any change in daily use of or numbers of vehicles coming to the Country Club would be minimal and would likely not have any measurable effect on local or regional traffic or involve a conflict with any applicable plans, ordinances, policies or the County's Congestion Management Plan related to area traffic circulation or transportation systems. There is ***no impact***.

c) Air Traffic Patterns

Would the Project:

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location which results in substantial safety risks?

The Project would not result in a change in air traffic patterns. There is ***no impact***.

d-e) Site Access, Circulation and Hazards

Would the Project:

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

The Project would not require any changes to the design or alignment of roadways that provide access to the Club and there would be no change that would affect emergency access. The conditions on existing roadways that access the Club would not change and therefore there would be ***no impact*** in terms of roadway hazards or emergency access.

f) Alternative Transportation and Transit

Would the Project:

Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed Project would not conflict with any adopted policies, plans, or programs supporting alternative transportation. The Project site is located in an unincorporated area that is consistent with applicable plans and policies for land use and transportation in that part of Alameda County. Therefore, there would be ***no impact*** with regard to conflicts with adopted plans and policies or programs related to public transit, bicycle or pedestrian facilities.

Mitigation Measures: None

17. UTILITIES AND SERVICE SYSTEMS Would the project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				x
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				x
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				x
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			x	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				x
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				x
g) Comply with federal, state, and local statutes and regulations related to solid waste?				x

Setting

Castlewood Country Club is located on an approximately 450-acre site at the base of the Pleasanton Ridge, immediately west of Interstate 680 southwest of the City of Pleasanton. The Country Club has been in existence since 1925 and currently has approximately 730 members who have access to the Club's two 18-hole golf courses, tennis courts, aquatic center and Clubhouse. Surrounding and intermingled with the golf fairways are 190 single family homes.

Water

Water supplies in the Pleasanton area have involved a number of public and private entities since the late 1800's. In 1898, the Spring Valley Water Company (SVWC) constructed wells in the Bernal Well Field located in the City of Pleasanton and conveyed water to the City and County of San Francisco. In 1930, the City and County of San Francisco acquired water rights from the SVWC and in 1960 the City of Pleasanton acquired those rights from San Francisco. With Pleasanton's acquisition, San Francisco ceased its operation of wells in the area except for those servicing the Castlewood County Club and surrounding residences.

The water source and supply for Castlewood County Club and surrounding residences is based on an original 1911 recorded agreement between the former owner of the Castlewood property, Phoebe Apperson Hearst, and the SVWC pursuant to which the SVWC granted Hearst the right to 90 million gallons (MG) of water annually, at no cost to Hearst. SVWC and its successor(s) are obligated to deliver potable water at SVWC cost to the Hearst property. The beneficiaries of this original water entitlement include both the Castlewood homeowners and the Country Club. The Castlewood Country Club portion of the 90 MG annual entitlement is 43.2 MG. By separate agreement, the Country Club acquired the right to purchase from the SFPUC (successor to SVWC) an additional 62 MG per year bringing Castlewood

Country Club's total annual entitlement for water from the SFPUC to 105.2 MG. Historical usage of the water rights enjoyed by the Club has been substantially less than the potential use of the 105.2 MG entitlement. Data collected for a 2012 study shows that, in 2011, when water usage reached a new peak, the total water usage by the Club (including the Club's use of both potable and irrigation water, combined) was 50.5 MG, or approximately 48 percent of the combined entitlement limit.[21] Of this total, 2.5 MG was used by the Club for domestic purposes, and 48.1 MG was for irrigation.[22]

In 1968, at the request of the Club and residents to improve and maintain roads in the Castlewood area, the County of Alameda created an entity called the Castlewood County Service Area R-7 (CSA). Over time, the scope of the CSA's responsibilities has expanded to include management and supervision of the water and sewer services, as well as road maintenance, for the Castlewood area.

The physical components of the water supply system for the Castlewood area consist of two pump stations that draw SFPUC groundwater from underground aquifers, a level control tank located along Valley Avenue in Pleasanton and a 400,000 gallon underground concrete reservoir (Valley Reservoir) located just off the Club's Valley Golf Course. Incoming water from the SFPUC wells is disinfected with chlorine prior to entering the Valley Reservoir. From there water is pumped uphill to storage tanks at two different elevation levels to serve the domestic water and fire flow needs of the residents and the Club. Beginning in the 1990s, irrigation water for the golf courses was separated from the domestic system and is now pumped to a separate storage facility for that purpose. The estimated water need for the proposed golf practice facility is 8 - 10 MG annually.[23] Irrigation water for the practice facility would be stored in the irrigation pond near hole #4 on the Valley Course and fed by gravity. The proposed irrigation system is designed to comply with the Water Efficient Landscape Ordinance of the Alameda County General Ordinance Code (§492.3, California Code Of Regulations).[24]

Wastewater

In the early years, the Country Club and Castlewood residences were served by individual septic systems. As residential use began to expand, a sanitary sewer system and treatment facility was constructed within the Castlewood area, with treated effluent discharged into the Arroyo de la Laguna. In the early 1970's, as a result of problems associated with the Club's wastewater treatment plant operations and overflowing of treatment ponds into the Arroyo, the County imposed a sewer connection moratorium to address the pollution problems which had been recognized by the Regional Water Quality Control Board. In 1985, the CSA entered into an agreement with the City of Pleasanton allowing the CSA to connect to the Dublin San Ramon Services District (DSRSD) wastewater treatment plant. As part of the agreement, the CSA agreed to develop a program to improve facilities, both for water and sewer.

In the mid 1990's the CSA hired consultants to evaluate and improve both the sewer collection and water systems. Construction on improving a majority of both systems occurred in the late 1990's which also included the separation of the Club's irrigation system from the domestic water supply. The current sanitary sewer system that serves the Castlewood community consists of approximately 28,000 feet of 6-

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[21] *Castlewood County Service Area Water and Sewer Assessment*, Alameda County Public Works Agency, October 2012, Page 5-4.

[22] Ibid.

[23] Russell D. Mitchell &Associates, Inc., Irrigation Consultants, Irrigation Legend and Notes, Castlewood County Club, Sheet IR-3 of 6, dated May 8, 2013. Also, personal communication with Lou Silveira, Superintendent, Castlewood Country Club, June 12, 2013.

[24] Water Efficient Landscape Ordinance application, signed by the Project applicant May 15, 2013. This document is included as **Attachment F** to this Initial Study.

inch and 8-inch pipe. The collection system drains into two main pipelines that terminate at the pump station on Foothill Boulevard where it is then pumped to the DSRSD treatment plant via the West Pleasanton Interceptor Sewer.

Impacts:

a-b, e) Wastewater Collection, Treatment and Disposal

Would the Project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments?

No toilets or bathroom facilities would be constructed as part of the Project. Users of the proposed practice facility would use the restroom facilities in the Clubhouse which is an approximately 400-yard golf cart trip away from where the tee boxes would be located. Potable drinking water would be brought daily to the practice facility by Country Club maintenance staff in 5-gallon jugs and would be replenished as needed. As a result of the proposed design of the Project, no wastewater would be generated and no wastewater facilities would be required. As a result, there would be ***no impact*** regarding wastewater treatment infrastructure or the need for new or expanded water or wastewater facilities.

c) Storm Drainage Facilities

Would the Project:

Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Virtually no part of the Project site will be covered with impervious surface material. As a result, rainfall will percolate through the surface materials which would include grasses on the tee boxes, fairways and greens, sand in the sand traps, crushed gravel on the roadway, and natural undisturbed vegetation along the Arroyo and adjacent to the railroad tracks. Any stormwater not absorbed on site would flow towards two bio-retention basins to be located along the east edge of the site and would percolate into the soil.

d) Water Supply

Would the Project:

Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Most of the water required for the Project would be irrigation water for the fairways and greens. As noted previously, the water entitlements held by the Club assure delivery of up to 105.2 MG of water annually, an amount that has been more than sufficient to meet demands for both domestic and irrigation purposes. Using the 2011 water usage data as a baseline, the Club uses approximately 48 MG for irrigation; this amount would be increased by 8-10 MG annually once the proposed practice facility is in place.

The potable water needs of the facility would be minimal. As indicated above, Country Club maintenance staff would provide potable drinking water for users of the practice facility by way of 5-gallon jugs brought to the site daily by Club maintenance staff, and replenished as needed throughout the day or week. Domestic water use at the proposed facility would be minimal - about 2,600 gallons per year, or 0.001 percent of the Club's average annual consumption of potable water.

Based on historical usage levels the increased demand for the practice facility would remain well within the Club's water entitlements and no new entitlements or resources would be needed. ***No impact***.

f-g) Solid Waste Management

Would the Project:

f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

The minimal amount of solid waste that would be generated by the proposed practice facility would be combined with the solid waste generated by the Country Club itself. The Club's solid waste is collected by Pleasanton Garbage and is transported to the Pleasanton Transfer Station where it joins the flow of solid waste material ultimately disposed at the Altamont landfill in Livermore which is a permitted landfill facility with capacity to accommodate the minimal amount of solid waste that would be generated. ***No Impact***.

Mitigation Measures: None

18. MANDATORY FINDINGS OF SIGNIFICANCE	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			x	
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.)				x
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				x

Discussion

The proposed Project would convert an existing maintenance area for the Castlewood Country Club into a practice area for Country Club members and their guests. The project requires minimal grading during a short construction period. The only potentially significant impacts involve biological resources (on the remote possibility that sensitive species might be present despite not having found any during three site surveys conducted for this Initial Study) and cultural resources (on the remote possibility that archaeological, paleontological resources or human remains are encountered during construction). Mitigation measure Air-1 is a standard recommendation of the BAAQMD and is not required to mitigate a specific impact. In all other respects, the Project would have less than significant impacts or no impacts.

Impacts

a) Quality of the Environment

Does the Project:

> *Have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As indicated in the body of this initial Study, the Project involves only minor changes to the existing conditions on the Project site, primarily to implement a modest grading plan so that the site can be used by golfers to practice their golf driving, chipping, and putting skills in a realistically simulated situation. Project grading and other plans demonstrate that care would be taken to avoid impacts to the Arroyo, to not affect or result in drainage off-site or disturb resources during construction. The Project does not have the potential to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause fish or wildlife population to drop, threaten to eliminate a plant or animal community or reduce the number of restrict the range of rare or endangered plant or animals or have any effect on periods of California history or prehistory. Any such impacts would be less than significant.

The Project would have less than significant effects on cumulative impacts, and no impact upon other mandatory findings of significance.

b) Cumulatively Considerable Impacts

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.)

The Project would have no cumulative impacts.

c) Adverse Effects on Human Beings

Does the Project:

Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

The Project would not cause substantial adverse effects on human beings, either directly or indirectly because there are no structures that would be built on the site, use of the facility would be on a voluntary basis and available only to Country Club members and their guests, would not operate after dark, would comply with all applicable environmental rules and regulations regarding use of fertilizers and pesticides.

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F. MITIGATION MEASURES TO BE INCLUDED IN THE PROJECT AND AGREED TO BY THE PROJECT SPONSOR AND ALL SUBSEQUENT PROPERTY OWNERS AND PERMITTEES

The following mitigation measures are required to reduce potentially significant impacts of the proposed project to a "Less Than Significant" or "No Impact" level. These mitigation measures shall be made conditions of approval for the project. For every mitigation measure, the Permittee will be responsible for implementation actions, schedule, funding and compliance with performance standards, unless otherwise stated in the measure.

Air-1: **Basic Construction Management Practices.** The Project shall demonstrate proposed compliance with all applicable regulations and operating procedures prior to issuance of demolition, building or grading permits, including implementation of the following BAAQMD "Basic Construction Mitigation Measures".

a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) All vehicle speeds on unpaved roads shall be limited to 15 mph.

e) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

f) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Bio-2: **Impact Avoidance and Minimization Measures**

The Project applicant shall engage a qualified biologist to undertake the following avoidance and minimization measures to reduce the risk of take related to California Red Legged Frog (CRLF), Alameda Whipsnake (ASR) and Pacific Pond Turtle (PPT):

1. Work activities that are ground disturbing, should be completed during dry weather between April 1 and November 1.

2. Within 24 hours prior to the start of construction activities or vegetation clearing, the work areas will be surveyed for the CRLF and ASR.

3. If a CRLF or ASR is encountered during preconstruction surveys or during construction activities, work will stop until appropriate corrective measures have been completed or it has been determined that the frog or snake will not be harmed. Any sightings will be immediately reported to U.S. Fish and Wildlife Service by telephone at 916-414-6600 and the California Department of Fish and Wildlife. If PPT are encountered the California Department of Fish and Wildlife shall also be contacted.

4. Exclusionary fencing should be installed around the boundary of the construction zone immediately following completion of the pre-construction survey. The fencing should be sufficient to keep frogs from moving into this zone and to restrict construction equipment from moving beyond the designated work area.

5. Prior to construction activities, an environmental training session (tailboard) will be provided for all construction personnel. This training will include a description of the CRLF, ASR, WPT and their habitats, the measures that are being implemented during the project to conserve the species, and the boundaries within which the project may be accomplished (i.e. work areas).

6. A qualified biological monitor will be onsite for all work activities during clearing and grubbing and make daily inspections thereafter.

7. Cut vegetation will be chipped immediately or moved outside of the work area to ensure no potential cover for listed species is present in work areas.

8. Where practical and safe to do so, vehicle speed will be limited to 15 mph on access routes and roadways.

9. Movement of heavy equipment will be confined to existing roadways and designated access routes to minimize habitat disturbance. No construction activities, parking, or staging of materials will occur outside of designated areas. Environmentally sensitive areas should be marked with flagging or fencing.

In addition, Mitigation Bio-2 includes the following additional measures to avoid or minimize potential impacts to nesting birds and Pallid bats.

Nesting birds

If construction activities are initiated after August 1 and before January 15 (outside of the typical nesting season for the birds-of-prey and migratory birds that may nest in the project area), then pre-construction surveys for active nests are not be necessary. If activities are initiated before August or after January, then pre-construction surveys for active nests within a certain radius of proposed activities shall be undertaken. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then a no-disturbance buffer zone shall be created around the nest until the young have fledged as determined through monitoring. The size of the buffer zone and types of construction activities to be restricted within the zone will be determined through consultation with the CDFW. Once

the young have fledged, the buffer zone can be abandoned and construction activities can resume in the vicinity.

Pallid Bats

If any large trees along the edge of the project area bordering the Arroyo are proposed for removal, a qualified wildlife biologist shall conduct a focused survey for roosting Pallid bats no more than 14 days prior to the anticipated date of tree removal. Trees that contain cavities should be thoroughly investigated for evidence of bat activity. If Pallid bats are found, the tree shall not be removed until a qualified biologist can assure that the bats have vacated the roost.

Cultural-1a: **Construction Crew Cultural Resource Training.** Prior to the beginning of construction, the applicant shall engage a qualified professional archaeologist to conduct a cultural resources training session for construction crew members. Information should be provided to construction personnel about the legal requirements relating to the discovery of buried cultural resources or buried human remains, as well as information useful in identifying historic and prehistoric cultural material, and the procedures to follow should cultural resources or buried human remains be encountered during Project excavations.

Cultural-1b: **Construction Activity, Evaluate Find and Implement Mitigation.** In accordance with CEQA Guideline §15064.5 (f), should any previously unknown paleontological, historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable soils, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching, or other on-site excavation(s), earthwork within 100 feet of these materials shall be stopped until a qualified professional archaeologist has an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary to protect the resource, as detailed below.

(A) According to CEQA Section 15126.4 avoidance is the preferred mitigation. Since CEQA provisions regarding the preservation of historic sites direct that adverse effects to historic sites shall be avoided, if feasible, the resource shall be protected from damaging effects through avoidance.

(B) Avoidance can include, but is not limited to, the following options:

1. Planning construction to avoid the historic site.

2. Incorporation of sites within parks, green space, or other open space.

3. Capping the historic site with a layer of chemically stable soil before construction. Capping the historic site would include installation of a water permeable protective barrier that is covered with a 3-ft.-thick layer of chemically stable soil before constructing non-intrusive facilities on the site. Excavation for landscaping, irrigation or any other purpose shall be limited to the soil layer above the water permeable protective barrier. If the soil layer cannot accommodate all planned underground utilities, a thicker soil layer may be used to cover the site.

4. Deeding the site into a permanent conservation easement.

(C) If avoidance of any previously undiscovered site is not feasible, data recovery shall be conducted in accordance with an approved Archaeological Data Recovery Plan (ADRP) to mitigate adverse effects to the significance of the site – the area of data recovery being limited to the area of adverse effect. This would fulfill CEQA requirements that the mitigation measure must be "roughly proportional" to the impacts of the Project. Data recovery shall be conducted by a professional archaeologist in compliance with CEQA Guideline Section §15064.5. Once the site has been properly tested, subject to data recovery, or preserved to the satisfaction of the professional archaeologist in compliance with CEQA Guideline §15064.5, the site can be further developed.

Cultural-2: **Halt Construction Activity, Evaluate Remains and Take Appropriate Action.** Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during Project-related construction excavation. Section 7050.5(b) states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties, including the appointment of Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

G. AGREEMENT BY PROJECT SPONSOR

Project Sponsor, acting on behalf of all present and future property owners and Permittees, understands the mitigation measures set forth above and agrees to be bound by them if they are adopted as a result of project approval. Monitoring reports shall be provided to the Planning Director and Director of Public Works at appropriate stages in the development process.

Project Sponsor's Signature

7/2/13
Date

Jerry Olson
Project Sponsor's Printed Name and Title

Attachment A:

Air Quality and GHG Analysis Assumptions and Computations

6/4/2013 10:26:27 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Users\nat\AppData\Roaming\Urbemis\Version9a\Projects\Castlewood CC Practice Facility Project.urb924

Project Name: Castlewood CC Practice Facility Project

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2013 TOTALS (lbs/day unmitigated)	2.58	20.61	12.01	0.00	76.00	0.99	76.99	15.87	0.91	16.78	2,349.41

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 9/3/2013-11/22/2013 Active Days: 59	**2.58**	**20.61**	**12.01**	**0.00**	**76.00**	**0.99**	**76.99**	**15.87**	**0.91**	**16.78**	**2,349.41**
Fine Grading 09/03/2013-11/22/2013	2.58	20.61	12.01	0.00	76.00	0.99	76.99	15.87	0.91	16.78	2,349.41
Fine Grading Dust	0.00	0.00	0.00	0.00	76.00	0.00	76.00	15.87	0.00	15.87	0.00
Fine Grading Off Road Diesel	2.55	20.56	11.10	0.00	0.00	0.99	0.99	0.00	0.91	0.91	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.00	0.00	0.01	0.00	0.00	0.00	102.09

Phase Assumptions

Phase: Fine Grading 9/3/2013 - 11/22/2013 - Default Fine Site Grading Description

Total Acres Disturbed: 7.6

Maximum Daily Acreage Disturbed: 3.8

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

6/3/2013 04:31:09 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Users\nat\AppData\Roaming\Urbemis\Version9a\Projects\Castlewood CC Practice Facility Project.urb924

Project Name: Castlewood CC Practice Facility Project

Project Location: Bay Area Air District

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2013 TOTALS (tons/year unmitigated)	0.08	0.61	0.35	0.00	2.24	0.03	2.27	0.47	0.03	0.50	69.31

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2013	0.08	0.61	0.35	0.00	2.24	0.03	2.27	0.47	0.03	0.50	69.31
Fine Grading 09/03/2013-11/22/2013	0.08	0.61	0.35	0.00	2.24	0.03	2.27	0.47	0.03	0.50	69.31
Fine Grading Dust	0.00	0.00	0.00	0.00	2.24	0.00	2.24	0.47	0.00	0.47	0.00
Fine Grading Off Road Diesel	0.08	0.61	0.33	0.00	0.00	0.03	0.03	0.00	0.03	0.03	66.30
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.01

Phase Assumptions

Phase: Fine Grading 9/3/2013 - 11/22/2013 - Default Fine Site Grading Description

Total Acres Disturbed: 7.6

Maximum Daily Acreage Disturbed: 3.8

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Attachment B:

Zander Biological Assessment

Biological Resources Assessment
Proposed Practice Area
Castlewood Country Club
Alameda County, California

Martin Inderbitzen
Attorney at Law
P.O. Box 1537
Pleasanton, CA 94566

Prepared by:
Zander Associates
4460 Redwood Hwy, Suite 16-240
San Rafael, CA 94903

March 11, 2013

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1.0 INTRODUCTION

This Biological Resources Assessment was prepared for the site of the proposed Practice Area at the Castlewood Country Club in Pleasanton, California (Figure 1). The assessment describes existing biological resources within and around the approximate 7.6-acre project area, evaluates the potential for special status species to be present, identifies potential effects of the project on biological resources and recommends avoidance and minimization measures, as appropriate.

The assessment is based on review of various background information including; California Natural Diversity Database records (CNDDB 2013), National Wetlands Inventory Maps (USFWS, 2010), commercially available orthorectified aerial photography, the online U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm), the *East Alameda County Resource Conservation Strategy* (ICF 2010), and environmental documents available for other projects in the vicinity.

Zander Associates conducted a reconnaissance-level survey of the project area on January 31, 2013 to characterize and map existing vegetation and wildlife habitats and evaluate potential habitat for special status species. We also consulted with Karen Swaim of Swaim Biological, Inc. regarding potential habitat for Alameda whipsnake and California red-legged frog. Ms. Swaim conducted a reconnaissance-level survey of the project site on March 4, 2013.

1.1 General Site Characteristics

The proposed Practice Area is situated within a 10.4-acre parcel in the southeastern portion of the Castlewood Country Club property; south of Castlewood Drive and between the Union Pacific Railway tracks and the Arroyo de la Laguna (Figure 1). This portion of the property is currently used for golf course maintenance activities that include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. All of these activities take place on the relatively flat terrace eastward of the top of bank of the Arroyo de la Laguna. As a result of these activities, there are dirt access roads and areas of topsoil disturbance throughout the parcel. The parcel includes portions of the Arroyo de la Laguna and its associated riparian habitat, but the proposed project area is situated a minimum of 100 feet beyond the top of bank, within the areas disturbed for maintenance activities. In some areas, the banks of the Arroyo de la Laguna are near vertical slopes that rise approximately 30 feet from the active channel to the top of bank. In other areas there is a relatively broad primary terrace between the active channel and the top of bank.

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San Rafael, CA 94903

N

0 0.5 1 2 Miles

Site Location
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 2/13

Figure
1

2.0 EXISTING CONDITIONS

2.1 Vegetation

The 10.4-acre parcel includes portions of the Arroyo de la Laguna and associated riparian woodland as well as stands of oak trees and coyote brush scrub that occur along the top of bank. Most of this vegetation occurs outside of the 7.6-acre project area. Large valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*) and some willows (*Salix* sp.) comprise much of the canopy lining the east bank of the Arroyo in the parcel. Eastward of the trees is a line of dense coyote brush (*Baccharis pilularis* ssp *consanguinea*) that then opens up to the disturbed areas that are vegetated with stands of hemlock (*Conium maculatum*), star thistle (*Centaurea solstitialits*), and invasive stinkweed (*Dittrichia graveolens*). Oak trees are also present along portions of the eastern parcel boundary. Just outside the property, there are smaller coat live oak trees that almost appear to have been planted in rows along the railway. Figure 2 identifies the location and extent of the different vegetation and disturbance types within the parcel and in the project area.

2.2 Wildlife

Wildlife species expected to occur in the project area include a variety of birds, rodents, and other mammals that are adapted to ruderal or disturbed habitats, such as Golden-crowned Sparrow (*Zonotrichia atricapilla*), Northern Mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrnchos*), mourning dove (*Zenaida macroura*), black-tailed jackrabbit (*Lepus californicus*), rat (*Rattus sp.*), raccoon (*Procyon lotor*), and opossum (*Didelphimorphia* sp.). Also to be expected, due to the amount of rocky and woody debris, are reptiles such as western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), and northern alligator lizard (*Elgaria coeruleus*), though none were observed during our site visit.

The Arroyo de la Laguna and associated riparian woodland provide habitat for a number of riparian-associated birds, as well as mule deer (*Odocoileus hemionus*), grey foxes (*Urocyon cinereoargenteus*), and other mammals that use the arroyo channel as a movement corridor. The large oak trees may also provide suitable nesting sites for raptors such as red-tailed hawk, red-shouldered hawk and Cooper's hawk. However, the amount of development and level of human disturbance in the vicinity may preclude some birds from nesting here. Although wildlife trails were observed throughout the dense stands of ruderal vegetation, there was little evidence of small mammal burrows in these areas.

2.3 Special Status Species

For this assessment, special status species are defined as: those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (ESA); those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); plants with California Rare Plant Ranks of 1B or 2 in the California Native Plant Society (CNPS) *Online Inventory of Rare and Endangered Vascular Plants of California* (8th Edition); animals designated as

Scale: 1" = 100'

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LEGEND:

- Riparian Woodland
- Oak Trees
- Coyote Brush
- Annual Grassland
- Ruderal Field
- Project Area
- Parcel Boundary

Vegetation Types
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 3/13

Figure 2

"Species of Special Concern" by the CDFW; birds protected under the Migratory Bird Treaty Act.

The CNDDB was queried for occurrences of special status species in the vicinity of the project site (Dublin, Niles, Livermore, La Costa Valley, 7.5 minute quadrangles)(Figure 3). We also searched the CNPS Online Inventory for special status plants that have the potential to occur in the general vicinity and reviewed the East Alameda County Conservation Strategy (EACCS) for information on special status species in this portion of the County. Table 1 lists all the plant and animal species evaluated for their potential to occur on the site and selected species are discussed further below.

2.3.1 Plants

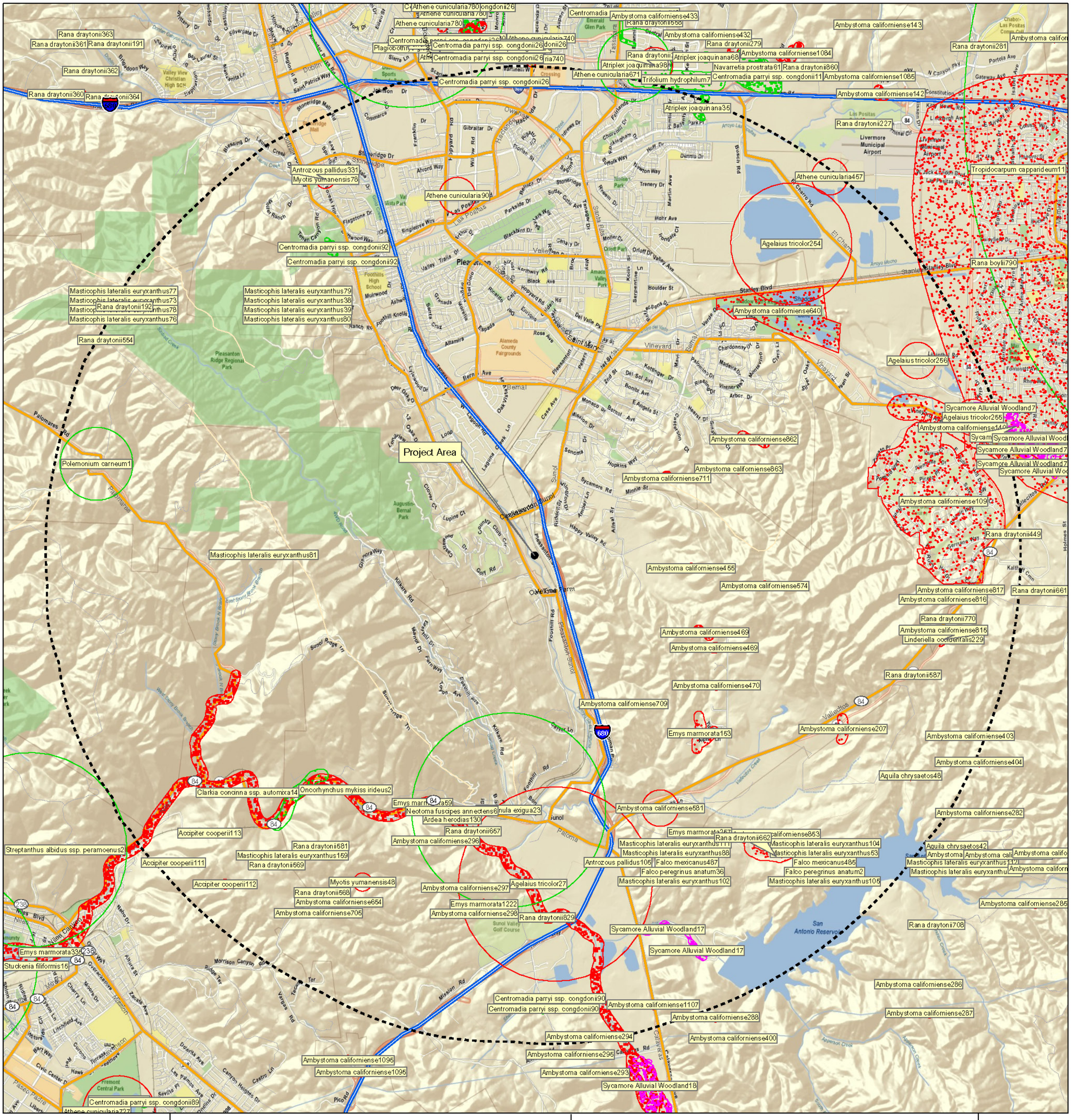
It is unlikely that any special status plants inhabit the project area due to the amount of disturbance and the dominance of non-native invasive species such as yellow star thistle and stinkweed or the thick, almost impenetrable stands of hemlock. Most of the special status plants known from this area of Alameda County are typically found in habitats not present on the site. However, there are four species found in more generalized habitats that cannot be definitively dismissed without appropriately-timed surveys during the blooming period. These species include: bent-flowered fiddleneck (*Amsinckia lunaris*), big-scale balsamroot (*Balsamorhiza macrolepis*), Diablo helianthella (*Helianthella castanea*), and royal Jacob's ladder (*Polemonium carneum*). All of these species can typically be identified in April.

2.3.2 Animals

There are several special status animal species that are known to occur within a five-mile radius of the project area and have the potential to use habitats in the vicinity. Steelhead trout are known to occur in the Alameda Creek watershed but downstream barriers in the Arroyo de la Laguna may preclude this species from inhabiting the reach of the Arroyo nearby the project site. Even if present, no project facilities are planned within the Arroyo or within 100 feet of the top of bank. Other species known from this portion of Alameda County warranting further discussion are addressed below.

Callippe Silverspot Butterfly (*Speyeria callippe callippe*). Federal Status – Endangered; State Status – None. The callippe silverspot is endemic to the San Francisco Bay area and is best known from San Bruno Mountain in San Mateo County. Historically, populations occurred on the west side of San Francisco Bay from Twin Peaks in San Francisco to the vicinity of La Honda in San Mateo County (Arnold 2008). In the East Bay, populations were known from northwestern Contra Costa County southward to the Castro Valley area of Alameda County (Arnold 2008). The callippe silverspot butterfly occurs in grasslands where its sole larval food plant, johnny jump-up (*Viola pedunculata*), grows. It has been observed in both grazed and ungrazed grasslands. The callippe silverspot butterfly occurs in hilly terrain with a mixture of topographic relief. Adults will visit the margins of oak woodlands and riparian areas in search of nectar, as well as disturbed areas if favored nectar plants grow there (Arnold 1981). The three primary habitat requirements of the callippe silverspot butterfly are:

- grasslands supporting its larval food plants;
- hilltops near suitable habitat for mate location; and



Zander Associates
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San Rafael, CA 94903

Legend

5 Mile Radius

N

0 0.25 0.5 1 Miles

California Natural Diversity Database
5 Mile Radius
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 2/13

Figure
3

Table 1: Special Status Plant and Animal Species Evaluated for Potential to Occur in the Proposed Practice Area at Castlewood Country Club[1]

Plant Species	Status[2] Fed/CA/CNPS	Lifeform/Habitat/Blooming Period	Findings[3]
Amsinckia lunaris Bent-flowered fiddleneck	--/--/1B.2	Annual herb. Coastal bluff scrub, cismontane woodland, and valley and foothill grassland; March-June.	Low potential to occur in project area. Habitat marginal
Atriplex cordulata var. cordulata Heartscale	--/--/1B.2	Annual herb. Shadscale scrub, valley and foothill grassland on alkaline flats and scalds, sandy soils: March – October.	Unlikely to occur in project area. No suitable habitat.
Atriplex depressa Brittlescale	--/--/1B.2	Annual herb. Shadscale scrub, meadows and sinks, playas, valley and foothill grasslands, and alkaline vernal pools with clay substrate; April – October.	Unlikely to occur in project area. No suitable habitat.
Atriplex joaquiniana San Joaquin spearscale	--/--/1B.2	Annual herb. Shadscale scrub, meadows and sinks, playas, valley and foothill grassland in alkaline soils; April – September.	Unlikely to occur in project area. No suitable habitat.
Atriplex miniscula Lesser saltscale	--/--/1B.1	Annual herb. Shadscale scrub, meadows and sinks, playas, valley and foothill grassland in alkaline soils; May – October.	Unlikely to occur in project area. No suitable habitat.
Balsamorhiza macrolepis Big-scale balsamroot	--/--/1B.2	Perennial herb. Chaparral, cismontane woodland and valley and foothill grasslands, sometimes in serpentine outcrops; March – June.	Low potential to occur in project area. Habitat marginal
Blepharizonia plumosa Big tarplant	--/--/1B.1	Annual herb. Dry hills and plains in annual grassland, clay to clay-loam soils; usually on slopes an often in burned areas; July – October.	Unlikely to occur in project area. No suitable habitat.
Campanula exigua Chaparral harebell	--/--/1B.2	Annual herb. Chaparral, in rocky, usually serpentine soils; May – June.	Unlikely to occur in project area. No suitable habitat.
Centromadia parryi ssp congdonii Congdon's tarplant	--/--/1B.1	Annual herb. Valley and foothill grasslands in alkaline soils; June – November.	Unlikely to occur in project area. No suitable habitat.
Helianthella castanea Diablo helianthella	--/--/1B.2	Perennial herb. Chaparral, foothill woodland, northern coastal scrub, valley grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils; March – June.	Low potential to occur in project area. Habitat marginal
Navarretia prostrata Prostrate navarretia	--/--/1B.1	Annual herb. Vernal pools, seasonal wetlands in coastal sage scrub; April – July.	Unlikely to occur in project area. No suitable habitat.
Plagiobothrys glaber Hairless popcorn flower	--/--/1A	Annual herb. Meadows and seeps, marshes and swamps, coastal salt marshes and alkaline meadows; March – May.	Unlikely to occur in project area. No suitable habitat.

Table 1 Continued

Plant Species	Status[2] Fed/CA/CNPS	Lifeform/Habitat/Blooming Period	Findings[3]
Polemonium carneum Royal Jacob's ladder	--/--/2.2	Perennial herb. Coastal prairie, coastal scrub, and lower montane coniferous forest; April - September.	Low potential to occur in project area. Habitat marginal
Streptanthus albidus ssp peramoenus Most beautiful jewelflower	--/--/1B.2	Annual herb. Chaparral, cismontane woodland, and valley and foothill grasslands in serpentine soils on ridges and slopes; April – September.	Unlikely to occur in project area. No suitable habitat.
Stuckenia filiformis Slender-leaved pondweed	--/--/2.2	Perennial rhizome. Freshwater marshes and swamps; shallow clear water of lakes and drainage channels; May – July.	Unlikely to occur in project area. No suitable habitat.
Trifolium hydrophilum Saline clover	--/--/1B.2	Annual herb. Marshes and swamps, valley and foothill grassland (mesic or alkaline soils), and vernal pools; April – June.	Unlikely to occur in project area. No suitable habitat.
Animal Species	**Status[2] Fed/CA**	**Habitat**	**Findings[3]**
Speyeria callippe callippe Callippe silverspot butterfly	E/--	Endemic to the San Francisco Bay area. Best known from San Bruno Mountain but historic occurrences in Alameda County. Occurs in grasslands where its sole larval food plant, johnny jump-up (*Viola pedunculata*), grows.	No larval foodplants found in project area. Unlikely to occur in project area.
Oncorhynchus mykiss irideus Steelhead Central California Coast DPS	T/--	Coastal basins from the Russian River south to Soquel Creek.	Downstream barriers may preclude presence but habitat in Arroyo de la Laguna projected to be suitable.
Ambystoma californiense California tiger salamander	T/T	Breeds in vernal pools, swales, drainages, and ponds. Aestivates in burrows and other moist retreats in grassland, savanna, and fields.	No suitable breeding habitat in the project area or within dispersaldistance without substantial barriers. Not likely to occur in the project area.
Rana draytonii California red-legged frog	T/SSC	Lowlands and foothills in or near permanent sources of deep water, preferring shorelines with extensive vegetation (disperses far during and after rain); larvae require 11-12 weeks of permanent water to develop	No suitable habitat in the project area. Additional surveys recommended to confirm status in reach of Arroyo nearby.
Rana boylii Foothill yellow-legged frog	--/SSC	Partially shaded, shallow streams and riffles with a rocky substrate in a variety of habitats; need at least some cobble-sized substrate for egg-laying; need at least 15 weeks to attain metamorphosis	No CNDDB records in Arroyo. Not likely to occur in project area.

Table 1 Continued

Plant Species	Status[2] Fed/CA/CNPS	Habitat	Findings[3]
Emys marmorata Western pond turtle	--/SSC	Associated with permanent or nearly permanent water in a wide variety of habitats	Could occur in Arroyo but no CNDDB records. Found near Alameda Creek, 1 mile west of Sunol. If in Arroyo, could disperse to project area for nesting.
Masticophis lateralis euryxanthus Alameda whipsnake	T/T	Frequently found in chaparral, Diablan sage scrub, northern coyote brush scrub, and riparian scrub, but also uses mosaic of adjacent habitats including oak woodland, grassland (grazed and ungrazed), riparian, and mixed evergreen forest.	Several recorded occurrences within 5 miles and designated Critical Habitat nearby but substantial barriers between these areas and project site. No suitable habitat in project area, unlikely to occur.
Ardea spp and Egretts thula Great egret, great blue heron, snowy egret (nesting colonies)	--/--	These birds nest in colonies in large trees nearby feeding areas; ponds, marshes, mudflats. The nests are large and typically a platform of sticks placed at least 1 to 2m above ground to avoid predators. Sensitive to human disturbance during breeding/nesting season (February through May).	No nests or evidence of nesting (pruned/cleaned trees, broken egg shells) observed in or below trees in project area.
Aquila chrysaetos Golden eagle *(*nesting and nonbreeding wintering)	--/FP	Rolling foothills, mountain areas, sage-juniper flats and desert.	Unlikely to forage in project area. No known nests in the vicinity, habitat not suitable.
Falco peregrinus anatum American peregrine falcon (nesting)	--/FP	Near wetlands, lakes, rivers or other water; on cliffs, banks, dunes, mounds. Also human-made structures. Nest consists of a scrap on a depression or ledge in an open site.	Unlikely to nest or forage in project area.
Athene cunicularia California burrowing owl	--/SSC	Ground nester in open dry annual or perennial grasslands, deserts and scrublands with low-growing vegetation, dependent upon burrowing mammals (i.e. California ground squirrel)	Unlikely to occur in project area. No owls or evidence of owl use found during site survey.
Agelaius tricolor Tricolored blackbird	--/SSC	Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats	No suitable habitat in project area.
Antrozous pallidus Pallid bat	--/SSC	Variety of habitats including all types of woodlands. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees and various human structures.	Suitable roosting sites in riparian and oak woodlands along the Arroyo
Vulpes macrotis mutica San Joaquin kit fox	E/T	Occurs in grasslands, scrublands, vernal pool areas, alkali meadows and playas, and an agricultural matrix of row crops, irrigated pastures, orchards, vineyards, and grazed annual grasslands	Unlikely to occur in project area. Substantial barriers (I-680, Hwy 85) between site and core habitat. Site surrounded by development.

Table 1 Continued

Plant Species	Status[2] Fed/CA/CNPS	Habitat	Findings[3]
Taxidea taxus American badger	--/SSC	Principal habitat requirements include sufficient food, friable soils, and relatively open, uncultivated ground. Grasslands, savannas, and mountain meadows near timberline are preferred. Prey primarily consists of burrowing rodents such as gophers, ground squirrels, marmots, and kangaroo rats.	Unlikely to occur in project area due to marginal habitat and human disturbance.

1. Species list developed from a query of the CNDDB (Dublin, Niles, Livermore, and La Costa Valley USGS 7.5 Minute quadrangles), and review of CNPS lists for Alameda County.

2. Status Explanations

Federal (Fed):

E Listed as endangered under the federal Endangered Species Act
T Listed as threatened under the federal Endangered Species Act
-- No designation.

California State (CA):

E Listed as endangered under the California Endangered Species Act
T Listed as threatened under the California Endangered Species Act
SSC California Department of Fish and Game species of special concern
FP Fully Protected
-- No designation

California Native Plant Society (CNPS):

1A Presumed extinct in California
1B Rare, threatened or endangered in California and elsewhere
2 Rare, threatened or endangered in California but common elsewhere

Threat Rank

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

3. Findings based on knowledge of species habitat requirements, evaluation of existing habitats in project area, and January 2013 site reconnaissance.

- nectar plants, which can occur in grasslands or nearby oak woodlands, riparian areas, or disturbed areas. Nectar plants include mints, especially *Monardella*, and thistles, such as *Silybum*, *Carduus*, and *Cirsium*, and buckeye trees.

There are no CNDDB occurrences of callippe silverspot in Alameda County (CNDDB 2013), but there have been records in the hills near Pleasanton, although these populations have not been taxonomically verified (USFWS 2009). The EACCS modeled potential habitat for the callippe silverspot butterfly based on suitable grassland habitat and previously published ranges. The project area is included in this modeled habitat. Since there are no occurrence data to corroborate this model, the EACCS recommends that any potential habitat shown be surveyed for the presence of host plants, and if found, then for the presence of the butterfly to determine whether an area provides habitat for the species. The larval foodplant, johnny jump-up is a perennial herb that typically blooms February through March, however, the distinctive foliage would be identifiable in late January, when we conducted our field survey. No plants of the species *Viola* were observed in the project area during our survey. This coupled with the fact that the subspecies has not been verified as occurring in Alameda County makes it unlikely that callippe silverspot would be found in the project area.

California Tiger Salamander (*Ambystoma californiense*). **Federal Listing Status: Threatened; State Listing Status: Threatened**. California tiger salamanders (CTS) are large (up to 8 inches in length), stocky, terrestrial salamanders. They usually have several white or pale yellow spots or bars on a black dorsal surface, and a lighter ventral side. During summer months, CTS aestivate in subterranean refuge sites, usually small mammal burrows, but also crevices in the soil. After winter rains have moistened the ground, the salamanders emerge from their refugia and migrate to breeding pools. Breeding pools are usually seasonal, but they must remain ponded long enough for metamorphosis to occur. Permanent ponds are also used for breeding, but such ponds may contain predators such as fish and bullfrogs, which can consume eggs and larvae and prevent successful breeding. Adults are known to move one mile or more between aestivation sites and breeding pools. Juveniles may wander and forage for even longer distances. Presence of CTS is most readily determined by springtime pond surveys for larvae or by rainy season nighttime observations and pitfall trap/drift fence arrays.

The California tiger salamander was listed as threatened by the USFWS in July 2004. The California Fish and Game Commission voted on March 3, 2010 to list CTS as threatened in California, subject to protection under the CESA. The USFWS designated Critical Habitat for the Central Population of CTS in August 2005. No portion of the property is within this designated Critical Habitat.

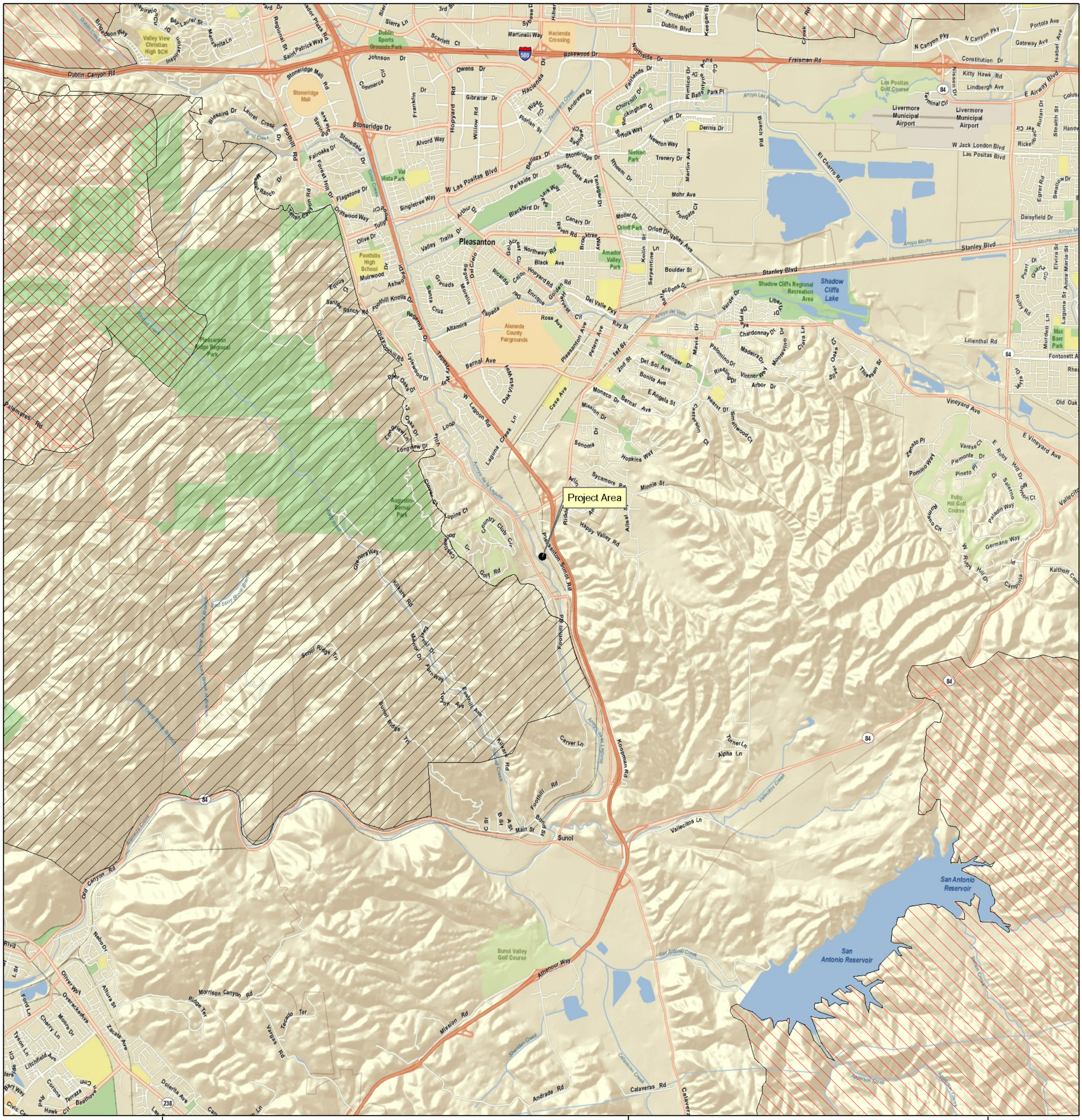
California tiger salamanders have been documented at several locations within the known movement distance of the species (1.3 miles). However, there are significant migratory barriers between these locations and the site, including I-680, Hwy 84, and urban development. There is no suitable breeding for CTS in the project area and there are no documented occurrences of CTS within barrier-free dispersal distance. The amount of ground disturbance and absence of small mammal burrows in the project area reduces its potential as suitable upland habitat for CTS. Due to the lack of suitable breeding habitat, marginal upland habitat, and presence of significant migratory barriers between the site and known breeding locations, it is unlikely CTS would be found in the project area.

California Red-legged Frog (*Rana draytonii*). Federal Status - Threatened; State Status - Species of Special Concern. The California red-legged frog (CRLF) is a medium-sized frog that is relatively common in the San Francisco Bay Area and along the central coast. It uses a variety of habitat types; including various aquatic systems as well as riparian and upland habitats (USFWS 2002a). CRLFs inhabit marshes; streams; lakes; ponds; and other, usually permanent, sources of water that have dense riparian vegetation (Stebbins 2003). They prefer deep (more than 3 ft deep), calm pools in creeks, rivers, or lakes below 4,500 ft in elevation. Habitat requirements include fresh emergent or dense riparian vegetation, especially willows or emergent vegetation adjacent to shorelines. Frogs may aestivate in a variety of habitats, including small mammal burrows, beneath leaf litter, in trees and logs that have fallen on the ground, inside pipes. The species also utilizes non-aquatic habitats for refuge and dispersal. CRLFs are known to rest and feed within riparian vegetation and it is believed that the moisture and cover of the riparian zone provides foraging habitat and facilitates dispersal. CRLF often disperse from their breeding habitat to utilize various aquatic, riparian, and upland aestivation habitats in the summer, however, it is also common for individuals to remain in the breeding area on a year-round basis. CRLF have been found to disperse over 1.8 miles from breeding sites and can be found up to 300 feet away from aquatic habitats, though they typically remain within 200 feet of water.

The U.S. Fish and Wildlife Service (USFWS) listed southern populations of the CRLF as threatened in 1996, due to continued habitat degradation throughout the species' range, and population declines. Critical Habitat was designated for the CRLF in 2001, but was rescinded in 2002; Critical Habitat was then re-designated in April 2006. On September 16, 2008, the USFWS issued a Proposed Rule to once again revise the critical habitat designation for CRLF and a Final Rule was issued March 17, 2010. No portion of the Project site is within the areas designated as Critical Habitat in the 2010 Final Rule (Figure 4).

Several occurrences of CRLF are recorded within a five-mile radius of the project site (Figure 3). There is no suitable CRLF breeding habitat on the site and there are no records of CRLF in the Arroyo de la Laguna. Although there is a record from Alameda Creek in Sunol Valley downstream of the confluence with San Antonio Creek, no CRLFs were encountered by biological monitors during recent dewatering efforts in the Arroyo de la Laguna for the Verona Road Bridge Project, which is just downstream from the project area (ACRCD, 2012). Nevertheless, the Arroyo de la Laguna is considered potential habitat for CRLF. Even if CRLF were present in the portion of the Arroyo nearby the property, it is unlikely they would disperse into the project area due to the lack of suitable habitat and disturbed nature of the site.

Western Pond Turtle (*Emys marmorata*). Federal Status – None; State Status – Species of Special Concern. The western pond turtle (WPT) occurs throughout California in permanent or nearly permanent water bodies, including streams, with suitable refuges, basking sites, and nesting sites. Refuge sites can be submerged logs or rocks or mats of floating vegetation. Basking sites can be partially submerged rocks or logs, as well as shallow-sloping banks with little or no cover. WPT constructs nests in sandy banks if present, or in soils up to 100 meters away from aquatic habitat and at least ten centimeters deep. The nests must have a relatively



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Legend

- 5 Mile Radius
- Alameda Whipsnake Critical Habitat
- California Red-legged Frog Critical Habitat

N

0 0.25 0.5 1 Miles

Critical Habitat within a 5 Mile Radius
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 3/13

Figure
4

high humidity in order for the hatchlings to avoid desiccation. WPT eats a variety of organisms, including aquatic plants, beetles, fish, and frogs.

There are no recorded occurrences of WPT in the Arroyo de la Laguna and the species was not encountered during recent dewatering efforts for the Verona Road Bridge Project just downstream (ACRCD 2012). A WPT was found in Alameda Creek, about one mile west of Sunol in 2006 (CNDDB 2013). If WPT inhabit the reach of the Arroyo de la Laguna adjacent to the project area, they could move into the site to nest. However, due to the level of disturbance and nature of the soils over most of the site (compacted), and the availability of more suitable habitat nearer to the Arroyo, it seems unlikely that WPT would nest in the project area. Nevertheless, that potential cannot be completely dismissed.

Alameda Whipsnake (*Masticophis lateralis euryxanthus*). Federal Status - Threatened; State Status – Threatened. Alameda whipsnake (AWS) is a slender, fast-moving, diurnal snake with a narrow neck and relatively broad head. The dorsal color is sooty-black with relatively wide, yellow-orange dorso-lateral stripes. The anterior portion of the stripes and ventral surface of the snake are typically heavily pigmented with orange-rufous coloration. Adults reach up to five feet in length (Swaim 1994, Stebbins 2003). AWS are most frequently found in chaparral, Diablan sage scrub, northern coyote brush scrub, and riparian scrub, but also uses the mosaic of adjacent habitats in Alameda and Contra Costa Counties, including oak woodland, grassland (grazed and ungrazed), riparian, and mixed evergreen forest. Swaim (1994) found that the home ranges of six radio-telemetry transmitter equipped AWS were centered on scrub communities with a high degree of spatial overlap and core areas (areas of concentrated use) consisted of open or partially open canopy shrub communities on east, southeast, south, and southwest facing slopes, or in nearby grassland habitats that were within 500 feet of scrub with similar aspects. Rock outcrops, which were abundant in core areas, provide protective cover and retreats for snakes and are associated with high densities of lizards, a major prey item of the AWS (Swaim 1994, Stebbins 2003).

The project area is located entirely outside of areas designated as Critical Habitat for the AWS (Figure 4) by the US Fish and Wildlife Service (2006) and outside of the boundaries of the Recovery Units for the AWS (USFWS 2002b). There are however several recorded occurrences within a five-mile radius and designated Critical Habitat is very nearby. But the project area is separated from known occupied habitat to the west by residential development, Foothill Road, and the Arroyo de la Laguna.

Karen Swaim of Swaim Biological, Inc. conducted a reconnaissance survey of the property on March 4, 2013. Karen concluded that the site does not provide suitable habitat for AWS. Therefore, given the quality of the habitat, level of site disturbance, and isolated nature of the area from known occupied habitat, it is unlikely that AWS would be found in the project area.

Pallid Bat (*Antrozous pallidus*). Federal Status – None; State Status – Species of Special Concern. The pallid bat occurs in a variety of habitats including all types of woodland especially oak savanna, grassland, riparian areas and wetlands, orchards, vineyards, and cropland if appropriate roosting sites are available. The pallid bat roosts both during the day and at night, spending 60-80% of a 24-hour cycle in the roost environment. During the day this species

shelters inside crevices or cavities found in natural features such as trees, cliffs, caves and rocky outcrops, and in man-made features such as barns, bridges, mines and attics. Night roosts are usually separate from day roosts and are often structurally more open but warmer than ambient temperatures and protected from wind. Night roosts are commonly located under bridges and overhanging porches, and inside barns. The CNDDB has a record of several males observed exiting from a bridge roost near Foothill Road and Gold Creek. The large trees found in the Arroyo de la Laguna corridor could provide suitable roosting habitat for pallid bats.

2.2.3 Sensitive Habitats

Although the parcel in which the project is proposed includes portions of the Arroyo de la Laguna and associated riparian habitat, project facilities will not encroach into the creek channel or into the riparian habitat. The project area is set back a minimum of 100 feet from the top of bank specifically to protect the riparian resource.

The National Wetlands Inventory maps four relatively large excavated freshwater ponds on the parcel. There is currently no evidence of these ponds on the property and according to the project applicant the ponds were likely mapped when the site was used for quarrying. A review of available historic aerial photographs shows no signs of these ponds on the property dating back to 1993. During our January survey, we did not observe any areas with a predominance of wetland vegetation or indicators of surface ponding or soil saturation (e.g. cracked soils, algal matting, vegetation matting) in the project area.

3.0 ASSESSMENT

The assessment of potential effects on biological resources is based on the revised Grading Plan for the Proposed Practice Area received March 5, 2013 from Jim Templeton, MacKay and Somps Engineering (Figure 5), and descriptions of project components provided by Jim Templeton and Neal Meagher, Golf Course Architect, via email correspondence.

3.1 Project Description

The proposed project consists of construction of a golf course practice area with tees, a fairway, sand bunkers and greens. It will include: two retention basins along the eastern boundary to capture excess irrigation; a cart path turn around and parking area; a gravel-surfaced maintenance road running along the eastern boundary parallel to the railroad track. The perimeter of the fairway will be landscaped with a mixture of native and non-native tree and shrub species. All of these features will be contained within an approximate 7.6 acre area.

3.2 Discussion of Potential Project Effects

The project will convert approximately 7.6 acres of mostly disturbed habitat to a manicured golf course landscape. It will remove approximately 0.5 acre of coyote brush scrub but all existing oak trees along the western boundary and a few individual trees within the fairway area will be maintained. Some oak trees may be removed along the eastern boundary to accommodate construction of the maintenance road paralleling the railroad track. No wetland or riparian habitats will be affected by the project.

Scale: 1" = 100'

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LEGEND:

- Site Plan
- Grading Plan
- Creek Setback
- Project Area
- Parcel Boundary

Grading Plan
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 3/13

Figure
5

Conversion of mostly disturbed habitat is not expected to result in a substantial adverse change in the physical conditions which exist in the project area. The ruderal vegetation will be converted to manicured lawn but the site will remain free from barriers that might keep animals from moving through the area. The removal of coyote brush scrub could displace some native wildlife but there is more of this habitat type in the vicinity, toward the Arroyo, and opportunity to replant additional coyote brush on golf course property just outside the project area. The oak trees to be removed can also be replaced through replanting efforts and there are numerous oaks along the railroad track and the Arroyo that will remain and continue to provide habitat for local wildlife.

No special status plant species are expected to occur in the project area. All but four of the plants considered are found in habitats not present on the site. The presence/absence of the four species found in more generalized habitats can be confirmed through appropriately-timed surveys during the blooming period; an April survey would address all species in this case. None of these plants is federally or state listed so if found, they can be salvaged and relocated outside of the project area without any required authorization.

There are two special status animal species that if found to use habitats in the vicinity, could possibly disperse through the project area. One of these species is federally listed; California red-legged frog, and the other, western pond turtle, is a California Species of Special Concern. It is unlikely that either the California tiger salamander or Alameda whipsnake would be found on the property due to the lack of suitable habitat, level of site disturbance, and isolated nature of the area from known occupied habitat. There are potential nesting sites for birds-of-prey and other migratory birds in the large trees in and around the project area and bats could roost in the trees lining the Arroyo. Further discussion of potential project effects on specific animals follows.

Red-legged frog: The project will not encroach into the riparian corridor along the Arroyo and therefore will not substantially reduce the extent of potential breeding or dispersal habitat for CRLF. There is no suitable breeding habitat for CRLF in the project area. The project will also not erect barriers that would prevent movement of dispersing frogs once construction is complete. However, if CRLF were found in the portion of the Arroyo nearby the project area, individual frogs could disperse into the project area during construction which could result in potential take. Because CRLF is a federally listed species, it is protected under the Federal Endangered Species Act (ESA). As a fundamental element of this protection, Section 9 of the ESA prohibits killing, harming, or otherwise "taking" listed animal species. Taking includes destruction or significant alteration of habitat such that it actually kills or injures listed animals. While the conversion of disturbed habitat to maintained turf may not have an adverse effect on CRLF if present in the area, especially since dispersal habitat along the riparian corridor of the Arroyo will remain unaffected, any take of individual animals during construction would be prohibited under Section 9 of the ESA.

Western pond turtle: The WPT could nest in the project area if it is present in the reach of the Arroyo nearby. Conversion of this potential habitat to maintained turf would not substantially reduce the amount of suitable nesting sites for WPT in the vicinity and therefore would not have an adverse effect on the species. However, individual WPT could be harmed if an active nest is

present in the project area during construction activities. Although Species of Special Concern is an administrative designation and carries no formal legal status, impacts to these species are typically considered through the project environmental review.

Pallid bat: The pallid bat could roost in large trees associated with the woodland areas along the Arroyo. The project does not include the removal of any of these trees or disturbance of the riparian woodland habitat. The smaller oak trees along the eastern property boundary that may be removed for construction of the maintenance road do not provide suitable roost sites for pallid bat. Therefore, it is not expected that roosting bats would be disturbed during construction of the project.

Migratory birds: Active nests of migratory birds are protected under the Migratory Bird Treaty Act and the California Fish and Game Code. The Migratory Bird Treaty Act (16 USC 703) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Most native bird species within the vicinity of the project area are covered by this act. The California Fish and Game Code (Section 3511) also provides protection for certain species as listed in the Section. Section 3503.5 of the Fish and Game Code specifically protects the nests and eggs of birds-of-prey and essentially overlaps with the Migratory Bird Treaty Act. If there is an active nest in any of the trees in the vicinity at the time of construction, there is a potential that construction activities would disturb the birds resulting in abandonment of the nest, which would not comply with the MBTA or Fish and Game Code.

4.0 RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES

4.1 Special Status Plants

Conduct appropriately-timed surveys (April-May) to confirm the presence/absence of the four special status plant species typically found in more generalized habitats; bent-flowered fiddleneck (*Amsinckia lunaris*), big-scale balsamroot (*Balsamorhiza macrolepis*), Diablo helianthella (*Helianthella castanea*), and royal Jacob's ladder (*Polemonium carneum*). If found in the project area, salvage and relocate outside of the area of disturbance.

4.2 Special Status Animals

The following measures are recommended to prevent potential harm to specific special status animals during construction of the project. They are consistent with the generalized and species-specific avoidance and minimization measures provided in the EACCC (Table 3-2 and Table 3-3 in the Conservation Strategy).

California red-legged frog

Additional surveys will be conducted in March/April to confirm the presence/absence of CRLF in the nearby reach of the Arroyo de la Laguna. These surveys will target sightings of individual

animals as well as egg masses along the waterway. If evidence of CRLF is found in the nearby Arroyo, the following construction-related measures are recommended:

1. Schedule project construction activities between April 1 and November 1.
2. Have a qualified biologist survey the project area 24 hours prior to the onset of construction activities. If CRLFs are found, the qualified biologist should contact USFWS to determine the appropriate course of action. Construction activities should not recommence until authorization to proceed has been issued by USFWS. If no CRLFs are found, then Measure #3 should be implemented and construction can proceed.
3. Exclusionary fencing should be installed around the boundary of the construction zone immediately following completion of the pre-construction survey. The fencing should be sufficient to keep frogs from moving into this zone and to restrict construction equipment from moving beyond the designated work area.
4. The qualified biologist should train all construction personnel in the identification of CRLF and the required protocol in the event that any animals are encountered during construction activities. At a minimum, the training should include photographs of the CRLF, a description of its habitat, description of the general protection measures being implemented during construction, and discussion of the penalties for not complying with the protection measures.
5. The qualified biologist should conduct a pre-construction survey within the area to be disturbed prior to the start of daily construction activities. If any CRLFs are found during theses surveys or during construction, all construction activities should cease and USFWS should be notified.
6. To prevent inadvertent entrapment of CRLFs, all excavated steep walled holes or trenches should be covered at the end of each workday with plywood or similar materials. If this is not possible, one or more escape ramps constructed of earth fill or wooden planks should be established in the hole. Before such holes or trenches are filled, they will be thoroughly inspected for animals.
7. Avoid storage of any pipes measuring 10 cm (4 in) or greater in diameter at the site, or seal the ends of any such pipes with tape as they are brought to the site to prevent CRLF from entering and becoming trapped in pipes.
8. During construction, all trash that may attract predators should be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris should be removed from work areas.

<u>Western pond turtle</u>

Measures #1 - #8 above can be adapted to protect WPT during construction activities. Pre-construction surveys for WPT should be conducted 48 hours prior to construction. In the event any WPT are found, the California Department of Fish and Wildlife should be consulted regarding relocation procedures.

<u>Nesting birds</u>

If construction activities are initiated after August 1 and before January 15 (outside of the typical nesting season for the birds-of-prey and migratory birds that may nest in the project area), then pre-construction surveys for active nests should not be necessary. If activities are initiated

before August or after January, then pre-construction surveys for active nests within a certain radius of proposed activities are recommended. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then a no-disturbance buffer zone should be created around the nest until the young have fledged as determined through monitoring. The size of the buffer zone and types of construction activities to be restricted within the zone will be determined through consultation with the CDFW. Once the young have fledged, the buffer zone can be abandoned and construction activities can resume in the vicinity.

Pallid Bat

If any large trees along the edge of the project area bordering the Arroyo are proposed for removal, a qualified wildlife biologist should conduct a focused survey for roosting Pallid bats no more than 14 days prior to the anticipated date of tree removal. Trees that contain cavities should be thoroughly investigated for evidence of bat activity. If Pallid bats are found, the tree should not be removed until a qualified biologist can assure that the bats have vacated the roost.

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U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm),

Attachment C:

Zander Letter Report

ZANDER ASSOCIATES

Environmental Consultants

April 29, 2013

Martin Inderbitzen
Attorney at Law
P.O. Box 1537
Pleasanton, CA 94566

Special Status Plant Survey
Proposed Practice Area
Castlewood Country Club, Alameda County

Dear Marty:

Pursuant to the recommendations in our March 11, 2013 Biological Assessment for the proposed Practice Area at the Castlewood Country Club, Zander Associates has completed a survey to confirm the presence/absence of four special-status plant species in the project area; bent-flowered fiddleneck (*Amsinckia lunaris*), big-scale balsamroot (*Balsamorhiza macrolepis*), Diablo helianthella (*Helianthella castanea*), and royal Jacob's ladder (*Polemonium carneum*). This letter provides the results of our survey.

The proposed Practice Area is situated within a 10.4-acre parcel in the southeastern portion of the Castlewood Country Club property; south of Castlewood Drive and between the Union Pacific Railway tracks and the Arroyo de la Laguna. This portion of the property is currently used for golf course maintenance activities that include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. As a result of these activities, there are dirt access roads and areas of topsoil disturbance throughout the parcel.

The project area was surveyed April 25, 2013, which coincides with the blooming period for all four of the targeted species. Systematic transects were walked through the entire 10.4-acre parcel and all plants encountered were either identified to species in the field or collected for later identification in the laboratory. A list of the herbaceous species found on the site during our survey is provided in the attached table.

None of the special status plant species targeted in our survey were found in the project area. The majority of herbaceous plants encountered were non-native species typically found in disturbed habitats and the site contains several dense stands of invasive weeds such as hemlock (*Conium maculatum*), star thistle (*Centaurea solstitialits*), and stinkweed (*Dittrichia graveolens*) throughout the site. Our April 25, 2013 survey results confirmed the absence of bent-flowered fiddleneck, big-scale balsamroot, Diablo helianthella, and royal Jacob's ladder, in the project

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area. Therefore, based on our previous biological assessment and the results of this survey, we conclude that the project area does not contain any special status plant species.

Should you have any questions regarding the results of our survey, please don't hesitate to call me.

Sincerely,

Leslie Zander
Principal Biologist

Attachment: Herbaceous Plant Species Encountered During April 25, 2013 Survey of the Proposed Practice Area for the Castlewood Country Club.

Herbaceous Plant Species Encountered During April 25, 2013 Survey of the Proposed Practice Area for the Castlewood Country Club

Scientific Name	**Common Name**
Anagallis arvensis	scarlet pimpernel
Avena barbata	wild oat
Brassica nigra	mustard
Bromus diandrus	ripgut brome
Bromus hordeaceus	soft chess
Convolvulus arvensis	bindweed
Carduus pycnocephalus	Italian thistle
Centaurea solstitialis	star thistle
Cirsium vulgare	bull thistle
Conium maculatum	hemlock
Cynodon dactylon	Bermudagrass
Dittrichia graveolens	stinkweed
Elymus glaucus	blue wild rye
Erodium cicutarium	redstem filaree
Eschscholzia californica	California poppy
Galium aparine	bedstraw
Geranium dissectum	geranium
Hirschfeldia incana	mustard
Hordeum jubatum	foxtail barley
Hordeum marinum ssp gussoneanum	Mediterranean barley
Hordeum murinum ssp leporinum	hare barley
Hypochaeris radicata	hairy cat's ear
Lactuca serriola	prickly lettuce
Lolium perenne	Italian ryegrass
Matricaria chamomilla	chamomile
Matricaria discoidea	pineapple weed
Medicago polymorpha	bur clover
Melilotus indicus	yellow sweet clover
Nicotiana acuminate var *multiflora*	many flower tobacco
Phalaris aquatica	Harding grass
Picris echioides	prickly ox tongue
Senecio vulgaris	common groundsel
Silybum marianum	milkthistle
Sisyrinchium bellum	blue-eyed grass
Sonchus oleraceus	sow-thistle
Spergularia rubra	sand spurry
Trifolium hirtum	rose clover

Attachment D:

Swaim Habitat Assessment

Swaim Biological Inc.
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(925) 455-6106 (fax)

April 26, 2013

Ms. Leslie Zander
Zander Associates
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RE: Results of Habitat Assessment for Special Status Reptiles and Amphibians at the Proposed Castlewood Practice Facility Project Site in Pleasanton, Alameda County, California.

Dear Leslie:

This letter presents the results of an assessment of the potential for special status reptile and amphibian species to occur on or in the vicinity of the proposed Castlewood Practice Facility Expansion project site in Pleasanton, Alameda County California (**Attachment A**). The specific target species for the assessment include the California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), Pacific pond turtle (Actinemys marmorata), and Alameda striped racer (=whipsnake) (*Masticophis lateralis euryxanthus*). The project site is within the range of all of these species with extant records in the vicinity.

In addition, an estimate of the level of risk that the project will result in direct take (mortality or injury leading to mortality) for these target species is provided based on the quality and quantity of potential species habitat at the specific project work site, access routes and the specific project activities that will take place. SBI Biologists Karen Swaim, Jeff Mitchell, Eric Britt and Cole Paris conducted the field reconnaissance and analysis for this project. Field analysis was limited to the project site and accessible surrounding potential aquatic habitat within dispersal distance of the target species.

The Alameda striped racer (ASR) and California tiger salamander (CTS) are State and Federally listed as threatened. The California red-legged frog (CRLF) is Federally listed as threatened and considered a Species of Special Concern by the State. Pacific pond turtle (PPT) is also a Species of Special Concern, but has not Federal status. The project site is not within designated critical habitat for any of the target species.

PROPOSED PROJECT

The proposed Practice Area is situated within a 10.4-acre parcel in the southeastern portion of the Castlewood Country Club property; south of Castlewood Drive and between the Union Pacific Railway tracks and the Arroyo de la Laguna. The project involves construction of a new

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practice facility on approximately 7.6 acres of a 10.4 acre parcel land, just south of the existing course. Within the 7.6 acres, there will be grading of land to construct a fairway, greens and sand traps (**Attachment B**). Arroyo de la Laguna, a permanent creek, is located within and near the western edge of the parcel and flows south to Alameda Creek in Niles Canyon. The project proposes to leave a minimum 100 foot set back from the top of bank and construct bio-retention basins will filter runoff from the turf areas.

The 10.4-acre parcel includes portions of the Arroyo de la Laguna and associated riparian woodland as well as stands of oak trees and coyote brush scrub that occur along the top of bank. Most of this vegetation occurs outside of the 7.6-acre project area. Large valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*) and some willows (*Salix* sp.) comprise much of the canopy lining the east bank of the Arroyo in the parcel. Eastward of the trees is a line of dense coyote brush (*Baccharis pilularis* ssp *consanguinea*) that then opens up to the disturbed areas that are vegetated with stands of hemlock (*Conium maculatum*), star thistle (*Centaurea solstitialits*), and invasive stinkweed (*Dittrichia graveolens*). Oak trees are also present along portions of the eastern parcel boundary.

The majority of the 7.6 acres to be converted to the practice facility is currently used for golf course maintenance activities that include green waste composting, rock and wood debris storage, soil and sand storage, and a turf field. All of these activities take place on the relatively flat terrace eastward of the top of bank of the Arroyo de la Laguna. As a result of these activities, there are dirt access roads and areas of topsoil disturbance throughout the parcel. The parcel includes portions of the Arroyo de la Laguna and its associated riparian habitat. In some areas, the banks of the Arroyo de la Laguna are near vertical slopes that rise approximately 30 feet from the active channel to the top of bank. In other areas, there is a relatively broad primary terrace between the active channel and the top of bank.

METHODS

Pre-field Locality Data Review

Swaim Biological, Inc. (SBI) conducted a desktop analysis to determine habitat types, proximity to known records for each target species, and distance to the nearest potential breeding habitat for amphibians. SBI accessed the California Natural Diversity Database (CNDDB) and museum records for locality data. SBI also researched the availability of unpublished field survey data (both negative and positive) for these species by contacting the local land managers (East Bay Regional Parks District [EBRPD] and State Parks) and by searching the internet (City and County Planning websites) for unpublished survey reports to determine how close the project area is to localities for each species. In order to determine if nearby records are potentially extant, Swaim Biological, Inc. used Google Earth Pro to review aerial photographs from multiple years. This allowed us to determine if a pond had been lost due to development or if it was only recently created or if other habitat had been impacted or lost at or near the work sites. The following paragraphs describe specific analysis conducted for each target species.

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Field Survey and Assessment of Site and Surrounding Habitats to Support Target Species

SBI Biologists conducted visual surveys of aquatic and upland habitats and field assessments of habitat conditions on the parcel and adjacent accessible properties during four day time field visits, two in March and two in April, 2013 (**Attachment C**). A night survey for CRLF was conducted on the accessible portions of Arroyo de la Laguna on the parcel and existing golf course and the water hazard features on the existing golf course by Karen Swaim and Cole Paris on April 9, 2013.

California Tiger Salamander and California Red-legged Frog

During the field visits in March and April, 2013, an assessment of the species' potential to occur at the project site. SBI biologist also made a reconnaissance level field visit to three nearby ponds in Pleasanton Ridge Regional Park that are within the dispersal distance for these species. Using the known dispersal distances of each species and the location of the nearest CNDDB records, we estimated the potential for the species to occur and level of risk that the project will result in direct take.

Alameda Striped Racer

In order to analyze the potential for ASR to be in the project area, we estimated the distance to the nearest high quality or "core type" habitat for the Alameda whipsnake based on aerial imagery and field visits to the project site and surrounding accessible lands in March and April of 2013. We also evaluated the level of connectivity between the core habitat areas and the site. Swaim (1994) defined core habitat as areas of concentrated use by AWS monitored via radio telemetry at two study sites in the East Bay. Swaim (1994) indicated core habitat consisted of chaparral and scrub type habitats and the nearby adjacent grasslands and open woodlands with an aspect ranging from approximately northeast through southwest. Swaim (1994) did not define all chaparral and scrub/brush habitat to be considered core areas.

Pacific Pond Turtle

During all field visits, SBI biologists scanned the aquatic features potential adjacent basking areas for turtles, including Arroyo de la Laguna and golf course hazards.

RESULTS AND POTENTIAL FOR OCCURANCE

The following section provides information for each of the target species' potential to be in the project area based on habitats present at the site and within three miles, locality data for each

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species and the level of connectivity between the site and documented occurrences or high quality habitat. In addition, a statement providing an estimate of the level of risk that specific actions in the project site will result in direct take (mortality or injury that could lead to mortality) of a target species, is provided.

California Tiger Salamander

No CTS were observed during any of the field surveys and no suitable breeding habitat is present on the site. Arroyo de la Laguna and the golf course water hazard features do not provide suitable breeding habitat for CTS. The project site does have upland habitat that contains small mammal burrows that CTS would potentially inhabit if within dispersal distance and connected to breeding sites. There are nine records of CTS breeding ponds found within three miles of the project site with the closest from a pond 1.5 miles to the east across I-680 (**Attachment D**). There are no records of CTS breeding in the area that are west of I-680 and north of Highway 84 (Niles Canyon Road) within two miles of the project site (CNDDB 2013).

The closest potential breeding habitats are three small ponds on EBRPD Property in Pleasanton Ridge Regional Park, just west of Foothill Rd. 0.61 miles to the south (**Attachment E and F**). One of the ponds had a breeding population of Pacific chorus Frogs (*Pseudracris regilla*) and California Newt (*Taricha torosa*) present during the site visit on March 18, 2013. There were numerous ground squirrels and burrows in the area, with which CTS shares a strong commensal relationship. These ponds are separated from the site by residential development and CTS have not been documented in the area, despite numerous surveys.

Although several potentially suitable breeding ponds are present in Pleasanton Ridge Regional Park, EBRPD amphibian surveys have not detected them in these areas in multiple surveys on-going for over a decade. There is no expectation that individual CTS move to the site from occupied habitat east of I-680 and the Union Pacific Railway Tracks or from occupied habitat south of Alameda Creek, Niles Canyon Road, and residential lots to the south of the project area. These man-made and natural deterrents and residential areas surrounding the project site likely prevent CTS dispersing from occupied breeding ponds to the site. The project is not expected result in any significant impact on CTS or their habitat.

California Red-legged frog

No CRLF were observed on the site or any of the aquatic habitats visually surveyed during this assessment. Arroyo de la Laguna and the golf course water hazard features do not provide suitable breeding habitat for CRLF. Arroyo de la Laguna experiences high velocity flow during rain events throughout the CRLF breeding season that would eliminate potential for successful breeding. During the night surveys of the golf course water hazards we observed adult bullfrog, adult Pacific chorus frogs and juvenile California toad in the water bodies. The closest recorded breeding record for CRLF in the CNDDB is from a pond approximately 4.15 miles east of the Castlewood Country Club just south of the Ruby Hill housing development, to the east

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(**Attachment D**). Breeding ponds are also known to occur approximately 2.5 miles southeast of the site on SFPUC land east of I-680 (personal observation). The ponds at Pleasanton Ridge Regional Park that were visited in March are potential breeding habitat, but marginal as they may have a hydro period too short to support successful recruitment in all but the wettest of years. Surveys by EBRPD in the vicinity have not detected CRLF breeding, but adults have been observed in Sinbad Creek, approximately 1.5 miles southwest of the project area (Pers. Comm. Steve Bobzien, EBRPD wildlife biologist). In addition, CRLF have not been observed in Arroyo de la Laguna in the area south of the project site by either the SFPUC biologists or the Alameda County Resource Conservation District biologists during extensive surveys and restoration projects along the Creek.

CRLF are not expected to breed on the site due to lack of suitable aquatic habitat on the site or in areas that are potentially well connected to the site. Due to the distance, topography and geographic barriers between the potentially suitable aquatic habitat and the project site, CRLF are not expected to be on the site, on any regular basis. The project is not expected to have any significant impact on CRLF or their habitat. Take would not be expected with implementation of the AMMs.

Alameda Striped Racer

Visual surveys of the project area did not result in any ASR observations. Although the Castlewood Country Club is located just outside of ASR designated critical habitat area, unit 3, the eastern peripheral portion around this unit contains development-related disturbance and fragmentation of habitat. The habitat on the site is highly disturbed and consists of only a narrow area of upland adjacent to the creek with scattered coyote brush, but no real scrub or chaparral community that would support a resident population of ASR (**Attachment E**). ASR has been observed approximately 4.2 miles northwest of the site, within 5.5 miles to the west, and 6.7 miles to the southwest (**Attachment D**).

ASR are not expected to be resident on the site and unlikely to move through the work site given the barriers to high quality habitat being present in multiple directions including Interstate 680 to the east and residential/suburban development to the west and north. The project is not expected to have any significant impact on ASR or their habitat.

Pacific Pond Turtle

Three adult Pacific pond turtles were observed basking on the banks of Arroyo de la Laguna during visual surveys on April 7, 2013. No turtles were observed at the golf course hazard water features. No non-native turtles were observed in the creek or on the site. It is likely that a breeding population of this species is present along the length of Arroyo da la Laguna within and adjacent to the project site. PPT nest in uplands away from the aquatic habitat and the site

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potentially has nesting habitat. Construction would potentially destroy nest sites and reduce available nesting habitat for the local population.

Summary

The project is not expected to have any significant impact on any of the listed target species, ASR, CTS, CRLF if the avoidance and minimization measures provided in Appendix E are implemented. Impact to the PPT is not expected to be significant due to the planned set back distance from the top of the bank of Arroyo de la Laguna and the overall availability of upland habitat in the area.

Sincerely,

Karen E. Swaim

Karen E. Swaim
President/ Herpetologist

Attachment A: Project Site Location
Attachment B: Project Grading Limits
Attachment C: Aquatic Habitats Surveyed
Attachment D: Targets Species Occurrences
Attachment E: Site Photos
Attachment F: Avoidance and Minimization Measures

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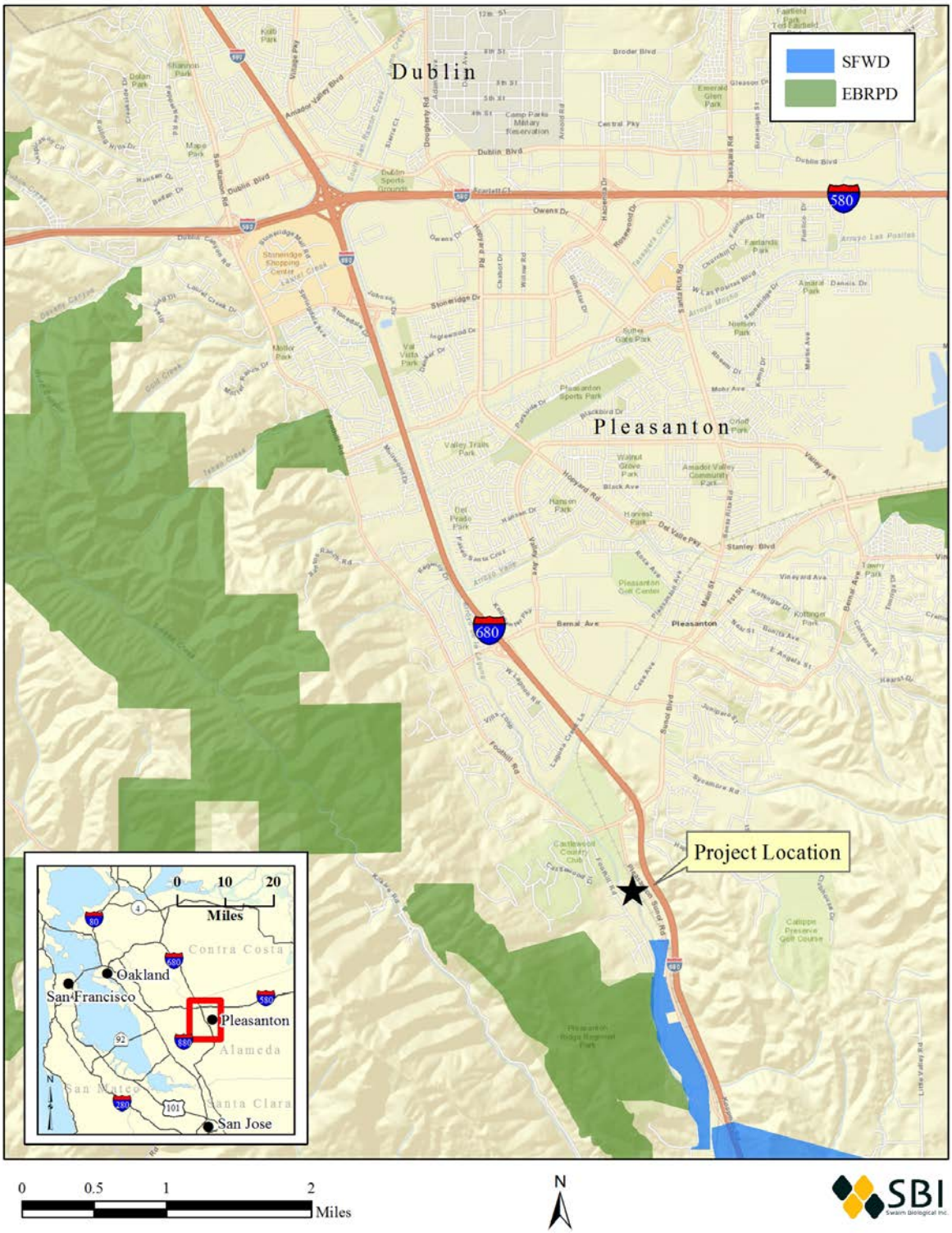
Attahcment A- Project Site Location



Attachment B. Grading plan at the proposed practice area, Castlewood Country Club.

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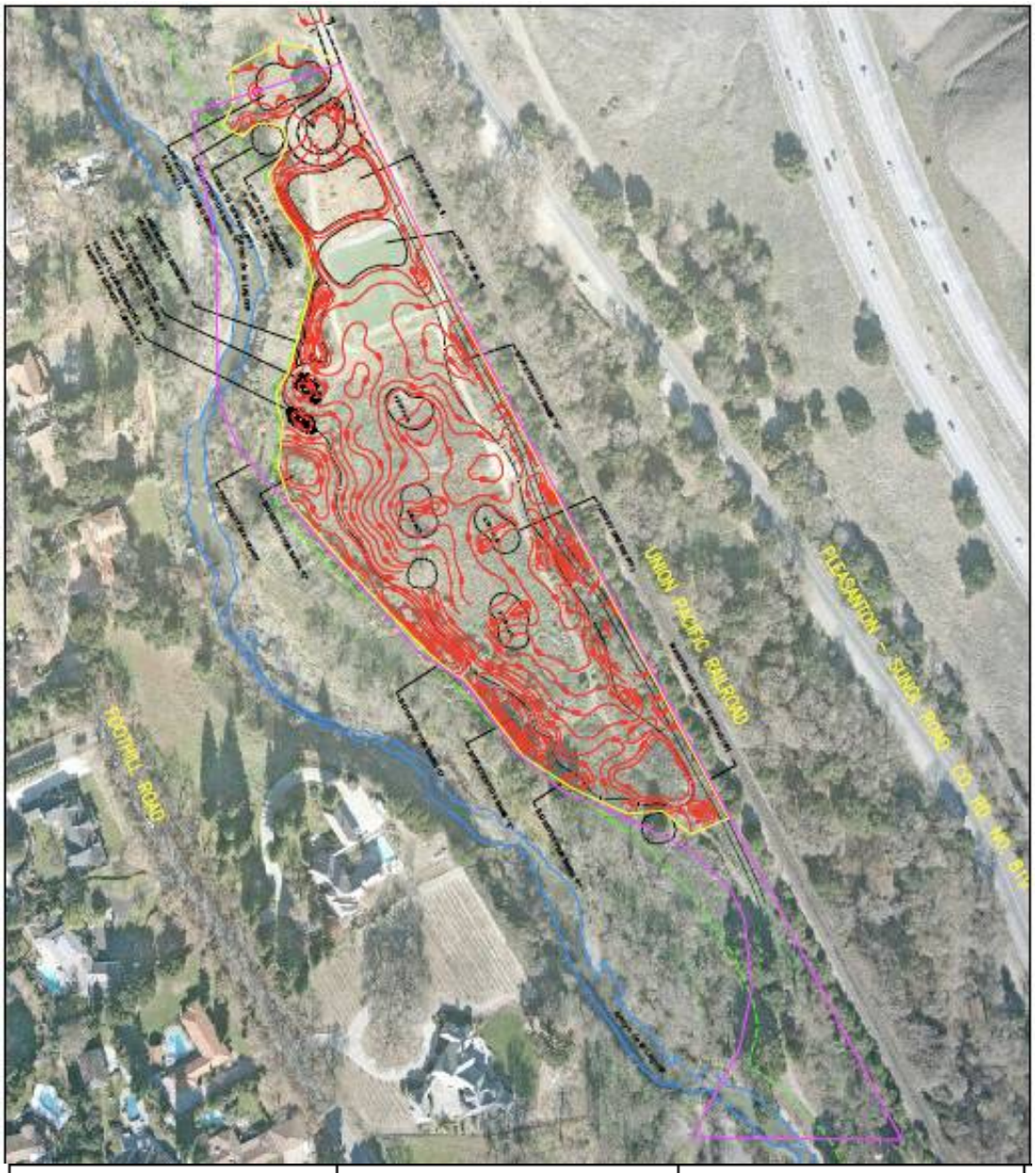

N

Scale: 1" = 100'

Zander Associates
Environmental Consultants
4460 Redwood Hwy, Suite 16-240
San Rafael, CA 94903

LEGEND:
- Site Plan
- Grading Plan
- Creek Setback
- Project Area
- Parcel Boundary

Grading Plan
Proposed Practice Area Project
Castlewood Country Club
Pleasanton, California

Date: 2/13

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Attachment C- Aquatic Habitats Assessed and Surveyed

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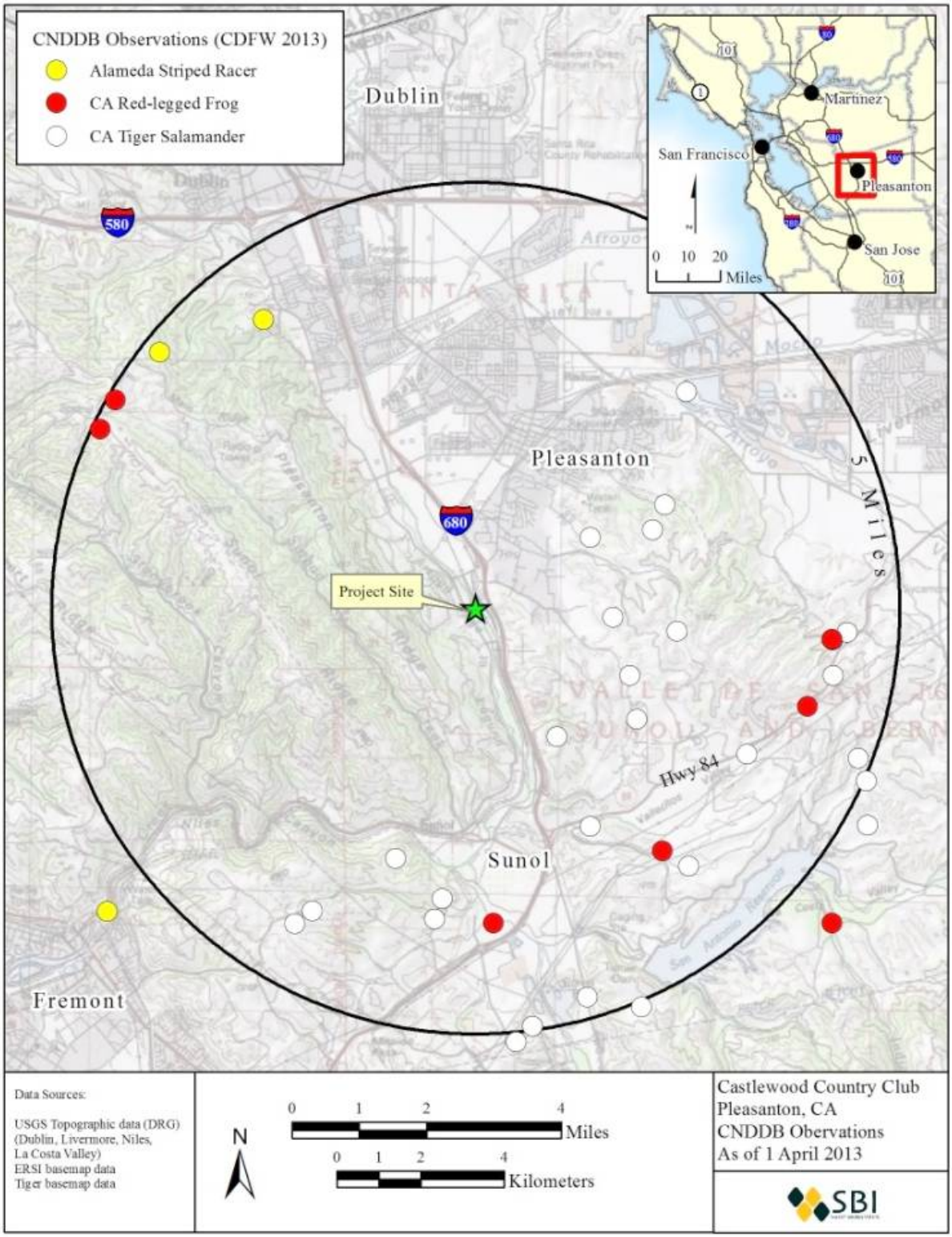
Appendix D: Listed Target Species Records in the Project Region



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Attachment E: Site Habitat Photos

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APPENDIX F Recommended Avoidance and Minimization Measures

In order to reduce the risk of take, we recommend the implementation of the following avoidance and minimization measures for CRLF, AWS, PPT

1. Work activities that are ground disturbing, should be completed during dry weather between April 1 and November 1.

2. Within 24 hours prior to the start of construction activities or vegetation clearing, the work areas will be surveyed for the CRLF and ASR.

3. If a CRLF or ASR is encountered during preconstruction surveys or during construction activities, work will stop until appropriate corrective measures have been completed or it has been determined that the frog or snake will not be harmed. Any sightings will be immediately reported to U.S. Fish and Wildlife Service by telephone at 916-414-6600 and the California Department of Fish and Wildlife. If PPT are encountered the California Department of Fish and Wildlife shall also be contacted.

4. Exclusionary fencing should be installed around the boundary of the construction zone immediately following completion of the pre-construction survey. The fencing should be sufficient to keep frogs from moving into this zone and to restrict construction equipment from moving beyond the designated work area.

5. Prior to construction activities, an environmental training session (tailboard) will be provided for all construction personnel. This training will include a description of the CRLF, ASR, WPT and their habitats, the measures that are being implemented during the project to conserve the species, and the boundaries within which the project may be accomplished (i.e. work areas).

6. A qualified biological monitor will be onsite for all work activities during clearing and grubbing and make daily inspections thereafter.

7. Cut vegetation will be chipped immediately or moved outside of the work area to ensure no potential cover for listed species is present in work areas.

8. Where practical and safe to do so, vehicle speed will be limited to 15 mph on access routes and roadways.

9. Movement of heavy equipment will be confined to existing roadways and designated access routes to minimize habitat disturbance. No construction activities, parking, or staging of materials will occur outside of designated areas. Environmentally sensitive areas should be marked with flagging or fencing.

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10. All garbage will be kept in closed containers and removed from the work site daily.

11. To control erosion during and after project implementation, will implement best management practices. No erosion control materials with monofilament netting will be used on the site. Burlap wrapped wattles are acceptable and some coconut coir blankets may be acceptable with specific approval.

Attachment E:

Report from the Northwest Information Center

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
Email: leigh.jordan@sonoma.edu
http://www.sonoma.edu/nwic

June 14, 2013 NWIC File No.: 12-1511

Nathaniel Taylor
Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

Re: Record search results for the proposed Castlewood Country Club Project, Alameda County, California; Project Number 31309.

Dear Mr. Taylor:

Per your rapid response request received by our office on 5 June 2013, a records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Alameda County. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates there is record of one cultural resources study that covers the proposed Castlewood Country Club project area: S-21676 (Jones & Stokes Associates, Inc. 1999). The project area contains no recorded archaeological resources. The State Office of Historic Preservation Historic Property Directory (OHP HPD) (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) lists no addresses within the proposed project area. Other local inventories include no recorded buildings or structures within the proposed project area. In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed project area.

At the time of Euro American, contact the Native Americans that lived in the area were speakers of the Costanoan language, part of the Utian language family (Levy 1978:485). There are no Native American resources in or adjacent to the proposed project area referenced in the ethnographic literature.

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Alameda County have been found near sources of water (including perennial and intermittent springs and streams), in close proximity to ecotones or other productive resource environments, and near the interface between the valleys and adjacent uplands. The proposed project area is in a narrow,

sheltered valley setting adjacent to the Arroyo de la Laguna. The project area is located on the most recent Holocene-age stream terrace deposits. These alluvial deposits have the potential for overlying buried archaeological deposits with sterile alluvium, with little or no signs on the surface of the underlying archaeological deposit. Given the potential for buried archaeological material, along with the general environmental and cultural setting, there is a moderately high potential of identifying unrecorded Native American resources in the proposed project area.

Review of historical literature and maps gave no indication of the possibility of historic-period archaeological resources within the project area. While the general vicinity of the proposed project underwent early development during the mid to late 19th century, maps from those eras and from the early 20th century fail to show any buildings or structures with the proposed project area. With this in mind, there is a low potential of identifying unrecorded historic-period archaeological resources in the proposed project area.

RECOMMENDATIONS:

1) While there is a moderately high potential of Native American archaeological resources (and a low potential for historic-period archaeological resources), previous study by Jones & Stokes Associates, Inc. (1999) intensively surveyed the proposed project area in 1999 and failed to identify any cultural resources within the proposed project area. Therefore, no further study is recommended for Native American archaeological resources at this time.

2) If archaeological resources are encountered during construction, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. Project personnel should not collect cultural resources. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

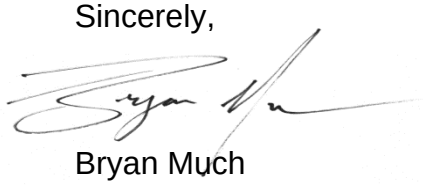
3) If the proposed project area contains buildings or structures that meet the minimum age requirement of 45 years or older, it is recommended that prior to commencement of project activities, those buildings or structures be assessed by a professional familiar with the architecture and history of Alameda County. Please refer to the list of consultants who meet the Secretary of Interior's Standards at http://www.chrisinfo.org.

4) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

5) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069

Thank you for using our services. Please contact this office if you have any questions, (707) 588-8455.

Sincerely,



Bryan Much
Assistant Coordinator

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Historical Resources Information System, Northwest Information Center, the following literature was reviewed:

Bowman, J.N.
1951 *Adobe Houses in the San Francisco Bay Region*. In Geologic Guidebook of the San Francisco Bay Counties, Bulletin 154. California Division of Mines, Ferry Building, San Francisco, CA.

Cook, S.F.
1957 *The Aboriginal Population of Alameda and Contra Costa Counties*. University of California Anthropological Records 16(4):131-156. Berkeley and Los Angeles.

Fickewirth, Alvin A.
1992 *California Railroads*. Golden West Books, San Marino, CA.

Gudde, Erwin G.
1969 *California Place Names: The Origin and Etymology of Current Geographical Names*. Third Edition. University of California Press, Berkeley and Los Angeles.

Hart, James D.
1987 *A Companion to California*. University of California Press, Berkeley and Los Angeles.

Heizer, Robert F., editor
1974 *Local History Studies*, Vol. 18., "The Costanoan Indians." California History Center, DeAnza College, Cupertino, CA.

Helley, E.J., K.R. Lajoie, W.E. Spangle, and M.L. Blair
1979 *Flatland Deposits of the San Francisco Bay Region - Their Geology and Engineering Properties, and Their Importance to Comprehensive Planning*. Geological Survey Professional Paper 943. United States Geological Survey and Department of Housing and Urban Development.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, revised by William N. Abeloe
1966 *Historic Spots in California*. Third Edition. Stanford University Press, Stanford, CA.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, William N. Abeloe, revised by Douglas E. Kyle
1990 *Historic Spots in California*. Fourth Edition. Stanford University Press, Stanford, CA.

Hope, Andrew
2005 *Caltrans Statewide Historic Bridge Inventory Update*. Caltrans, Division of Environmental Analysis, Sacramento, CA.

Jones & Stokes Associates, Inc.
1999 *Cultural Resources Inventory for the Arroyo de la Laguna Flood Control Project, Pleasanton, Alameda County, California*. S-21676. Report on file at the Northwest Information Center, Rohnert Park.

Kroeber, A.L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprint by Dover Publications, Inc., New York, 1976).

Levy, Richard
1978 Costanoan. In *California,* edited by Robert F. Heizer, pp. 485-495. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Milliken, Randall
1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press Anthropological Papers No. 43, Menlo Park, CA.

Myers, William A. (editor)
1977 *Historic Civil Engineering Landmarks of San Francisco and Northern California*. Prepared by The History and Heritage Committee, San Francisco Section, American Society of Civil Engineers. Pacific Gas and Electric Company, San Francisco, CA.

Nelson, N.C.
1909 *Shellmounds of the San Francisco Bay Region*. University of California Publications in American Archaeology and Ethnology 7(4):309-356. (Reprint by Kraus Reprint Corporation, New York, 1964)

Roberts, George, and Jan Roberts
1988 *Discover Historic California*. Gem Guides Book Co., Pico Rivera, CA.

State of California Department of Parks and Recreation
1976 *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

State of California Department of Parks and Recreation and Office of Historic Preservation
1988 *Five Views: An Ethnic Sites Survey for California*. State of California Department of Parks and Recreation and Office of Historic Preservation, Sacramento.

State of California Office of Historic Preservation **
2012 *Historic Properties Directory*. Listing by City (through April 2005). State of California Office of Historic Preservation, Sacramento.

Thompson & West
1878 Official and Historical Atlas Map of Alameda County, California. Thompson & West, Oakland. (Reprint by Valley Publishers, Fresno, 1976)

Woodbridge, Sally B.
1988 *California Architecture: Historic American Buildings Survey*. Chronicle Books, San Francisco, CA.

Works Progress Administration
1984 *The WPA Guide to California*. Reprint by Pantheon Books, New York. (Originally published as California: A Guide to the Golden State in 1939 by Books, Inc., distributed by Hastings House Publishers, New York.)

******Note that the Office of Historic Preservation's *Historic Properties Directory* includes National Register, State Registered Landmarks, California Points of Historical Interest, and the California Register of Historical Resources as well as Certified Local Government surveys that have undergone Section 106 review.

Attachment E:

Water Efficient Landscape Ordinance Application - Signed

LANDSCAPE DOCUMENTATION PACKAGE

of the

WATER EFFICIENT LANDSCAPE ORDINANCE OF THE ALAMEDA COUNTY GENERAL ORDINANCE CODE

This Package follows §492.3 of the California Code of Regulations

DATE:	May 10, 2013
PROJECT APPLICANT:	The Castlewood Country Club 707 Country Club Circle Pleasanton, CA 94566
PROJECT SITE APN'S:	946-3760-002 946-3760-012-01 946-3760-012-02
TOTAL LANDSCAPE AREA:	283,166 Sq. Ft.
PROJECT TYPE:	Private Country Club Golf Practice Area
WATER SUPPLY TYPE:	Well Water – 95%, Potable Water – 5% Potable Water Provided by the San Francisco Water Company
PROJECT CONTACT:	The Castlewood Country Club General Manager/COO Jerry Olson
APPLICANT'S REPRESENTATIVE:	Martin Inderbitzen, Attorney at Law (925) 485-1060

DOCUMENT CHECKLIST:

Water Efficient Landscape Worksheet

See Sheet IR-3 of the attached plans

Landscape Design Plan

See Sheets 11 and 12 of the previously-submitted Plans

Irrigation Design Plan

See Sheets IR-1 – IR-6

Grading Design Plan

See Sheets 4 and 5 of the previously-submitted Plans

Soil Management Report

As per §492.5 of the Model Water Efficient Landscape Ordinance (2) (A), a soil analysis report shall be submitted as part of the Certificate of Completion

APPLICANT SIGNATURE AND DATE:

"I agree to comply with the requirements of the Water Efficient Landscape Ordinance and submit a complete Landscape Documentation Package"

Jay Olson

For The Castlewood Country Club

5-15-13

Date