APPENDIX D

BIOLOGICAL RESOURCES

Appendix D1:
Biological Constraints Analysis











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Notre Dame de Namur University Redevelopment
Biological Constraints Analysis

HTH #10932

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March 2, 2022

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Section 1. Introduction

1.1 Purpose of this Assessment and Constraints Analysis

The purpose of this biological constraints analysis is to discuss biological resources that could potentially be impacted significantly under the California Environmental Quality Act (CEQA) and/or for which regulatory agency approvals or mitigation measures may be required as a result of potential future redevelopment of the existing Notre Dame de Namur campus in Belmont, California (Figure 1). Any redevelopment by Stanford University would undergo some form of CEQA review by the City of Belmont. That CEQA review, which may take the form of an Environmental Impact Report (EIR) or a Mitigated Negative Declaration, will determine whether impacts on various biological resources are significant, and for significant impacts, it will identify the measures that are necessary to mitigate (i.e., avoid, minimize, and compensate for) impacts to less-than-significant levels. In addition, if the project would impact features such as wetlands or streams for which resource agency permits are necessary, additional project conditions (involving avoidance/minimization of such impacts and/or compensatory mitigation) may be necessary. It is important to understand those potential CEQA mitigation measures and permit conditions so that potential constraints on development, approval timelines, and costs of implementing mitigation measures or permit conditions are understood.

Examples of biological resources that we considered as part of this analysis include the following:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); "take" of individuals of these species, which also includes modification of their habitat, would require approval from the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS)
- Species listed as threatened or endangered under the California Endangered Species Act (CESA); "take" of individuals of these species would require approval from the California Department of Fish and Wildlife (CDFW)
- California species of special concern or species listed on California Native Plant Society (CNPS) lists of rare plants
- Migratory birds, roosting bats, or other non-special-status species that could be impacted by a project, and for which impacts would be considered during the CEQA review process
- Wetlands or other waters of the U.S.; work within these features could require a permit from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), and a water quality certification from the Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA
- Wetlands or other waters of the State; fill of these features would require a water quality certification from the RWQCB under Section 401 of the CWA if these features are also considered Waters of the U.S. by the USACE, or would require Waste Discharge Requirements from the RWQCB under the Porter-Cologne

Water Quality Control Act (Porter-Cologne); if the USACE does not claim jurisdiction over these features this permit is likely not required.

- Riparian habitats; temporary and permanent impacts to these habitats would be considered during the CEQA review process. Impacts to riparian habitat, in this case, the unnamed tributary of Belmont Creek up to top of bank (TOB), would be regulated by CDFW under section 1600 of the Fish and Game Code and would require a Lake and Streambed Alteration Agreement (LSAA). In addition, riparian habitat up to the top of bank would be regulated by the RWQCB as waters of the state as described in the previous bullet point.

This report provides a summary of our methods and of our findings with respect to biological resources that represent potential constraints to future redevelopment of the study area in the context of applicable laws and regulations. Please note that whereas we provide our opinions (e.g., regarding CEQA significance) below, the City of Belmont would be the CEQA lead agency for any future development project, and the ultimate decision regarding the significance of these impacts under CEQA (and therefore whether mitigation will be required to reduce impacts to less-than-significant levels) rests with the City. However, as discussed below, it is our opinion that, with implementation of mitigation measures, all project impacts can be appropriately mitigated to less-than-significant levels under CEQA.



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Figure 1. Vicinity Map
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March 2022

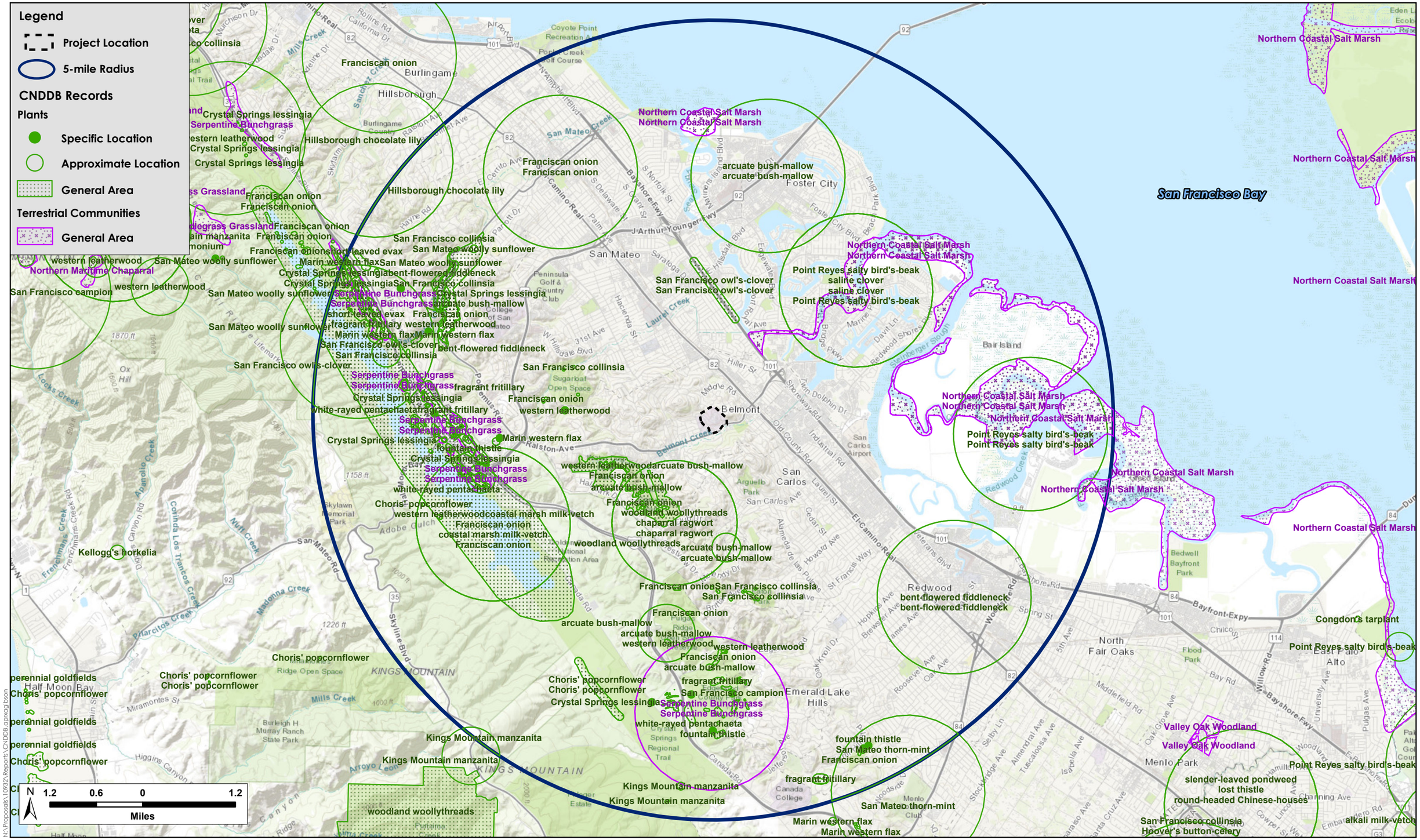
Section 2. Methods

2.1 Background Review

Prior to conducting a site visit, H. T. Harvey and Associates ecologists reviewed background information on the sensitive biological resources potentially present in and immediately adjacent to the study area (Figure 1). The information reviewed included records from the California Natural Diversity Database (CNDDB 2022) and the California Native Plant Society (CNPS's) Online Rare Plant Inventory (2022), focused on the *San Mateo, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (where the study area occurs) and nine surrounding quadrangles: *San Francisco South*, *Hunter's Point, Montara Mountain, San Leandro, Redwood Point, Palo Alto, Half Moon Bay, and Woodside*. Our searches focused on the distribution and habitats of vascular plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, and 4 that occur in any of the USGS quadrangles listed above.

We reviewed CNDDB records for special-status animals and natural communities of concern in the vicinity of the study area, defined in this report as the area within a 2-mile (mi) radius of the study area. Maps of CNDDB plant and animal records in the study area's vicinity are included as Figures 2 and 3. These generalized maps show areas where special-status species are known to occur or have occurred historically. Additionally, the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify soils that underlay the study area (NRCS 2022), and the USFWS's National Wetland Inventory (NWI) Wetlands Mapper was consulted to review pre-existing mapping of aquatic features, including wetlands, streams, and sloughs, that may be present in the study area (NWI 2022). Historical aerial imagery of the study area obtained from Google Earth Pro (Google, Inc. 2022) was also evaluated. Other information reviewed included various technical publications available through the USFWS, California Department of Fish and Wildlife (CDFW), and other sources.

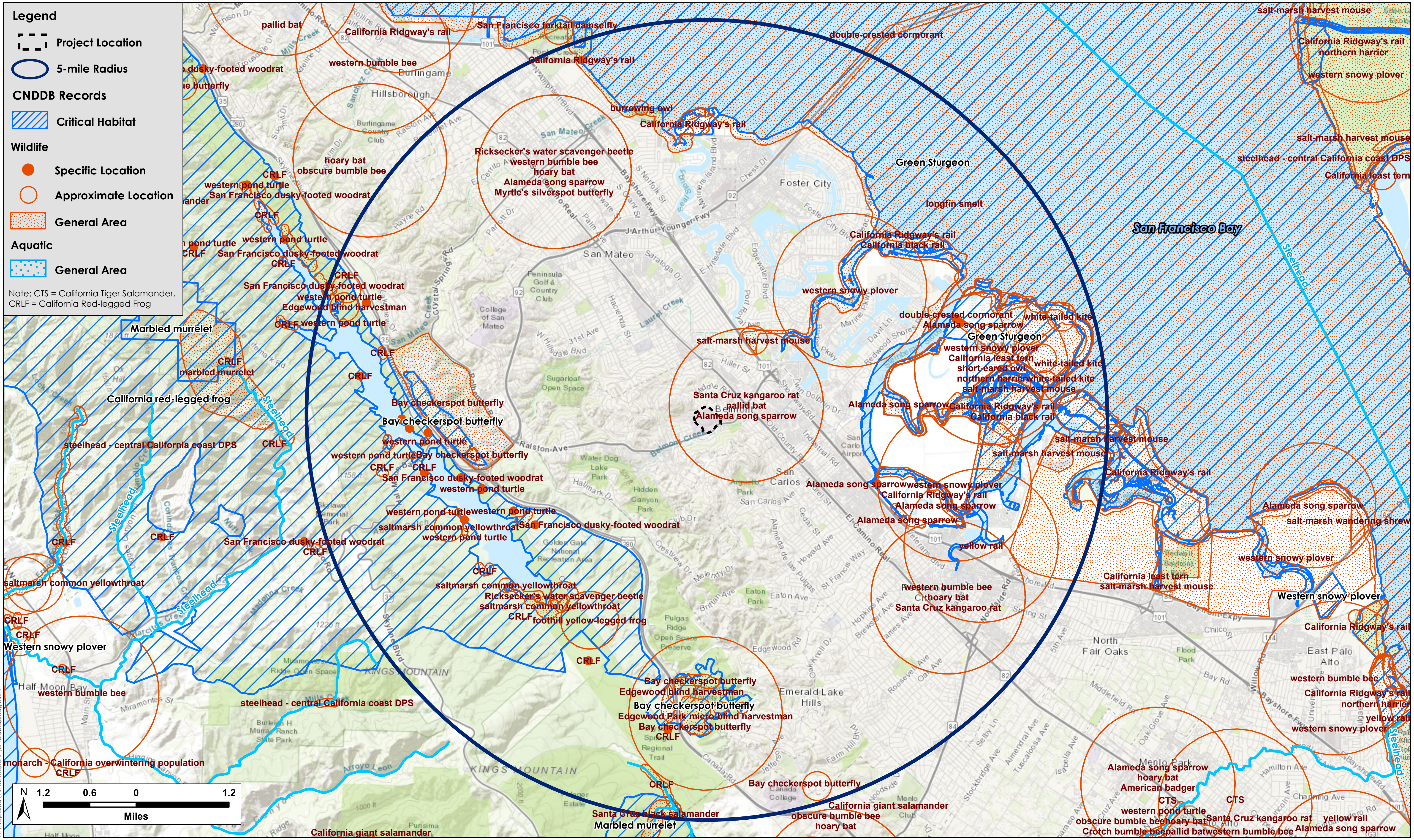
We also reviewed the Belmont 2035 General Plan draft and final EIR (City of Belmont 2017). The study area is part of the Belmont 2035 General Plan, and development on the site is therefore subject to requirements of the General Plan and its EIR, as appropriate.



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Figure 2. CNDDB-Mapped Records of Special-Status Plants
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Figure 3. CNDDB-Mapped Records of Special-Status Animals

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March 2022

2.2 Site Visits

H. T. Harvey & Associates wildlife ecologist Emily Malkauskas, B.S., plant ecologist Jillian Pastick, M.S., and associate wildlife ecologist/bat specialist Dave Johnston, Ph.D. surveyed the study area on February 11, 2022. The purpose of this initial survey was to (1) assess existing biotic habitats and plant and animal communities in the study area, (2) conduct a focused assessment of the potential for existing buildings and trees on the site to support bat roosts, (3) assess the site for its potential to support special-status species and their habitats, and (4) identify potential jurisdictional habitats (such as Waters of the U.S./State), although a formal wetland delineation was not conducted at that time.

H. T. Harvey ecologists walked transects throughout the study area, examining habitats and observing plant and animal species present. They mapped biotic habitats within the study area using a combination of field observations (recorded via the Apple iPad GIS Kit Pro application) and aerial imagery signatures. Habitat types were distinguished using natural community descriptions discussed in Holland (1986), Sawyer et al. (2009), and CDFW's Vegetation Classification and Mapping (CDFW 2022). Plant species within each habitat were identified using Baldwin et al. (2012). Habitat acreages were calculated using geographic information systems (GIS) and aerial imagery interpretation.

Dr. Johnston assessed the potential for bats to be roosting on the site by examining the exteriors of existing structures and looking for points of ingress/egress, bat guano, and urine staining. He assessed the potential for bats to roost in trees on the site by examining trees and looking for high-quality roost sites such as cavities and deep fissures or flaking bark.

In addition, senior wildlife ecologist Steve Rottenborn, Ph.D., visited the study area on February 27, 2022 to assess habitat conditions.

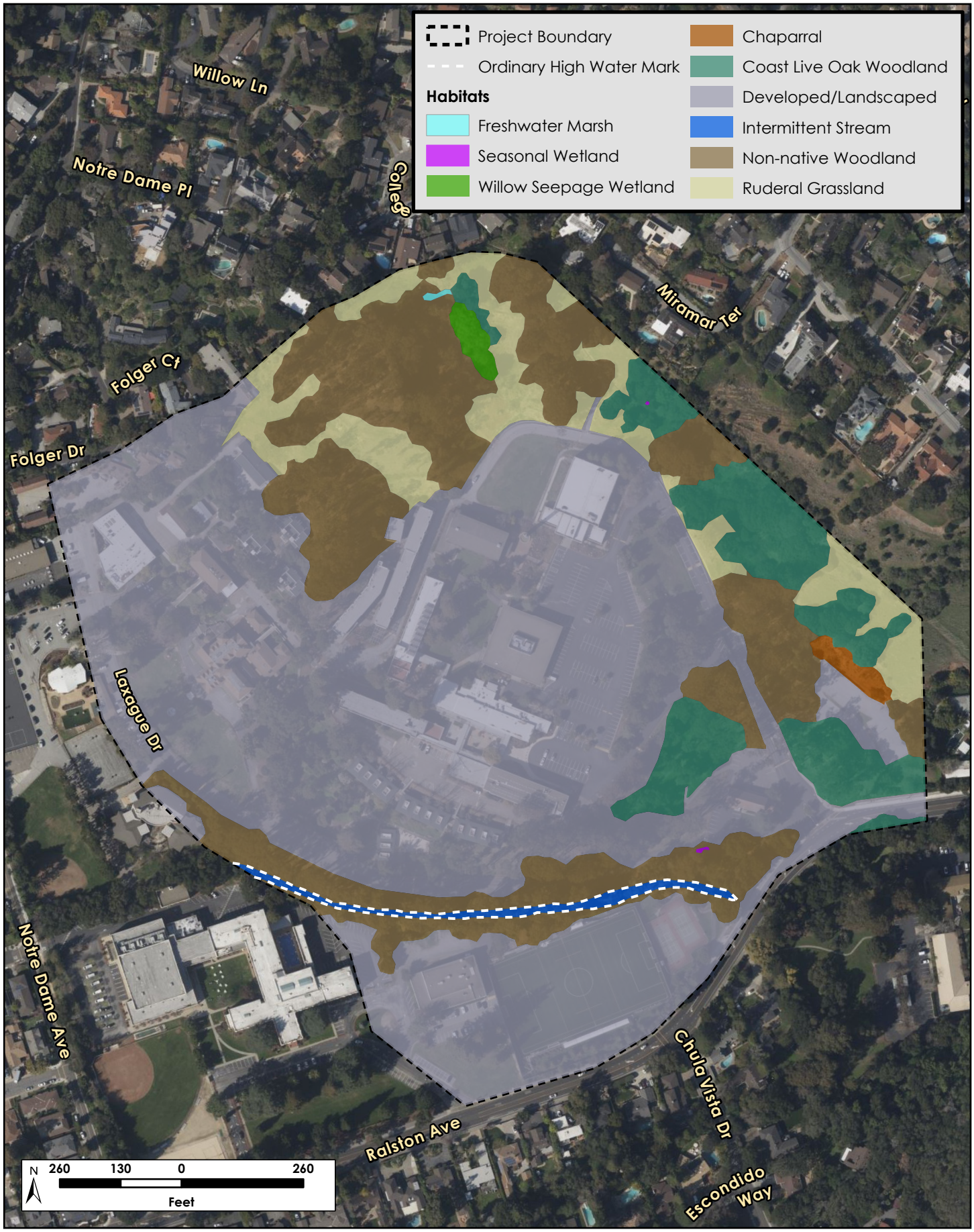
Section 3. Results

3.1 General Site Conditions

The approximately 48.9-acre (ac) study area is located at 1500 Ralston Avenue in the City of Belmont, just north of Ralston Avenue. The study area is bounded by residential development to the north and northeast, a high school and elementary school to the west and southwest, and a retirement community to the south. An unnamed tributary of Belmont Creek bisects the southern portion of the study area, flowing from west to east parallel to Laxague Drive. This intermittent creek originates to the west of the study area, likely capturing water runoff from the surrounding residential communities.

The study area is topographically varied, with steep slopes in the north and northeast parts of the study area surrounding the developed portions of the campus. Elevations range from approximately 81 to 290 feet (ft) (WGS84) (Google, Inc. 2022). The central portion of the site where most of the buildings are concentrated is generally level. Five soil units were mapped within the study area: Fagan loam, 15 to 50 percent slopes, Orthents, cut and fill, 0 to 15 percent slopes, Orthents, cut and fill-Urban land complex, 5 to 75 percent slopes, Urban land, and Urban land-Orthents, cut and fill complex, 5 to 75 percent slopes. The Urban land soils are typical of developed sites and include fill material. The following land cover/habitat types were mapped within the study area and are described below: developed/landscaped (31.22 ac), non-native woodland (9.86 ac), chaparral (0.20 ac), ruderal grassland (3.23 ac), coast live oak (3.80 ac), willow seepage wetland (0.20 ac), freshwater marsh (0.02 ac), seasonal wetland (0.004 ac), and intermittent stream (0.38 ac) (Figure 4).

Developed/Landscaped. Developed areas are the dominant land cover type in the study area. This land cover includes all buildings, paved walkways and parking areas, and sports fields associated with the College. The developed/landscaped land cover also includes areas that have been planted with landscaping and are maintained on an ongoing basis. Landscaping on the site consists of ornamental trees, shrubs, and groundcovers bordering the parking lots and sidewalks on the campus. Common tree and shrub species observed as landscaping include native trees such as coast redwood (*Sequoia sempervirens*), as well as non-native species such as Chinese juniper (*Juniperus chinensis*), Mexican fan palm (*Washingtonia robusta*), red maple (*Acer rubrum*), Peruvian pepper tree (*Schinus molle*), deodar cedar (*Cedrus deodara*), Monterey cypress (*Hesperocyparis macrocarpa*), celtis (*Celtis* sp.), and oleander (*Nerium oleander*). The understory of these landscaped areas includes ornamental grass and herb species such as Mexican sage (*Salvia mexicanus*), New Zealand flax (*Phormium tenax*), Mexican bush sage (*Salvia leucantha*), and Iris sp. (*Iris* sp.).



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Figure 4. Habitats Map
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The developed/landscaped areas also include the lawns in the areas surrounding the campus buildings and recreation fields. These areas are regularly mowed and irrigated. Small patches of ruderal vegetation were present on the margins of lawns including annual bluegrass (*Poa annua*), bristly ox-tongue (*Helminthotheca echioides*), and black medick (*Medicago lupulina*), and dandelion (*Taraxacum officinale*).

Non-native Woodland. The second most widespread land cover type in the study area was non-native woodland. This land cover type was observed in a number of locations in the study area but was most dominant in the northern part of the site. Large patches of non-native woodland were also observed adjacent to and upslope of the entrance to the campus in the southeast portion of the study area. Additionally, a dense stand of non-native woodland occurs along the unnamed tributary to Belmont Creek. These areas were differentiated from the landscaping in the developed/landscaping land cover type by their more natural and less disturbed structure and appearance, in both the overstory and understory. The understory of non-native woodland is not mowed or planted, and it does not appear that these areas of non-native woodland receive irrigation as was observed in the landscaped parts of the study area.

The species composition of the non-native woodland within the northern and northeastern portion of the study area is dominated by blue gum (*Eucalyptus glabra*) in the overstory, with an understory of Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), cleavers (*Galium aparine*), chickweed (*Stellaria madia*), ripgut brome (*Bromus diandrus*), and French broom (*Genista monspessulana*).

The non-native woodland in the southern portion of the study area along the unnamed tributary to Belmont Creek contains a higher diversity of non-native tree species. Non-native blue gum, Mexican fan palm, Canary Island date palm (*Phoenix canariensis*), and silver wattle (*Acacia dealbata*), as well as native coast live oak (*Quercus agrifolia*), line the creek. The understory is dominated by English ivy, Himalayan blackberry (*Rubus armeniacus*), crane's bill geranium (*Geranium molle*), Bermuda buttercup (*Oxalis pes-caprae*), and ruderal grass species.

Chaparral. A small patch of chaparral was mapped in the southeast portion of the study area. This habitat was observed on a narrow, rocky slope, just above a parking lot. This patch of chaparral is disturbed and of low quality. Dominant species within the chaparral habitat include coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*) in the shrub layer, as well as wildoats, ripgut brome, and red-stemmed filaree (*Erodium cicutarium*) in the understory. The substrate within this habitat type is extremely rocky. Review of soils in the area confirmed a lack of serpentine conditions (NRCS 2022).

Ruderal Grassland. Patches of ruderal grassland were mapped in the northern and northeastern parts of the study area, adjacent to the main driveway through the campus. Ruderal grassland was differentiated from lawns observed within developed/landscaped land cover type because they appeared to be less maintained (i.e., they did not receive regular mowing and irrigation). The patch of ruderal grassland observed upslope of the chaparral land cover type was heavily vegetated with ruderal grass and herb species, including wildoats, ripgut brome, soft brome, bristly ox-tongue, and dandelions. Other patches of ruderal grassland contained less dense vegetation, and some contained rocky outcrops. Dominant species included soft brome and red-stemmed

filaree, and scattered California poppy (*Eschscholzia californica*). Some of the more shaded patches of this grassland include annual bluegrass, orchardgrass (*Dactylis glomerata*), and English daisies (*Bellis perennis*).

Coast Live Oak Woodland. Patches of coast live oak woodland are present in the eastern and northeastern portions of the study area, intermixed with non-native woodland and ruderal grassland. These patches included dense cover of coast live oak, with an understory dominated primarily by French broom and ruderal grass species.

The coast live oak woodland mapped to the southeast of the large parking lot within the center of the campus contains a paved walkway that switchbacks up a steep slope, connecting the sidewalk near the entrance of the campus to the western end of the large parking area. The overstory of this area was dominated by coast live oak, and the understory consisted primarily of ruderal grass and herb species including ripgut brome, wild oats (*Avena fatua*), soft brome (*Bromus hordeaceus*), Italian thistle, Bermuda buttercup, chickweed, and cleavers.

Willow Seepage Wetland. A small patch of willow seepage wetland was observed in the northern portion of the study area. This wetland was not associated with a waterway; rather, it was associated with a seep on a steep slope. This area contained relatively continuous cover of arroyo willow (*Salix lasiolepis*). Where there are breaks in the cover of willow, other common species associated with seepages, such as Himalayan blackberry and pampas grass (*Cortaderia selloana*) are present. The understory of this scrub vegetation is dominated by a number of non-native and invasive ground cover species including greater periwinkle (*Vinca major*), English ivy (*Hedera helix*), juncus sp. (*Juncus* sp.), and Harding grass (*Phalaris aquatica*).

Seasonal Wetland. Two very small seasonal wetlands were observed within the study area. One near the northeastern boundary of the study area is located at the downslope end of a small swale that appeared to convey stormwater and irrigation runoff away from the adjacent residences. This wetland was small in size, approximately 5 feet by 5 feet in the understory of a coast live oak woodland. Dominant vegetation included common rush (*Juncus effusus*), tall flat sedge (*Cyperus eragrostis*), Italian wild rye (*Festuca perennis*), and curly dock (*Rumex pulcher*). The soil within this shallow depression was saturated, despite the absence of standing water. The second seasonal wetland was observed in a shallow, roadside depression along Laxague Drive. Species composition of vegetation in this seasonal wetland was similar to the seasonal wetland discussed above, being dominated by tall flat sedge, Italian wild rye, and bur clover (*Medicago polymorpha*). Though no standing water was observed at the time of the survey, the soil within this depression was soft and moist.

Freshwater Marsh. A small patch of freshwater marsh was mapped in the northern portion of the study area. This freshwater marsh occurs within a small depression on a topographically level portion of a steep slope. This freshwater marsh occurs just upslope of the willow seepage wetland, suggesting that this may be the origin of the seep that supports the willows downslope. Vegetation within the marsh is dominated by hydrophytic species such as cattails (*Typha latifolia*), greater periwinkle, and tall flat sedge. However, the depression also contains upland species such as pampas grass and coyote brush. Approximately 0.5 inch of water was present in the depression at the time of the survey and appeared to trickle downslope.

Steep cliffs in the northern portion of the project area, along with this subtle depression located mid-slope, appear to be the result of an old quarry or other anthropogenic activities. However, historical aerials from as far back as 1930 showed what appears to be coast live oak woodland throughout the area (UCSB 2022).

Intermittent Stream. The unnamed tributary to Belmont Creek is an intermittent stream that flows through the study area from the west to the east. The stream originates in the residential development to the west of the study area and exits the study area through a concrete culvert under Ralston Avenue. This culvert extends approximately 800 feet under the memory care center to the southeast before daylighting at Belmont Creek on the south side of Ralston Avenue. The on-site segment of the intermittent stream averaged 3 feet in width, and the bed of the channel was lined with gravel and pebbles. At the time of the survey, the intermittent stream contained approximately 4 inches of flowing water, with occasional pools up to 8 inches deep. The hydrology of the creek is likely fed by groundwater, stormwater drainage from the surrounding development, and summer inputs from irrigation runoff and other anthropogenic sources. The channel was primarily unvegetated throughout.

Although a formal wetland delineation was not carried out as part of this analysis, the extent of the intermittent stream habitat as shown on Figure 4 corresponds with what is expected to be the ordinary high water mark (OHWM) of the unnamed tributary. The OHWM was estimated in the office using topographical data in GIS. The OHWM represents the limits of USACE jurisdiction within the creek channel (see discussion under Section 3.2.1).

3.2 Potential Biological Constraints

The following sections describe the potential biological constraints to redevelopment of the study area. For each potential constraint, we describe the sensitive resource's potential to occur in the study area, potential CEQA and regulatory considerations associated with the constraint, and measures typically required to mitigate significant impacts to a less-than-significant level (or typically required as conditions of resource agency permits), if any. Based on the potential for the study area to be developed, we assumed that any of the sensitive species or habitats in or immediately adjacent to the study area could potentially be impacted for the purpose of identifying constraints.

3.2.1 Potential Waters of the U.S./State

Potential for Occurrence. The study area contains features that would likely be considered wetlands and other waters of the U.S. by the USACE and waters of the State by the RWQCB. Along the unnamed intermittent tributary to Belmont Creek, the limits of USACE jurisdiction extend upward on each bank to the OHWM which is defined in Section 404 of the Clean Water Act as "the line on the shore established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris." The OHWM, depicted on Figure 4, was clearly identifiable by a shift in substrate and vegetation cover. The

limits of RWQCB jurisdiction extend upward on either side of the intermittent stream to the top of bank. The top of bank on both sides of the intermittent stream were observed to be only a few feet outside of (landward of) the OHWM throughout its entire length. The bank on the south side of the intermittent stream was slightly steeper than the northern bank, which was more gradually sloped. Scattered native and non-native trees were observed within the top of bank, which would likely be claimed by the RWQCB as riparian habitat. The RWQCB jurisdiction would not extend to the entire non-native woodland corridor associated with the intermittent stream. Rather, jurisdiction would only include the canopy of those individuals rooted within the top of bank. A detailed survey of which trees are rooted within the top of bank would be necessary to accurately map the limits of likely RWQCB jurisdiction along the channel.

In addition to the unnamed tributary, the two seasonal wetlands may be considered jurisdictional wetlands. Both seasonal wetlands were observed in small, shallow depressions, dominated by hydrophytic vegetation. The source of hydrology for these wetlands is unclear, though it appears that it is possibly an artificial source, likely from nearby irrigation. If these wetlands are supported by an artificial source such as leaky irrigation, the USACE may consider them non-jurisdictional, but only if the source of wetland hydrology is disrupted. Otherwise, these wetlands are expected to be considered waters of the U.S./State.

The freshwater marsh habitat in the northern portion of the study is expected to be considered a jurisdictional wetland by the USACE and RWQCB. The predominance of cattails in this wetland suggests that this wetland is persistent, and is supported by ground water or seep hydrology, rather than by irrigation and stormwater runoff like the previously mentioned seasonal wetlands.

Downslope of this freshwater marsh habitat, a willow seepage wetland was observed. This area was likely fed by the seep hydrology discussed above. The presence of hydrophytic vegetation, established willow thickets, and soil saturation suggest that this wetland may be considered a jurisdictional wetland by the USACE and RWCQB.

A concrete- lined drainage ditch, which flows north to south, runs parallel to the main driveway located along the eastern half of the study area and directs stormwater run-off from the campus roads into numerous storm drains. The concrete-lined ditch is dug in uplands, lacks any wetland habitat features, and is a part of the stormwater run-off management of the site. As such, this feature is not expected to be jurisdictional.

The USACE makes the ultimate determination of the extent of waters of the U.S. on a site, a process typically evaluated with a formal wetland delineation and issuance of a Jurisdictional Determination, although we do not expect the results of such a delineation to result in substantially different results from those described above and depicted on Figure 4.

Potential CEQA and Regulatory Considerations. Impacts to jurisdictional wetlands and other waters of the U.S./State, including placement of fill or structures within such features, would likely be considered significant during CEQA review, though implementation of mitigation measures (described below) would reduce such

impacts to less-than-significant levels. Because we expect the USACE and RWQCB to determine that habitats within the study area are jurisdictional waters of the U.S. and State, permits would be required prior to filling, grading, or allowing discharge of material into one of these habitats.

Impacts to any wetlands or other waters mapped in Figure 4 (i.e., the areas within the "limits of USACE jurisdiction") would require a Clean Water Act Section 404 permit from the USACE. Additionally, Water Quality Certification from the RWQCB under Section 401 of the Clean Water Act would be needed for any project requiring a Section 404 permit from the USACE. The RWQCB typically claims jurisdiction over the same set of features as the USACE, but in addition, RWQCB would extend its jurisdiction to top of bank of the unnamed tributary of Belmont Creek above the USACE's jurisdiction. Even in the absence of a Section 404 permit, if the project were to propose impacts within the banks of the unnamed tributary to Belmont Creek (e.g., a bridge over the stream, or if bank stabilization along the stream were required) outside of the OHWMs and USACE jurisdiction, a Waste Discharge Requirement (WDR) under the state Porter-Cologne Act would be required for impacts to areas regulated by the RWQCB but not by the USACE.

The RWQCB would also require that water quality impacts be addressed by the project during both CEQA review and any RWQCB permitting. The evaluation of water quality impacts would include considering how water quality from peak stormflows off the site into the unnamed tributary of Belmont Creek could affect water quality. Projects causing land disturbances that are equal to one acre or greater must comply with State requirements to control the discharge of stormwater pollutants under the NPDES/Construction General Permit. Prior to the start of construction/demolition, a Notice of Intent must be filed with the State Water Board describing the project. In complying with State requirements to control the discharge of stormwater pollutants under the NPDES/Construction General Permit, the Project will be required to develop and maintain a Stormwater Pollution Prevention Plan (SWPPP), which would include the use of BMPs to protect water quality until the site is stabilized. Standard permit conditions under the NPDES/Construction General Permit require that the applicant utilize various measures including: on-site sediment control best management practices, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, in many Bay Area counties, including San Mateo County, projects must also comply with the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (MRP) (Water Board Order No. R2-2009-0074, as amended). This MRP requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevents stormwater runoff pollution, promotes infiltration, and holds/slows down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors. Compliance with both of these permits will prevent significant negative water quality impacts and improve stormwater runoff compared to existing conditions at the study area, and further avoid impacts on the unnamed tributary to Belmont Creek.

We recommend that future development be designed to avoid or minimize impacts to jurisdictional habitats to the greatest extent practicable. For example, any development associated with the unnamed tributary should avoid impacts within the OHWM, and ideally below the top of bank as well. If the project results in impacts to features that are considered jurisdictional by the USACE and/or RWQCB, permits under the CWA and/or Porter-Cologne would be necessary. Timelines for obtaining such permits vary depending on the nature and extent of impacts. If permanent impacts total less than 0.5 ac and less than 300 linear feet of stream, then the impact could likely be permitted by the USACE under a Nationwide Permit. The permit process would take approximately 6–9 months to complete and would consist of obtaining approvals from the USACE and RWQCB. Permanent impacts exceeding 0.5 ac or 300 linear feet of stream would necessitate an Individual Permit, which could take well over a year to obtain and would require a detailed alternatives analysis to determine whether the proposed project represents the Least Environmentally Damaging Practicable Alternative (LEDPA). If the USACE or RWQCB determine that other practicable alternatives, involving less impact to jurisdictional habitats, exist, they may not issue permits for the proposed project.

Typical Mitigation Requirements. Mitigation would be required to compensate for any permanent loss of jurisdictional wetlands or other waters as a condition of agency permits and to mitigate impacts to less-than-significant levels under CEQA. Such mitigation would take the form of onsite or offsite habitat restoration/revegetation, or purchase of mitigation bank credits.The only agency-approved mitigation bank in the area of which we are aware is the San Francisco Bay Wetland Mitigation Bank in Redwood City. Our most recent queries revealed costs in the range of $1,075,000/1 ac credit, or $60,000 per minimum 0.05 ac credit, but credit costs often increase annually. Current costs can be obtained by contacting bank owner Max Keech at 650.529.9500. However, that bank provides tidal wetland mitigation, and the USACE and RWQCB may not approve use of that bank as mitigation for impacts to nontidal wetlands on the Belmont project site.

Mitigation may also be provided through project-specific restoration of wetlands and/or riparian habitat, though finding a suitable site, constructing wetlands or riparian enhancement, and monitoring and preserving the wetlands would likely be more expensive for such small impacts than purchasing bank credits. Please note that if impacts are primarily or only to the intermittent creek, the RWQCB would likely require a greater bank credit purchase than 1:1, if they allowed use of the bank at all. Typically, the RWQCB requires that creek impacts be compensate by daylighting or restoring existing creeks. Temporary impacts on wetlands could be mitigated through restoration of temporarily impacted areas (e.g., restoring original topography and replanting wetland vegetation temporarily removed). Some combination of these approaches would likely satisfy any permit conditions from these agencies regarding compensatory mitigation and would adequately mitigate impacts to jurisdictional wetlands and other waters to less-than-significant levels under CEQA.

3.2.2 California Department of Fish and Wildlife Jurisdiction

Potential for Occurrence. The unnamed intermittent tributary to Belmont Creek is subject to CDFW jurisdiction under Section 1602 of the State Fish and Game Code. Although this intermittent stream is of fairly low quality, it is considered a creek with a defined bed and bank that represents the downstream extent of

creeks that are fed by a nontidal watershed. The jurisdictional limits of the unnamed tributary for CDFW would be equal to those of RWQCB as mentioned above, namely the top of bank, extending to the outer limits of the riparian canopy of trees rooted within top of bank.

The willow seepage wetland habitat is not considered "riparian" by the CDFW's definition due to its lack of association with a waterway, such as a stream, creek, or drainage, and thus, would not be regulated by CDFW under Section 1602. However, CDFW tracks sensitive natural communities and ranks vegetation alliances (CDFW 2022). The willow seepage wetland habitat located downslope of the freshwater marsh in the northern portion of the study area corresponds with the sensitive natural community, arroyo willow thickets alliance (G4/S4) (CDFW 2022). This alliance is ranked as G4/S4, globally and on the statewide level, it is "apparently secure". According to the California Manual of Vegetation (CMV), the *Salix lasiolepis* natural community is considered a sensitive natural community by CDFW.

CEQA and Regulatory Considerations. Impacts to CDFW sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, must be considered and evaluated under CEQA (Title 14, Division 6, Chapter 3, Appendix G of the California Code of Regulations). As discussed above, the study area contains an arroyo willow thicket, a sensitive natural community. Thus, any proposed redevelopment should avoid and minimize substantial adverse impacts to this area. Compensatory mitigation provided for impacts to these habitats for CWA permitting would be adequate to reduce impacts to a less-than-significant level under CEQA. However, this natural community is not actually "regulated" by CDFW, in that no permits from CDFW are necessary to impact this habitat because they are not associated with a stream.

Additionally, ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction under Section 1602 of the State Fish and Game Code, as described above for the unnamed intermittent tributary of Belmont Creek up to the top of bank. The CDFW also claims riparian habitat associated with this features. If project activities were to result in impacts to the bed or banks of this unnamed tributary, including the removal or trimming of any trees rooted below the top of bank along the unnamed tributary, then the project would require notification to CDFW under Section 1602 of State Fish and Game Code, and a Lake and Streambed Alteration Agreement (LSAA) would be required for such activities. The LSAA will include conditions necessary to protect fish and wildlife. The timeline for obtaining an LSAA is approximately 3 months.

Typical Mitigation Requirements. Impacts to CDFW sensitive communities and to the bed and banks of the unnamed tributary of Belmont Creek would likely be considered significant under CEQA. Avoidance and minimization measures (AMMs) should be employed to preserve and protect sensitive habitats, which would (in combination with any necessary compensatory mitigation) reduce construction-phase impacts to levels that are less than significant under CEQA. Such AMMs could include locating staging, access, and parking areas outside of sensitive habitats; limiting the project footprint in areas of disturbance; restricting personnel or equipment from operating in tidal channels; and other water-quality protection measures.

Depending on the extent and nature of the proposed project impacts to either the CDFW sensitive community and/or channel banks below the top of bank along the stream, compensatory mitigation might be required to reduce impacts to less-than-significant levels under CEQA, as described above in Section 3.2.1. Temporary impacts of any size to CDFW jurisdictional areas could be mitigated through restoration of temporarily impacted areas, (e.g., replanting native vegetation in bank areas where vegetation was removed by the project). As discussed in Section 3.2.1, mitigation for permanent impacts to areas below the top of bank along the unnamed tributary of Belmont Creek could be implemented through the purchase of credits in a mitigation bank if one were available; however, we are unaware of any banks with stream or riparian-related credits, and with a service area that includes the project site. Therefore, any required mitigation for impacts to the stream would likely need to be provided through project-specific mitigation. An example of appropriate project-specific mitigation would be a weed control removal and monitoring program along nearby streams that are infested with invasive plants; CDFW (or CEQA mitigation measures) may require such mitigation to be performed at a 2:1 or 3:1 ratio (mitigation : impact) on an acreage basis. However, locating a suitable area for project-specific mitigation, and obtaining owner approval to perform such mitigation, may be challenging. As a result, we recommend avoidance or minimization of impacts to areas within CDFW jurisdiction.

3.2.3 Special-Status Plants

Potential for Occurrence. A list of 95 special-status plant species thought to have some potential for occurrence within the study area was compiled from queries of the CNPS Inventory (CNPS 2022) and CNDDB (CNDDB 2022). Analysis of the documented habitat requirements and occurrence records associated with all of the species considered allowed us to reject 91 of the 95 species as not having a reasonable potential to occur in or immediately adjacent to the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the species is presumed extirpated. The study area is a primarily developed area. However, the coast live oak woodland, ruderal grassland, willow seepage wetland, and chaparral habitats that were mapped along the northeast and southeast boundary of the study area provide moderately suitable habitat for some special-status plants.

Suitable habitat, edaphic requirements, and elevation range are present within and adjacent to the study area for four special-status plant species: bent-flowered fiddleneck (*Amsinckia lunaris*; CRPR Rank 1B.2), Brewer's calandrinia (*Calandrinia breweri*; CRPR Rank 4.2), California bottle-brush grass (*Elymus californicus*; CRPR Rank 4.3), and arcuate bush-mallow (*Malacothamnus arcuatus*; CRPR Rank 1B.2). An explanation of each species is provided below. Although the presence of these special-status plants is unlikely due to the lack of recent records in the area, and due to the highly disturbed nature of much of the study area, the absence of these species cannot be confirmed without further surveys.

Bent-flowered Fiddleneck (*Amsinckia lunaris*)

Bent flowered fiddleneck typically occurs in cismontane woodland, coastal bluff scrub, or valley and foothill grassland habitat types. Within these broad habitat types, bent flowered fiddleneck in known to grow in sites that have some previous level of disturbance. The blooming period extends from March through June. A single CNDDB record, Occurrence # 69, occurs within a 5-mi radius of the study area. However, this is an historical record, which was last observed in 1933 (CNDDB 2022). Because this species has the potential to occur in disturbed habitats, there is potential (albeit low) for it to occur within the ruderal grassland and wooded habitat throughout the northeastern portion of the study area.

Brewer's Calandrinia (*Calandrinia breweri*)

Brewer's calandrinia typically occurs in chaparral and coastal scrub habitat. Within this habitat type, Brewer's calandrinia is most successful within disturbed or burned areas. The blooming period extends from March through June. The closest occurrence of Brewer's calandrinia to the study area is within chaparral habitat that had previously burned, approximately 2 miles from the study area. This is an historical record, which hasn't been observed again since 1973 (Calflora 2022). Because this species has the potential to occur in highly disturbed chaparral habitats, there is some potential (albeit low) for it to occur in the southwestern portion of the study area, just east of the parking area.

California Bottle-brush Grass (*Elymus californicus*)

California bottle-brush grass typically occurs in north coastal coniferous forest, closed-cone pine forest, redwood forest, Douglas-fir forest, mixed evergreen forest, or foothill woodland. Within these habitat types, the species usually occurs in shaded, mesic areas. The blooming period of California bottle-brush grass extends from May through August. The closest record of California bottle-brush to the study area occurs along Crystal Springs Road, 0.3 miles east of Tartan Trail, approximately 3 miles from the study area (Calflora 2022). This occurrence consists of a large population of over 10,000 individuals that was last observed in 1994 (Calflora 2022). This occurrence was recorded within a coast live oak woodland occurring on a north facing slope, similar to habitat that was observed within the study area. Thus, there is some potential (albeit low) for this species to occur within the coast live oak habitat observed throughout the study area.

Arcuate Bush-mallow (*Malacothamnus arcuatus*)

Arcuate bush-mallow typically occurs in chaparral and cismontane woodland habitats and has potential to grown in highly disturbed areas. The blooming period of this species occurs between April and September. The closest record of arcuate bush-mallow to the study area is in Big Canyon Park, south of Pulgas Creek, (CNDDB Occurrence # 16, CNDDB 2022). This record occurs within 5 miles of the study area in chaparral habitat being encroached by French broom. Because this species has the potential to occur in disturbed chaparral habitat,

there is potential (albeit low) for it to occur in the southwestern portion of the study area, just east of the parking area. This habitat is similar to that of CNDDB Occurrence #16.

CEQA and Regulatory Considerations. Redevelopment of the site may largely affect areas that do not provide suitable habitat for special-status plant species, as areas with potential to support the special-status plant species discussed above would include the undeveloped ruderal grassland, coast live oak woodland, chaparral, and those habitats that are discussed above as jurisdictional wetlands or sensitive natural communities regulated by CDFW. If project activities are to occur in these areas, we recommend an appropriately timed survey for each of the four potentially occurring special-status species to determine presence or absence; several surveys conducted March through August would encompass the periods in which these four species are detectable. If any of these species is present, and impacts cannot be avoided, this impact may be considered significant under CEQA; providing compensatory mitigation, as described below, would reduce the impact to less-than-significant levels under CEQA. None of these potentially occurring plant species is regulated by the USFWS or CDFW under FESA or CESA, and therefore no regulatory approvals related to special-status plants would be necessary.

Typical Mitigation Requirements. In the unlikely event that bent-flowered fiddleneck, Brewer's calandrinia, California bottle-brush grass, or arcuate bush-mallow is detected in or very close to (e.g., within 50 feet of) the study area, avoidance measures should be implemented to preserve and protect the occurrences, if feasible. Relocation of staging or access areas to avoid impacts, and use of fiber rolls or similar measures to prevent water quality and sedimentation impacts, would be appropriate. With implementation of AMMs, impacts to special-status plants may be avoided, and therefore no compensatory mitigation would be necessary. If potential populations could not be avoided, compensatory mitigation is likely to be required during the CEQA process. Such mitigation could be provided through preservation and enhancement of any avoided, occupied habitat in the study area, possibly supplemented with either relocation of seed from impacted individuals and monitoring, or preservation of off-site populations. Such mitigation would be appropriate at a 1:1 ratio, on the basis of the number of individuals and/or square footage of occupied habitat impacted. Implementation of this mitigation would reduce the impact to less-than-significant levels under CEQA.

3.2.4 Loss of Protected Trees

Potential for Occurrence. Associated with the coast live oak woodland, non-native woodland, willow seepage wetland, and landscaping within the developed portion of the study area are a number of both native and non-native trees that are expected to be subject to protection under the City of Belmont's tree protection ordinance, codified in City municipal code. Depending on the proposed project activities, development could result in the removal or damage to a number of ordinance-sized trees. If these trees are impacted, a tree removal permit would be necessary through the City of Belmont.

CEQA and Regulatory Considerations. The City provides tree protection under the Municipal Code (2017-1120) and Municipal Code Chapter 25: *Trees*. This ordinance details permit requirements for tree related work,

including the removal, pruning, and planting of trees. Pruning or removal of street trees is illegal without a permit issued by the City and doing so without a permit may result in a fine. The City ordinance includes the following classes of trees; 1) coast live oak, valley oak (*Quercus lobata*), coast redwood, madrone (*Arbutus menziesii*), bay laurel (*Umbellularia californica*), and buckeye (*Aesculus californica*) having a single main stem or trunk of ten inches or more dbh, where dbh is the diameter of a tree at breast height, measured across the widest face of the trunk at four and one-half (4.5) feet above the natural grade, 2) all other species with a main stem or trunk of 14 inches or more dbh; and 3) multi-stemmed trees totaling eighteen inches or more dbh. In addition to a permit application, an independent arborist report is required when the tree is in good health, the tree is growing within 10 feet or closer to existing structures, being removed as part of a building structure not within the footprint of the new structure, and for any protected sized coast redwoods and coast live oak trees.

Typical Mitigation Requirements. AMMs for trees that can be protected on site typically include implementation of tree protection zones (i.e., protecting trees that are intended to remain on the site from incidental project disturbance) and development of a tree protection plan by a certified arborist. In addition, the project proponent would be required to comply with the City of Belmont Municipal Code and submit permit applications for removal or damage of all trees covered by the ordinance. If any trees on the site that meet the City definition of Protected trees were to be removed, the City may require replacement according to the discretion of the Community Development Department. As per the City Protected Tree ordinance, protected trees to be removed are typically required to be replaced at a ratio of 1:1 and include a 24 inch box size single stem landscape tree(s) (no fruit or nut trees), which may be planted anywhere on the property. Implementation of these measures would reduce the impact to less-than-significant levels under CEQA.

3.2.5 Riparian Setbacks

Potential for Occurrence. Many municipalities in the San Francisco Bay Area have adopted riparian setback ordinances to regulate development adjacent to creeks and to protect waterways. While the City of Belmont does not have an enacted ordinance, the City has identified preservation and restoration of riparian habitat along Belmont Creek, and likely to associated tributaries of Belmont Creek, as a goal in the Conservation Element of the City of Belmont 2035 General Plan Conservation Element (Goal 5.4; Policy 5.4-1). Many nearby jurisdictions, including the City of San Carlos have adopted ordinances requiring a stream setback of a minimum of 25 feet from the top of bank line (or such other distance as specified by the Planning Commission).

CEQA and Regulatory Considerations. Although the City of Belmont does not have specific riparian setback requirements, the City could potentially consider encroachment of development (especially new development, such as new impervious surface) close to the creek to be a significant impact under CEQA. Redevelopment of areas that are already developed/hardscaped, even close to the creek, may not be considered an impact, but new development might be. In that case, the City might specify that a certain setback (e.g., 25 or 35 feet from the top of bank, or from riparian habitat) be maintained for new development. Impacts from encroachment within that setback might still be allowed under certain conditions (e.g., with mitigation, as

described below). Some land uses, such as bridge crossings and trails, are often considered allowed uses within riparian setbacks.

Regulatory agencies typically recommend setbacks between development and jurisdictional areas, but no agencies having jurisdiction over the unnamed creek have the authority to require setbacks.

Typical Mitigation Requirements. On projects in municipalities that have setback ordinances, mitigation is often required for encroachments within the setback. Such mitigation typically takes the form of riparian habitat restoration or enhancement. Given the paucity of native plants along much of the unnamed creek, there would be ample opportunity for onsite riparian habitat enhancement if the City of Belmont were to require such enhancement as mitigation for riparian setback encroachment.

3.2.6 California Red-legged Frog

The California red-legged frog (*Rana draytonii*) was listed as threatened by the USFWS in 1996 (USFWS) and critical habitat was most recently designated in March 2010 (USFWS 2010). It is listed by the CDFW as a California species of special concern.

Potential to Occur. The California red-legged frog inhabits perennial freshwater pools, streams, and ponds throughout the Central California Coast Range and isolated portions of the western slope of the Sierra Nevada (Fellers 2005). Its preferred breeding habitat consists of deep perennial pools with emergent vegetation for attaching egg clusters (Fellers 2005), as well as shallow benches to act as nurseries for juveniles (Jennings and Hayes 1994). Non-breeding frogs may be found adjacent to streams and ponds in grasslands and woodlands, and may travel over 2 miles from their breeding locations across a variety of upland habitats to suitable nonbreeding habitats (Bulger et al. 2003, Fellers and Kleeman 2007). The study area is not within designated critical habitat.

Due to the presence of water in the unnamed tributary to Belmont Creek in the study area, the creek provides suitable aquatic habitat for the California red-legged frog. Within the study area, the creek lacks emergent vegetation and pools of adequate depth to support breeding by California red-legged frogs. As a result, we do not expect this species to breed on the site. However, the creek may function as nonbreeding aquatic habitat, and as dispersal habitat, for the California red-legged frog, and this species could occur in the study area if a breeding population occurs nearby.

The closest known occurrences of this species are located approximately 2.5, 2.8, and 3.1 miles to the west of the study area near Crystal Springs Reservoir (CNDDB 2022, Figure 3). Of these, the nearest record to the project site occurs along Cañada Road, west of Interstate 280 (I-280), and adjacent to the east side of Crystal Springs Reservoir. Suitable breeding habitat within and immediately adjacent to the reservoir at this location supports the nearest known breeding population of red-legged frogs to the study area. An unnamed intermittent creek channel extending from this location to an underpass beneath I-280 where it crosses the Sheep Camp Trail represents the most direct link between this breeding population and the Belmont Creek watershed where

the project site occurs. On the east side of I-280 at the Sheep Camp Trail overpass, open space areas and minimally developed residential areas represent upland habitat through which dispersing frogs could access the headwaters of Belmont Creek, upstream of Water Dog Lake. Additional tributaries to Belmont Creek in this area (i.e., within Hidden Canyon Park) also serve as links between these open space upland habitat areas and Belmont Creek.

Because the nearest known occurrences of California red-legged frogs are so far from the study area and are separated from the study area by I-280, the probability of red-legged frog presence on the project site is fairly low, in our opinion. However, there is some potential for the species to be breeding closer to the site, such as in Belmont Creek. In the absence of a more thorough examination of surrounding areas including the extended reaches of Belmont Creek, the potential presence of breeding habitat for this species in the study area vicinity cannot be ruled out.

To better determine the likelihood of California red-legged frog occurrence in the study area, we recommend conducting focused surveys for the species within the on-site reach of intermittent stream and, to the extent that access can be obtained, in nearby Belmont Creek. The USFWS has issued guidance (USFWS 2005) regarding the protocol that should be used to determine the presence or absence of California red-legged frogs at a study area. The survey protocol recommends a total of up to eight surveys; two day surveys and four night surveys are recommended during the breeding season (e.g., from late November through early May) and one day and one night survey are recommended during the non-breeding season. Each survey must take place at least seven days apart and be conducted by a qualified biologist. While such a survey could feasibly be conducted for the study area, it would be up to the USFWS as to whether they would accept negative survey results as proof of the species' absence. Therefore, coordination with the USFWS should occur before such a survey effort is undertaken.

Potential CEQA and Regulatory Considerations. If California red-legged frogs are present on the project site, redevelopment activities could result in impacts to individuals and loss of the species' habitat. Due to the rarity and listed status of the California red-legged frog, impacts on this species or its habitat would likely be considered significant during CEQA review. In addition, take of this species would necessitate incidental take approval from the USFWS under FESA.

If redevelopment of the study area were to require a CWA Section 404 permit from the USACE, then FESA consultation would occur via Section 7. In that case, the project proponent would be responsible for preparing a Biological Assessment documenting the potential for occurrence of federally listed species on the study area, potential effects of the project on those species, and conservation measures (including compensatory mitigation) proposed to offset those effects. If a CWA Section 404 permit is not required, and there is no other federal agency with a discretionary action related to the project, then no FESA consultation would occur. In that case, any take of the species would necessitate Section 10 consultation (negotiation of a Habitat Conservation Plan with the USFWS). However, given the low likelihood of red-legged frog occurrence, and the anticipated low impacts to the species if it is present, implementation of AMMs during construction may

be adequate to avoid take so that Section 10 consultation is not necessary, given the long duration (2-3 years or more) to complete Section 10 consultation.

Typical Mitigation Requirements. If project developments were to result in significant impacts under CEQA on the California red-legged frog or its habitat, or if resource agency approvals were needed, compensatory mitigation could be required to offset impacts to the species or its habitat. Such mitigation could take the form of on-site and/or off-site habitat creation/restoration or purchase of credits in an agency-approved conservation bank. Purchase of credits in a conservation bank would likely require mitigation at a 1:1 or 2:1 (mitigation to impact ratio) ratio, on an acreage basis. The Sparling Ranch Conservation Bank provides credits for this species and has a service area that includes the study area. For information on mitigation costs at that bank, please contact Gina Waldron at (813) 630-1853 or gwaldron@stonecreek-properties.com.

If project-specific mitigation (rather than purchase of credits in a conservation bank) were performed, mitigation would likely be required at a ratio of 2:1 to 3:1 (mitigation to impact ratio). The required steps would include preservation of land via a Conservation Easement, preparation of a management and monitoring plan for the mitigation lands, and establishment of an endowment to fund management and monitoring in perpetuity. On-site lands may not be suitable for use as mitigation due to the absence of high-quality breeding habitat for these amphibians, although it is possible that the resource agencies would approve on-site mitigation in the right amount, location, and configuration.

In addition, minimization measures would likely need to be implemented during construction. Such measures may include preconstruction surveys, exclusion fencing, restricted work windows for certain activities occurring adjacent to the creek, and BMPs to protect water quality and prevent spills.

3.2.7 San Francisco Garter Snake

The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) is listed as endangered under FESA and CESA. It is also a fully protected species under the state Fish and Game Code. Critical habitat has not been established for this species.

Potential to Occur. San Francisco garter snakes have been observed in a number of aquatic and terrestrial habitats throughout their historic range, including ponds, pools in or next to streams, streams, lakes, and reservoirs. The presence of adjacent upland areas with abundant small mammal burrows is also important as hibernation sites for snakes during the winter. They prefer a dense cover of vegetation such as willows, bulrushes, cattails, and tules. San Francisco garter snakes depend on frogs, particularly the threatened California red-legged frog, for food.

The San Francisco garter snake occurs at very few locations in San Mateo County. The closest extant records to the study area occur in the vicinity of the lower and upper portions of Crystal Springs Reservoir, approximately 3 and 6 miles from the site respectively. While the study area contains marginally suitable habitat in the form of pooling water and emergent vegetation within the unnamed creek on-site, all known records of

this species in the vicinity are isolated from the study area by dense urban development, roads, and highways. Thus, there is no potential for the San Francisco garter snake to occur in the creek within the study area or in immediately adjacent areas.

Potential CEQA and Regulatory Considerations. Because no high-quality habitat for the San Francisco garter snake is present within or adjacent to the study area, and this species is not expected to be present, redevelopment of the site would not result in a significant to this species under CEQA, in our opinion, and no agency approvals related to the San Francisco garter snake should be necessary.

3.2.8 Monarch Butterfly

On December 15, 2020, the U.S. Fish and Wildlife Service (USFWS) announced that listing the monarch butterfly as endangered or threatened under FESA was warranted, but precluded by higher priority listing actions. Thus, the monarch butterfly is now a candidate species under FESA, and the USFWS will review its status annually until a listing decision is made.

Potential to occur. Adult monarchs collect nectar from a variety of host plants but larvae are obligate herbivores of milkweed (*Asclepias* spp). This migratory butterfly species spends the majority of its life cycle migrating from Canada to South America; although the western population occurs from British Columbia to California. During the winter months, monarchs congregate into large groups within very small areas. The western population of monarch over-winters along the central and southern California coast, including over 300 known congregation sites within the state. Coastal California monarch wintering sites consist of wooded areas that are well protected from wind or frost and most often are dominated by non-native eucalyptus trees; although monarchs also use native Monterey pine (Pinus radiata), Monterey cypress, and coast redwood when these species are present (Bell et al. 1993).

Monarchs are known to form over-wintering congregations in several locations in coastal San Mateo and Santa Cruz Counties (CNDDB 2022). However, no such congregations are known from the study area or its vicinity. Migrating monarchs are fairly common in the Belmont area, where they forage for nectar and breed on stands of milkweed. Although breeding habitat (i.e., milkweed plants) was not observed on the study area, these plants may not have been detectable during our February 2022 survey, and they may be present on the site. If milkweed is present, monarchs could breed on the site. Further, migrating adults of this species are expected to occur in the study area in small numbers, nectaring on flowers.

Potential CEQA and Regulatory Considerations. The study area and surrounding vicinity are not known to support a high percentage of the West Coast breeding population of monarchs. Therefore, it is expected that the number of eggs, larvae, and pupae of this species potentially impacted by project activities would be low, and that impacts to individuals and monarch habitat would not be considered significant under CEQA. However, given the federal candidate status of this species, if the species is listed under FESA prior to the implementation of project activities, take approval from the USFWS may be necessary, especially if the species breeds on the project site. This take approval would occur via Section 7 consultation, if a federal nexus (such

as the need for a CWA Section 404 permit) exists, or possibly via Section 10, as described above for the California red-legged frog. However, it is our opinion that AMMs could be developed to avoid the need for take approval in the event that this species is listed and Section 7 consultation does not occur.

Typical Mitigation Requirements. AMMs (which may be required by the USFWS as conditions of the Section 7 consultation, or which may be implemented to avoid the need for take approval) may include surveys of milkweed for eggs, larvae, or pupae, as well as avoidance of any occupied plants, during the breeding season. In the event that compensatory mitigation is required (e.g., as a condition of a USFWS Biological Opinion), such mitigation would likely include planting supplemental milkweed host plants and/or nectar plants, which could be easily accomplished in project landscaping.

3.2.9 Certain Common and Special-Status Birds that Nest on or Near the Study Area

Only one special-status bird species, the white-tailed kite (*Elanus leucurus*), could potentially breed in the study area, based on the habitats present. The white-tailed kite is a fully protected species under the California Fish and Game Code. This species as well as all other native bird species that nest within the study area are protected under the Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

Potential to Occur. White-tailed kites nest in trees and forage in open grassland, ruderal, or agricultural habitats. Although the species was not observed in the study area during our February 2022 site visit, kites have been observed in the vicinity during the nesting season, approximately 0.3-mi south of the project site (Cornell Lab of Ornithology 2022), and suitable nesting and foraging habitat is present for this species in the intermixed woodland and grassland in the northern and eastern parts of the study area. Based on our site observations, the areal extent of the study area, and known breeding densities of these species, no more than one pair of white-tailed kites is expected to nest on or adjacent to the study area, if this species is present at all.

In addition, a number of other birds nest in the study area. The buildings, landscaped plantings, fields, and riparian, grassland, and woodland habitats in the study area provide suitable nesting habitat for a variety of common bird species such as northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), dark-eyed junco (*Junco hyemalis*), house finch (*Haemorhous mexicanus*), and American robin (*Turdus migratorius*), among others.

Potential CEQA and Regulatory Considerations. Redevelopment of the project site could impact birds protected by the MBTA and California Fish and Game Code by directly destroying nests with eggs or young, creating disturbance that leads to nest abandonment, and causing the loss of habitat for nesting birds. In our opinion, impacts on one pair of white-tailed kites would not be considered significant under CEQA, as such an impact would represent a small proportion of the regional populations of these species. Similarly, because there was no evidence that the study area supports a large population of common nesting birds, it is our opinion that impacts on active nests or habitat of non-special-status bird species would also likely not be considered significant under CEQA. Nevertheless, many CEQA lead agencies consider impacts to nesting birds to be a significant impact. Also, destroying eggs or young would violate the MBTA and Fish and Game Code, and

breeding-season disturbance that causes native birds to abandon active nests would also be a violation of the Fish and Game Code. If the project needs an LSAA from CDFW, we expect the LSAA to include conditions requiring measures to avoid impacts to nesting birds.

Typical Mitigation Requirements. Because impacts on nesting birds would not be considered significant under CEQA, in our opinion, no mitigation measures should be warranted. Nevertheless, we recommend implementing measures to ensure compliance with the MBTA and California Fish and Game Code; such measures would likely be conditions of any LSAA that might be needed for the project, and may also be required by the CEQA lead agency. Those measures are as follows:

- Tree removal, building demolition, and initiation of construction activities should be avoided during the nesting season (i.e., February 1 through August 31) to the extent feasible.
- If it is not feasible to schedule tree removal, building demolition, or construction activities during the non-breeding season, then pre-activity surveys for nesting birds should be conducted by a qualified biologist to ensure that no nests will be disturbed during those activities. This survey should be conducted no more than seven days prior to the initiation of such activities. During this survey, the biologist would inspect all trees, shrubs, and other potential nesting habitats in and immediately adjacent to the study area for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist would determine the extent of a buffer zone to be established around the nest, typically 300 feet for raptors and 100 feet for other birds, to ensure that no nests of species protected by the MBTA or the California Fish and Game Code will be disturbed during construction activities.

- Potential nesting substrate (e.g., bushes, trees, snags, grass, and suitable artificial surfaces) that would be impacted by development should be removed during the non-breeding season (i.e., they should be removed between September 1 and January 31), if feasible, to help preclude nesting in the study area.

As Stanford University considers redevelopment of this site, we would strongly encourage the University to plan for removal of trees and any other vegetation outside the breeding season to avoid substantial constraints to development that could occur if construction had to accommodate buffers around nesting birds.

3.2.10 Certain Common and Special-Status Bats that Roost in the Study Area

The pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western red bat (*Lasiurus blossevillii*), all California species of special concern, as well as several other common bat species (e.g., the hoary bat [*Lasiurus cinereus*], California myotis [*Myotis californicus*], Yuma myotis [*Myotis yumanensis*], and Mexican free-tailed bat [*Tadarida brasiliensis*]), may occur within or adjacent to the study area.

Potential for Occurrence. H. T. Harvey's focused assessment of the potential for bats to roost in the study area determined that marginally suitable roosting habitat for crevice-roosting bats, such as the pallid bat,

California myotis, Yuma myotis, and Mexican free-tailed bat, is present on several of the buildings and trees within the study area. Many of the buildings on-site contain crevices and cavities that could support individual bats, or possibly maternity roosts, of these species. In addition, foliage-roosting bats such as the western red bat and hoary bat may utilize the eucalyptus, palm, maple, and oak trees present on-site for individual roosts during winter months, though neither would breed in the study area. More detailed information on the potential for each of the buildings and select trees in the study area to support roosting bats is described below.

- Ralston Hall provides many crevices and cavities throughout the external portion of the building, and it is possible that individual roosts (i.e., roosts used by single bats) or maternity roosts could occur within the internal features of this building. Further, suitable winter roosting habitat for the Townsend's big-eared bat is present within a covered passageway entering this building, though no evidence of roosting bats was detected at this location during the February 2022 survey.

- The Wiegand Gallery and Madison Art Center building contains three stories of exterior rock wall features with crevices suitable for individual roosting bats, though no areas suitable for maternity roosts or large nonbreeding roosts were detected during our examination of the building's exterior.

- The Tabard Center, Dining Hall and Campus Center contain holes and/or crevices in the eaves that could support small numbers of crevice-roosting bats, especially California myotis and big brown bats (*Eptesicus fuscus*)

- Gavin Hall, Toso Residency, New Hall, the Chapel, and a rock cave feature present along Laxague Drive contain night roosting habitat, though no evidence of bats roosting was detected during the February 2022 survey, and no areas suitable for day roosts were detected.

- New Hall, St. Mary's Hall, Julie Billiart Hall, St. Joseph's Hall, and the Chapel contain flashing along roof edges and at the tops of some floors for crevice-roosting bats, such as small numbers of Mexican free-tailed bats and possibly California myotis and big brown bats. No staining or guano pellets were observed below the flashing or on outside walls suggesting bats in larger numbers were not occupying these spaces.

- The Carroll, Kane, Wilkie, and Oaks dorm buildings contain warped shingles that provide potential day-roosting habitat for crevice roosting bats, especially California myotis. Some areas of these outside eastern-facing walls could potentially support a maternity colony.

- The Taube Center contains a tile roof that provides crevices for maternity colonies, especially for those of Mexican free-tailed bats.

- In addition to the flashing habitat described above, St. Joseph's Hall contains cracks in the ceiling of an outside entryway that provides potential day-roosting habitat for small numbers of California myotis, big brown bats, and Mexican free-tailed bats.

- The Bookstore, Cuvilly Hall, and Gleason Gym do not contain habitat that could support roosting bats.

In addition to the buildings present on-site, several palm and eucalyptus trees contain habitat suitable for individual and maternity roosts of foliage-roosting bats. These trees as well as select maple trees on-site (e.g., those with tag numbers 155, 156, and 157) also contain crevices and exfoliating bark that could support crevice-roosting bats. At least one large coast live oak present on-site also contains a cavity suitable for crevice-roosting bats.

Based on our review of the CNDDB, there are multiple occurrences of hoary bats and one occurrence of the pallid bat within the vicinity of the study area (CNDDB 2022); however, these occurrences are several decades old. While no obvious signs of roosting bats were observed during the site visit, and those bat occurrences within the vicinity are several decades old, we cannot rule out the possibility that bats may be roosting within the study area.

Potential CEQA and Regulatory Considerations. Redevelopment of the project site could impact bats by injuring or killing individuals during tree removal and building demolition; causing females to abandon young as a result of project disturbance close to maternity roosts; trapping individuals in buildings that are repaired; and causing the loss of suitable roost habitat. None of the bat species with potential to occur on-site are listed under the FESA or CESA, but all bat species are protected under the California Fish and Game Code, which prohibits the take of individuals.

Although a focused survey would be needed to determine the abundance of bats, and which species are present, it is our opinion that bats could roost in some buildings or trees in the study area in sufficient abundance that redevelopment could result in a significant impact to bats under CEQA, in the absence of AMMs. If the City of Belmont considers impacts on roosting bats to be significant, they will likely require several avoidance and minimization measures to reduce the potential for impacts on roosting bats to less than significant. Such measures are also likely to be required as conditions of any LSAA that might be needed for the project. Such measures are as follows:

- Pre-activity surveys of all potential roosting structures (trees and structures) should be conducted by a qualified biologist within 14 days prior to their removal, demolition, or modification.

- Removal or modification of trees or structures with suitable roost habitat should take place outside the bat maternity season (approximately April 15 – August 31) and the winter torpor period (approximately October 15 – March 2), if feasible.

- If removal or modification of potential roost habitat outside the maternity season or torpor period is not feasible, the following measures should be implemented.

    - If special-status bat species, or maternity or hibernation roosts, are detected during pre-activity surveys, appropriate species- and roost-specific avoidance and protection measures shall be developed by the qualified biologist in coordination with CDFW. Such measures may include postponing the removal of structures or trees until the non-maternity season and establishing exclusionary work buffers during maternity-season work nearby. A minimum 100-foot no disturbance buffer shall be established around special-status species, maternity, or hibernation roosts until the qualified biologist determines they are no longer active. The size of the no-disturbance buffer may be adjusted by the qualified biologist, in coordination with CDFW, depending on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of project activity that would occur around the roost site, and if that activity would not alter the behavior of the adult or young in a way that would cause injury or death to those individuals.

    - If disturbance of an active non-breeding roost cannot be avoided, the individuals shall be safely evicted outside the bat maternity season (approximately April 15 - August 31) and the winter torpor period (approximately October 15 - March 2). Bats may be evicted through exclusion, as directed by a qualified biologist, after notifying the CDFW. The qualified biologist must be present for removal of trees or structures occupied by bats.

    - For eviction from roost trees, trimming or removal of trees shall follow a two-step removal process whereby limbs and branches not containing roost habitat are removed on day 1 to disturb the roost, and then the entire tree is removed on day 2.

    - Disturbance of or removal of structures containing or suspected to contain active (non-maternity or hibernation) or potentially active common bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal will be completed the subsequent day. Alternatively, exclusion methods may include the installation of one-way doors and/or use of ultrasonic deterrence devices. One-way doors and/or deterrence devices should be left in place for a minimum of two weeks with a minimum of five fair-weather nights with no rainfall and temperatures no colder than 50°F.

Typical Mitigation Requirements. Compensatory mitigation (e.g., provision of alternate roost structures) may be required for the loss of bat roosts if the impact occurs to special-status species or if a roost used by large numbers of bats will be lost. If that is the case, the City may require replacement of each roost lost in consultation with the California Department of Fish and Wildlife. Mitigation may include construction and installation of bat boxes suitable for the bat species and colony size excluded from the original roosting site.

Roost replacement typically has to be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present at the original roost site, the original structures may be removed or sealed. Implementation of the AMMs described above, as well as the compensatory mitigation described here, would reduce the impact to less-than-significant levels under CEQA.

3.2.11 Lighting and Avian-Building Collisions

Construction of new buildings may increase the risk of avian mortality due to collisions. Glass windows and building facades can result in injury or mortality of birds due to collisions with these surfaces. Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. In addition, excessive lighting, especially lights pointed skyward, can disorient migrant birds at night, potentially attracting birds into areas where they are at greater risk of colliding with buildings. These risks are highest for buildings in or near areas of high avian activity or movement, such as migratory corridors, large open spaces, large water bodies, and riparian habitats.

Potential to Occur. In the context of the surrounding suburban areas of Belmont, the study area stands out as an "oasis" of bird habitat in the urban landscape due to the presence of the creek and abundance of trees and natural habitat. As a result, the site supports a fairly large number of birds, and during migration, the number of birds may be even higher. As a result, bird collision risk may increase with redevelopment of the site if new buildings have extensively glazed facades and/or if lighting on the site is extensive.

Potential CEQA and Regulatory Considerations. There are no adopted City of Belmont bird-safe design standards, and our review of the City's General Plan and CEQA documents for similar projects in the immediate vicinity did not detect any bird-safe design requirements. Therefore, bird-safe design requirements would only be required if the City required them as a CEQA mitigation measure. In our opinion, impacts from bird collisions could be significant under CEQA if Stanford University were to propose buildings with extensively glazed facades or with lighting that could disorient birds.

Typical Mitigation Requirements. If the City were to consider bird-building collisions potentially significant under CEQA, mitigation measures that would reduce impacts of bird-building collisions could include minimization of glazing on facades; avoidance of free-standing glass walls, glass railings, or transparent buildings corners; use glass that has patterns (e.g., frit, UV patterning) that allows birds to see the glass as a solid object; avoidance of up-lighting; minimization of light spillage into natural habitats; and other measures.

Section 4. Potential Design/Construction Considerations

Based on the biological constraints described above, we have identified several issues that should be considered when designing and planning for the development of the study area. Our recommendations are provided below:

- We recommend performing a delineation of regulated habitats and having the delineation verified by the USACE. The Jurisdictional Determination issued by the USACE would then legally establish the boundaries of jurisdictional waters of the U.S. and facilitate project planning (including impact avoidance and minimization) and mitigation planning (including determination of the project's mitigation costs).
- We recommend that any redevelopment be designed to avoid impacts to jurisdictional habitats to the extent practicable. Avoiding impacts to areas below the OHWM would avoid the need for a permit from the USACE and avoiding impacts to areas below the top of bank and out to the limits of riparian canopy would avoid the need from a permit from the RWQCB and CDFW. Impacts could be avoided by maintaining a setback from the top of bank of the unnamed tributary to Belmont Creek for future projects. Avoiding impacts to these wetlands and waters of the U.S./State, as well as riparian habitat along the tributary, would avoid the need for permits from USACE, RWQCB and/or CDFW. In addition, by incorporating this setback, the project will support the City of Belmont's goals and policies as stated in the Conservation Element of the 2035 General Plan update to preserve and restore Belmont's "*waterways and adjacent corridors as valuable community resources that serve as plant and wildlife habitats, groundwater recharge facilities, flood control and irrigation components, and connections between open space areas.*" If impacts to jurisdictional habitats cannot be avoided, we recommend minimizing those impacts.
- If the project plans to do any work in the study area that would be considered suitable habitat for bent-flowered fiddleneck, Brewer's Calandrinia, California bottle-brush grass, and/or arcuate bush-mallow (i.e., chaparral habitat or coast live oak woodland), we recommend conducting an appropriately timed survey for these special-status plant species. The survey periods are as follows: bent-flowered fiddleneck (March through June), Brewer's Calandrinia (March through July), California bottle-brush grass (May through August), and arcuate bush-mallow (April through September). Several surveys conducted March through August would encompass the periods in which these four species are detectable. Because the validity of surveys depends on rainfall during the prior wet season, we recommend that these surveys be conducted in 2022, as precipitation during the current wet season has been higher than in previous years, and future drought conditions could delay having surveys conducted.
- During the special-status plant survey, botanists should look for milkweed to determine whether there is potential for the monarch butterfly to breed on the project site.
- We recommend that focused surveys for California red-legged frogs be conducted to determine whether this species occurs on or near the site.

- We recommended that surveys for roosting bats be conducted within the buildings, and possibly some trees, identified as having potential to support roosting bats. The surveys should be conducted by a qualified bat biologist.
- Due to the potential for relatively high numbers of bird collisions to occur with buildings if extensive glass facades are used, we recommend avoiding extensively glazed facades in new building design, and avoiding up-lighting.

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APPENDIX D2:
TREE INVENTORY REPORT

Tree Inventory Report

Notre Dame de Namur University
Belmont, CA

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Revised August 2022 and February 2023

HORT SCIENCE
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Tree Inventory Report

Notre Dame de Namur University
Belmont, CA

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Tree Inventory Map

Tree Assessment Form

Tree Inventory Report

Notre Dame de Namur University
Belmont, CA

Introduction and Overview

Stanford University is assessing the property at Notre Dame de Namur University, located in Belmont California. HortScience | Bartlett Consulting (Divisions of the F. A. Bartlett Tree expert Co.) was asked to prepare a **Tree Inventory Report** for the project area for submission to the City of Belmont. A **Tree Preservation Report**, including assessment of impacts from future projects and identification of trees proposed for preservation and removal, will be prepared if development plans are designed.

This report provides the following information:

1. An assessment of the health and structural condition of the trees within the proposed project area based on a visual inspection from the ground.
2. Preliminary guidelines for tree preservation during the design, construction, and maintenance phases of development.

Tree Assessment Methods

Trees were assessed on several days in January 2022, February 2022, August 2022, and February 2023. The assessment included certain native trees 9 in. and greater in diameter and all trees 14 in. and greater, located within and adjacent to the project area. The assessment procedure consisted of the following steps:

1. Identifying the tree as to species.
2. Assigning each tree an identifying number, tagging the tree with a numerically coded metal tag, and recording its location on a map.
3. Measuring the trunk diameter at a point 54 inches above grade.
4. Evaluating the health and structural condition using a scale of 1 to 5 based on a visual inspection from the ground:
   - ***5*** - A healthy, vigorous tree, reasonably free of signs and symptom of disease, with good structure and form typical of the species.
   - ***4*** - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
   - ***3*** - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
   - ***2*** - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
   - ***1*** - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as “high”, “moderate” or “low”. Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

   High: Trees with good health and structural stability that have the potential for longevity at the site.

   Moderate: Trees with somewhat declining health and/or structural defects that can be abated with treatment. The tree will require more intense management and monitoring, and may have a shorter life span than those in ‘high’ category.

   Low: Tree in poor health or with significant structural defects that cannot be mitigated. The tree is expected to continue to decline, regardless of treatment.

Description of Trees

Nine hundred ninety-one (991) trees representing 55 species were evaluated (Table 1). Approximately 46% of trees (457 of 991) were in fair condition. Three hundred eight (308) trees (31%) were in good condition, 221 (22%) were in poor condition, and five trees (less than 1%) were dead. Many trees were growing in crowded stands with strong competition for growing space. Crown form and structure was often compromised as a result. Invasive species such as blue gum eucalyptus dominated the landscape. There were, however, a significant number of coast live oaks and coast redwoods which are native to the area and may be indigenous to the site. Descriptions of each tree can be found in the ***Tree Assessment Form***, and approximate locations are plotted on the ***Tree Assessment Plan*** (see Exhibits).

Six distinct development zones were present:

- **Academic Core** – A variety of ornamental species and coast redwoods surrounded the academic buildings, gym, and associated parking lots as accent plantings. Additionally, there were significant stands of coast live oak with Monterey pine, blue gum, and other species which were located in the southwest corner and eastern edge of the zone.
- **Residential Edge** – A large stand of blue gum on the eastern edge of the site. Smaller stands of coast live oak, Monterey pine and blackwood acacia were closer to the main housing areas. Plantings of ornamental species were adjacent to buildings.
- **Legacy Zone** – Primarily ornamental species planted as botanical specimens during the original design of the campus. Present in this area were individual coast redwood and dawn redwood trees in excellent condition.
- **Undeveloped North** – Mostly blue gums and coast live oaks were present from the entrance road to the northern property boundary.
- **Ralston Frontage** – This area included a stand of blue gum on the eastern end, a significant stand of young to mature coast live oak in the center, and a more diverse stand of trees along the riparian area near the northwestern edge. Also present were a stand of young coast redwoods along the southern edge of a soccer field, a stand of mature coast redwood in excellent condition at the west, and a diversity of ornamental species at the entrances to the buildings.
- **Laxague Drive** – Two separate locations on either side of the road were composed of blue gum, coast live oak, Canary island palm, and acacia.

Table 1: Condition ratings and frequency of occurrence of trees
Notre Dame de Namur University, Belmont

Common Name	Scientific Name	Condition				Total
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
Bailey acacia	*Acacia baileyana*	-	-	-	2	**2**
Blackwood acacia	*Acacia melanoxylon*	-	-	6	-	**6**
Japanese maple	*Acer palmatum*	-	3	2	1	**6**
Norway maple	*Acer platanoides*	-	1	1	1	**3**
Silk tree	*Albizia julibrissin*	-	-	-	1	**1**
Strawberry tree	*Arbutus unedo*	-	-	1	-	**1**
European white birch	*Betula pendula*	-	-	1	-	**1**
Blue atlas cedar	*Cedrus atlantica* 'Glauca'	-	-	-	1	**1**
Deodar cedar	*Cedrus deodara*	-	-	6	2	**8**
Floss silk tree	*Chorisia speciosa*	-	-	1	-	**1**
Camphor	*Cinnamomum camphora*	-	-	1	-	**1**
Dracaena palm	*Cordyline stricta*	-	-	1	-	**1**
Leyland cypress	*Cupressocyparis leylandii*	-	1	-	-	**1**
Blue gum	*Eucalyptus globulus*	2	100	133	89	**324**
Silver dollar gum	*Eucalyptus polyanthemos*	-	-	3	-	**3**
Red ironbark	*Eucalyptus sideroxylon*	-	5	3	-	**8**
Manna gum	*Eucalyptus viminalis*	-	1	1	1	**3**
European beech	*Fagus sylvatica*	-	-	-	1	**1**
Raywood ash	*Fraxinus angustifolia* 'Raywood'	-	-	4	1	**5**
Evergreen ash	*Fraxinus uhdei*	-	-	-	1	**1**
Ginkgo	*Ginkgo biloba*	-	-	-	2	**2**
Silk oak	*Grevillea robusta*	-	-	1	-	**1**
Monterey cypress	*Hesperocyparis macrocarpa*	-	3	5	-	**8**
English holly	*Ilex aquifolium*	-	1	-	-	**1**
Jacaranda	*Jacaranda mimosifolia*	-	2	4	-	**6**
Hollywood juniper	*Juniperus chinensis* 'Kaizuka'	-	-	1	1	**2**
Glossy privet	*Ligustrum lucidum*	-	-	2	-	**2**
Sweetgum	*Liquidambar styraciflua*	-	8	4	-	**12**
Southern magnolia	*Magnolia grandiflora*	-	1	-	-	**1**
Crabapple	*Malus sylvestris*	-	-	1	-	**1**
Dawn redwood	*Metasequoia glyptostroboides*	-	1	1	5	**7**
Mulberry	*Morus* sp.	1	1	-	-	**2**
Olive	*Olea europaea*	-	-	1	3	**4**
Canary Island date palm	*Phoenix canariensis*	-	-	5	15	**20**
Photinia	*Photinia fraseri*	-	1	-	-	**1**
Canary Island pine	*Pinus canariensis*	-	-	-	2	**2**
Italian stone pine	*Pinus pinea*	-	1	-	-	**1**
Monterey pine	*Pinus radiata*	1	5	11	5	**22**
Chinese pistache	*Pistacia chinensis*	-	1	-	1	**2**

Table 1, continued: Condition ratings and frequency of occurrence of trees
Notre Dame de Namur University, Belmont

Common Name	Scientific Name	Condition				Total
		Dead (0)	Poor (1-2)	Fair (3)	Good (4-5)	
Karo	*Pittosporum crassifolium*	-	2	2	-	**4**
Victorian box	*Pittosporus undulatum*	-	1	-	-	**1**
Fremont cottonwood	*Populus fremontii*	-	-	1	-	**1**
Plum	*Prunus domestica*	-	1	1	-	**2**
Coast live oak	*Quercus agrifolia*	-	74	220	129	**423**
Valley oak	*Quercus lobata*	-	-	3	4	**7**
Cork oak	*Quercus suber*	-	-	1	-	**1**
Black locust	*Robinia pseudoacacia*	-	-	2	-	**2**
Yellow willow	*Salix lasiandra*	-	3	1	-	**4**
California pepper	*Schinus molle*	-	1	2	-	**3**
Coast redwood	*Sequoia sempervirens*	1	3	18	37	**59**
Australian bush cherry	*Syzygium paniculatum*	-	-	-	1	**1**
English yew	*Taxus baccata*	-	-	1	1	**2**
Windmill palm	*Trachycarpus fortunei*	-	-	3	-	**3**
Chinese elm	*Ulmus parvifolia*	-	-	-	1	**1**
Siberian elm	*Ulmus pumila*	-	-	2	-	**2**
Total		**5**	**221**	**457**	**308**	**991**

The most frequently occurring species was coast live oak with 423 trees or 43% of the population. Coast live oak trees tended to occur on undeveloped portions of the campus. They were also present close to structures and in mixed-use areas. Average condition of coast live oaks was fair (220 trees, 52% of the oaks), with 129 in good condition (32%) and 74 poor (13%). Coast live oaks varied from young (8 in.) to mature in development (38 in.) with an average trunk diameter of 15 inches. One hundred five (105) trees had at least one stem of 18 in. or greater in diameter. Forty-seven (47) trees, all of which were multi-stemmed, had summed trunk diameters of greater than 36 in.

Coast live oaks in good condition had full, dense, spreading crowns with good branch unions. Individuals in fair to poor condition had small crowns with twig and branch dieback and tended to have multiple stems with included bark, sinuous trunks, and/or moderate to severe lean (Photo 1). Drought stress and over-crowding appeared to be a factor for trees in fair and poor condition. Some oaks had boring-insect activity and/or decay in the trunk.



Photo 1: Looking northwest at coast live oaks #122 - 126 below the parking lot in the Academic Core. They tend toward sinuous structure and slightly thin canopies.



Photo 2: Looking west at blue gums #783 - 785 in the northwest corner of the campus. Trees pictured were all in good condition.

Three hundred twenty-four (324) blue gum represented the largest trees on-site. Tree condition was generally fair (133 of 324 trees) while 100 were poor and 89 good. Trees #707 and 720 were dead. In general, the species occurred on undeveloped hillsides and along roadways throughout the property. Blue gums varied from young (10 inches) to mature in development (96 inches) with an average trunk diameter of 30 inches. Approximately fifty percent of blue gums had at least one trunk 24 inches or greater in diameter. Thirty-eight (38) blue gums had a single trunk diameter or summed trunk diameter of at least 60 inches.

Blue gums had either multiple or codominant stems arising between the ground and high in the crown, a structure typical of this species. Many trees in poor or fair condition suffered from over-crowding which led to suppression of development. Trees in poorer condition also tended to be on steeper slopes with shallow soils. These trees had small, high, thin, and/or, unbalanced crowns along with leaning or bowed trunks. Trees in good condition tended to have vigorous, spreading crowns with upright structure and single trunks (Photo 2).

Fifty-nine (59) coast redwoods (6% of the population) were primarily located in small stands within the Academic Core and Ralston Frontage zones (Photo 3). The trees were young to mature in development. Trunk diameters ranged from 10 inches to 73 inches with an average of 32 inches. Fifty percent of trees were 27 inches or greater in diameter. Sixteen (16) trees (29% of redwoods) had trunk diameters of greater than 40 inches. The species performed exceptionally well, with nine trees in excellent condition (15%), 28 trees in good condition (47%), 18 in fair (31%), and three in poor (5%). Redwood #7 was dead.



Photo 3: Looking north from Ralston Avenue at coast redwoods #490 - 493. Trees pictured are all in good to excellent condition. They represented some of the largest trees on-site with trunks 63 to 73 inches in diameter.

Twenty-two (22) Monterey pines (2% of the population) were primarily located in small stands within the Academic Core and Residential Edge zones. The trees were semi-mature to mature in development. Trunk diameters ranged from 14 inches to 57 inches with an average of 25 inches. Tree condition was generally fair (11 trees). Tree #64 was dead. The remaining pines were evenly divided between poor and good condition.

Canary Island date palms represented 2 percent of the population (20 trees). Trees were generally located close to Laxague Drive and appeared to have originated as volunteers. Trees were semi-mature to mature in development. Trunk diameters ranged from 27 inches to 48 inches with an average of 38 inches. The palms performed exceptionally well. Fifteen (15) trees were in good condition and five fair.

Twelve (12) sweetgums were located just north of a housing unit in the Academic core. Trees were semi-mature to mature in development. Trunk diameters ranged from 14 inches to 28 inches with an average of 20 inches. Tree condition was generally poor (8 trees). Four trees were in fair condition. Structure was poor due to poor pruning practices and tight branch unions with included bark. Eight trees had been topped. Trees #42 and #76 had decay in the main trunk with fungal fruiting bodies present.

No other species represented more than 1% of individuals on-site. The remaining trees were diverse (49 species) ornamental trees planted as accent specimens near buildings and quads.

Eight Deodar cedars were planted in the Academic Core and Ralston Frontage primarily as specimen trees around buildings (Photo 4). Trees were semi-mature to mature in development. Cedars were generally in fair condition (6 trees). Trees #452 and #495 were in good condition. Eight Monterey cypresses were planted throughout the campus. Trees were generally in fair condition (5 trees). Three trees were in poor condition. Trees were semi-mature to mature in development. Trunk diameters ranged from 13 inches to 45 inches. All trees had poor structure with multiple, codominant, or sweeping stems.



Photo 4: Looking east at Deodar cedar #450.

Eight red ironbark eucalyptus were planted along the southeast edge of the main parking lot in the Academic Core. Trees were generally in poor condition (5 trees). Seven trees had multiple stems with included bark arising between the base and 3 feet.

Seven dawn redwoods were planted as specimen trees in the Legacy Zone and Academic Core. Trees were generally mature (6 trees) in development. Trunk diameters ranged from 14 inches to 74 inches. Six trees were 29 inches or greater in diameter. Five trees were in good condition, tree #268 was in fair condition, and tree #34 was poor.

Seven valley oaks were located sporadically throughout the campus. All trees were semi-mature in development. Trunk diameters ranged from 12 inches to 18 inches. Four were in good condition and three fair. Five trees had poor structure either from leaning or multiple stems.

Six blackwood acacias were primarily located (4 trees) in an open stand of coast live oaks in the Residential Edge. All trees were in fair condition. They were young to mature in development with a range of 10 inches to 32 inches in trunk diameter. All trees had multiple stems and/or trunk leans, poor structure typical of the species.

Six jacarandas were planted on-site. Four trees were planted just south of a housing unit in the Academic Core and trees #252 and #252 were planted on the east side of a historic building in the Legacy Zone (Photo 5). Jacarandas were generally in fair condition (4 trees). Trees #89 and #91 were in poor condition. All trees had more than one stem. Three trees had dead and decaying stems and branches.



Photo 5: Looking northwest at jacarandas #89 – 92 from left to right. Trees pictured were in fair or poor condition.

Six Japanese maples were planted equally between the Residential Edge and Legacy Zone. Trees were generally in poor condition (3 trees). Trees #156 and #275 were in fair condition while #261 was good. They had trunk diameters ranging from 10 inches to 31 inches. Trees in poor and fair condition tended to have codominant or multiple stems with included bark, branch and/or twig dieback, or decay throughout the trunk.

Five Raywood ashes were planted in irrigated turf on either side of the gym in the Academic Core. Four trees were in fair condition and tree #2 was in good condition. All trees were young in development with trunk diameters of 10 or 11 inches. All trees had poor structure with codominant or multiples stem arising around 7 feet.

Three of four olives were planted near the main parking plot in the Academic Core while tree #307 was planted near Laxague Drive. Three trees were in good condition and tree #39 was fair. All trees were semi-mature in development with trunk diameters between 12 to 21 inches. All trees had codominant or multiple stems with good unions.

Four karos were planted in a landscaped area north of Laxague Drive. Trees were semi-mature in development. They were evenly split between fair and poor condition. Trees had thin canopies and poor structure from suppression by surrounding trees.

Four yellow willows were found in riparian areas throughout the campus. All trees were mature in development. Willows were generally in poor condition with only tree #132 in fair condition. They had a history of branch failures and tree #764 had failed at the base.

Norway maples #20, #21, and #23 were planted around the edge of a building at the northwest corner of the main parking lot in the Academic Core. Tree #20 was in good condition, #21 fair, and #23 poor. Tree #20 was semi-mature in development while #21 and #23 were mature. Trees #21 and #23 had branch and twig dieback and #23 had trunk decay, typical of aging individuals in this species.

Silver dollar gums #85, #86, and #87 were planted in an open parkway 4 to 7 feet from the south side of a building on the south edge of the main parking lot in the Academic Core. All trees were in fair condition. They were mature in development with trunks 18 to 23 inches in diameter (Photo 6).



Photo 6: Looking northeast at silver dollar gums #85 - 87 in the Academic Core.

Manna gums #264, #265, and #624 were planted on the south edge towards the northwest end of Laxague Drive. All trees were mature in development with large trunk diameters of 42 to 58 inches. Tree #624 was in good condition, #265 in fair, and #264 in poor. Tree #624 had codominant stems that arose from the base with a good union, great structure, and upright branching.

California pepper #99 was planted at the northeast corner of the main parking lot in the Academic Core while #246 and #250 were planted on the far western edge of the Legacy Zone. Trees #99 and #246 were in fair condition while tree #250 was poor. Both #246 and #250 had decaying stems. All three trees had multiple attachments near the base.

Windmill palms #496 and #497 were planted at the entrance to a building in the Ralston Frontage while #301 was planted in a landscape north of Laxague Drive. All trees were young in development with trunk diameters of 10 to 12 inches. They were all in fair condition.

Bailey acacias #591 and #592 appeared to be volunteers growing on the creek bank just south of Laxague Drive. Both trees were in good condition. They were mature in development. Tree #292 had a strong south lean.

Black locusts #57 and #74 were planted in the southern portion of the Academic Core. Both trees were mature in development. Tree #57 had a trunk diameter of 15 inches while tree #74 had two stems measuring 17 and 19 inches. Both trees were in fair condition.

Canary Island pine #24 and #25 were planted in an open landscape in the Academic Core. Both trees were mature in development. Tree #24 had a trunk diameter of 19 inches and #25 was 25 inches. Both trees were in good condition.

Chinese pistache #19 was planted on the north edge of the main parking lot in the Academic Core. It was young in development with a 10-inch trunk diameter. It was in poor condition due to multiple decaying stems and poor pruning cuts. Chinese pistache #281 was planted on the south edge of the main quad in the Legacy zone. It was also young in development. Tree #281 was in good condition. It also had multiple attachments. In contrast to tree #19, it had a good spreading canopy.

English yews #257 and #258 were planted on either side of a concrete pathway in the Legacy Zone. Both trees were mature in development. Tree #258 was in good condition while #257 was fair. Tree #257 had a single stem with a thinning, chlorotic crown. Tree #258 had multiple attachments arising at 2 feet, but had a good, dense crown.



Photo 7: Looking south at ginkgo #280 in the Legacy Zone.

Ginkgoes #280 and #283 were planted on either side of the main quad in the Legacy Zone. Both trees were in good condition. Tree #280 was mature in development with a trunk diameter of 32 inches (Photo 7). Tree #283 was semi-mature in development with a trunk diameter of 18 inches. They both had good structure with upright stems.

Glossy privets #256 and #260 were planted in a landscaped area in the Legacy Zone. Both were in fair condition. They had multiple stems with include bark. Both privets had good, dense canopies.

Hollywood junipers #30 and #31 were planted on either side of the entrance to a building in the Academic Core. Tree #30 was in good condition while tree #31 was fair. Both trees had limited grow space from surrounding concrete and asphalt. Both were multi-stemmed.

Mulberry # 108 was planted on the eastern edge of the main parking lot in the academic core. Tree #108 was young and dead. Mulberry #163 was planted on the western side of the Residential Edge. It was mature in development with a trunk diameter of 23 inches. Tree #163 was in poor condition. It had been topped.

Plums #526 and #527 appeared to be volunteers located on the south side of the creek in the Ralston Frontage. They were both semi-mature in development. Tree #526 was in fair condition while tree #527 was fair.

Siberian elms # 52 and #53 were planted in an open parkway near the western edge of the main parking lot in the Academic Core. Both trees were mature in development with trunk diameters of 18 inches. They were both in fair condition. The Siberian elms had dead and decaying branches with nesting cavities.

The remaining species were represented by the following individuals:

- Australian bush cherry #284 was located close to the road in the Legacy Zone. It was mature in development with a trunk diameter of 58 inches. It may be the largest recorded individual of this species in California (Photo 8). It was in good condition. There was evidence of past failures in the upper canopy.

- Blue Atlas cedar #22 was located west of the main parking lot in the Academic Core. It was semi-mature in development. It was in good condition.

- Camphor #56 was planted in an 8-foot open parkway on the north side of a building in the Academic Core. It was mature in development. It was in fair condition with a chlorotic spreading canopy.

- Chinese elm #26 was planted in a landscaped area west of the main parking lot in the Academic Core. It was young with a 10-inch trunk diameter. It was in good condition.

- Cork oak #50 was in a landscaped area in a small sitting plaza in the Academic Core. It had multiple attachments arising at 1 foot. It had a thin canopy with scales and sooty mold.

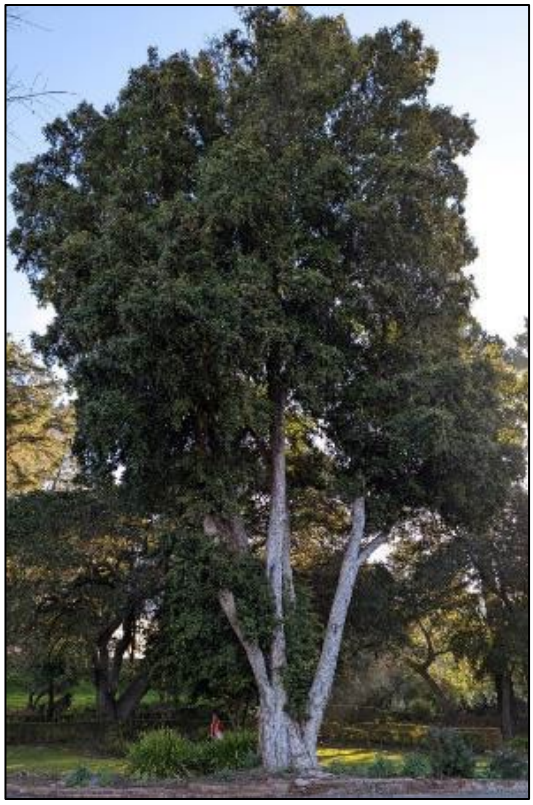


Photo 8: Looking northeast at Australian bush cherry #284. Preliminary measurements put this tree as larger than the current California Big Tree of this species. The California Big Tree State Registry is maintained by Cal Poly San Luis Obispo.

- Crabapple #282 was planted near Laxague Drive in the Legacy Zone. It was in poor condition. It had codominant stems arising at 7 feet which were splitting at the union.

- Dracena palm #254 was planted in a small, landscaped historic plaza in the Legacy zone. It was mature in development and in fair condition. It had multiple attachments arising at 2 feet ranging in diameter from 3 inches to 12 inches.

- English holly #279 was planted in irrigated turf in the Legacy Zone. It was in very poor condition. It had a very thin canopy with extensive twig and branch dieback

- European beech #488 was planted surrounded by a stand of redwood trees in the Ralston Frontage. It was semi-mature in development with a trunk diameter of 16 inches. It had good structure with upright branches and spreading crown.

- European white birch # 41 was planted on a slope in irrigated turf in the Academic Core. It was in fair condition. It had a trunk diameter of 13 inches. It had heading cuts throughout the crown.

- Evergreen ash #823 appeared to be a volunteer in the Undeveloped north. Its base was inaccessible and had an estimated trunk diameter of 19 inches. Condition was good with excellent structure.

- Floss silk tree #101 was planted on the northeast corner of the main parking lot in the Academic Core. It was young in development with a 12-inch trunk diameter. It was in fair condition. It had good structure, but chlorotic leaves and branch dieback.

- Fremont cottonwood #529 was in the creek along the Ralston Frontage. It was mature in development with a trunk diameter of 21 inches. It was in fair condition with a north lean and branch dieback with some decay.

- Italian stone pine #824 had failed at the base in the Undeveloped North. Trunk diameter was 24 inches.

- Leyland cypress #288 was planted as a specimen tree in a landscaped area near Laxague Drive. It was in poor condition. It was suppressed growing under tree #289.

- Photinia #88 was planted in the Academic Core. It was in poor condition. It had multiple stems arising at the base which were splitting and decaying.

- Silk oak #316 was located between a residential unit in the Academic Core and Laxague Drive. It was mature in development with a trunk diameter of 27 inches. Like many trees of this species, it had poor structure with multiple attachments arising in the upper canopy.

- Silk tree #154 was in an open landscape in the Residential Edge. It was in good condition. It had multiple attachments arising at 6 feet with good unions.

- Southern magnolia #453 was planted in a 10-foot median at the entrance to the campus on Ralston Road (Photo 9). It had a trunk diameter of 12 inches. It was in poor condition. It had a thin chlorotic crown.



Photo 9: Southern magnolia #453 was planted as a specimen tree at the Ralston Road entrance.

- Strawberry tree #84 was planted in a 6-foot open parkway on the south side of a building in the Academic Core. It had multiple attachments arising at 1 foot ranging in diameter from 8 inches to 10 inches. It was in fair condition. It had a vigorous canopy but had poor pruning cuts and some cracking stems.

- Victorian box #158 was planted 1 foot from the parking lot next to a building in the Residential Edge. It was in poor condition. It had a thin chlorotic canopy and a trunk wound.

The City of Belmont protects certain native trees with a diameter of 10 in. (or stems totalling 10 in.) or greater and all trees with a single stem of 14 in. (or totalling 18 in.) or greater measured at 54 inches above ground level. By this definition, 893 of the trees assessed are protected and cannot be removed without a permit. Status of individual trees is identified in the ***Tree Assessment Form*** (see Exhibits).

Suitability for Preservation

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment.

Evaluation of suitability for preservation considers several factors:

- **Tree health**
  Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees. All sweetgums were in fair or poor condition and are expected to continue to decline over time. Alternatively, most (54 of 58) coast redwoods were in fair, good or excellent condition and would respond well to changes in their environment.

- **Structural integrity**
  Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely. California pepper #246 and Norway maple #23 had extensive trunk decay. This extent of decay makes these trees much more likely to fail than trees with little to no decay.

- **Species response**
  There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, blue gum eucalyptus , Monterey pine, Monterey cypress and blackwood acacia are sensitive to construction impacts, while coast redwood and coast live oak are tolerant.

- **Tree age and longevity**
  Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

- **Species invasiveness**
  Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/) lists species identified as being invasive. Belmont is part of the Central West Floristic Province. Species identified as invasive present at the Notre Dame de Namur University site include: blackwood acacia, blue gum, olive, Canary Island date palm, black locust, and California pepper tree.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment. Suitability ratings are provided for each tree in the ***Tree Assessment Form*** (see attachments). A summary is provided in Table 2.

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with poor suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Table 2: Tree Suitability for Preservation
Notre Dame de Namur University, Belmont

High	These are trees with good health and structural stability that have the potential for longevity at the site. Two-hundred twenty-nine (229) trees were rated as having high suitability for preservation, including 109 coast live oaks, 60 blue gums, 31 coast redwoods, seven Canary Island date palms, five dawn redwoods, three olives, two Deodar cedars, two ginkgoes, two valley oaks, and one each of Australian bush cherry, Chinese pistache, English yew, European beech, Evergreen ash, manna gum, Monterey pine, and silk tree.
Moderate	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life spans than those in the “good” category. Three hundred eighty-seven (387) trees had moderate suitability for preservation: 191 coast live oaks, 101 blue gums, 23 coast redwoods, 11 Canary Island date palms, nine Monterey pines, five valley oaks, four Deodar cedars, four jacarandas, four Monterey cypresses, three Japanese maples, three silver dollar gums, three windmill palms, two Bailey acacias, two Canary Island pines, two Raywood ashes, two Siberian elms, two sweetgums, and one each of black locust, blue atlas cedar, California pepper, camphor, Chinese elm, dawn redwood, dracaena palm, English yew, Fremont cottonwood, glossy privet, Hollywood juniper, manna gum, Norway maple, olive, plum, and silk oak.
Low	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Three hundred forty (340) trees had low suitability for preservation: 139 blue gums, 117 coast live oaks, 11 Monterey pines, 10 sweetgums, eight red ironbarks, six blackwood acacias, four karos, four Monterey cypresses, four yellow willows, three coast redwoods, three Japanese maples, three Raywood ashes, two California peppers, two Deodar cedars, two jacarandas, two Norway maples, and one each of black locust, Canary Island date palm, Chinese pistache, cork oak, crabapple, dawn redwood, English holly, European white birch, floss silk tree, glossy privet, Hollywood juniper, Italian stone pine, Leyland cypress, manna gum, mulberry, plum, photinia, southern magnolia, strawberry tree, and Victorian box.

Preliminary Tree Preservation Guidelines

The following recommendations will help reduce impacts to trees from development as well as maintain and improve their health and vitality through the clearing, grading and construction phases. The key elements of a tree preservation plan for this site would include:

- Retaining select trees with high suitability for preservation, including the Australian bush cherry, English yews, European beech, ginkgoes, silk tree, and certain blue gums, Canary Island date palms, coast live oaks, coast redwoods, dawn redwoods, Deodar cedars, olives, manna gum #624, and valley oak #360.

- Establishing **TREE PROTECTION ZONES** for each tree to be preserved.

- Providing supplemental irrigation for trees proposed for preservation during the demolition and construction phases.

Design recommendations

1. Survey and plot the trunk location and elevations of all trees proposed to be preserved on all plans to assist in evaluating impacts to trees.

2. Forward all plans affecting trees to the Consulting Arborist for review of impacts to trees. These include, but are not limited to, demolition plans, grading and utility plans, landscape and irrigation plans.

3. For trees identified for preservation, designate a **TREE PROTECTION ZONE** in which no construction, grading and underground services including utilities, sub-drains, water or sewer will be located. For design purposes, the **TREE PROTECTION ZONE** should be either the dripline or edge of proposed construction, whichever is larger.

4. Include **Tree Preservation Notes**, prepared by the Consulting Arborist, on all plans.

5. Verify that any herbicides placed under paving materials are safe for use around trees and labeled for that use.

6. Design irrigation systems so that no trenching will occur within the **TREE PROTECTION ZONE**.

7. Do not lime soil within 50’ of any tree designated for preservation. Lime is toxic to tree roots.

Pre-construction treatments and recommendations

1. Have the construction superintendent meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.

2. Fence all trees to be retained to completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by the City. Fences are to remain in place until all grading and construction is completed.

3. Prune trees to be preserved to clean the crown and to provide construction clearance. Any pruning of off-site trees must be done with the property owner’s permission. All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the *Tree Pruning Guidelines* of the International Society of Arboriculture. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE.**

Recommendations for tree protection during construction

1. Prohibit grading, construction, demolition or other work within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.

2. Ensure that any root pruning required for transplanting or construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.

3. Apply and maintain 4-6” of wood chip mulch within the **TREE PROTECTION ZONE**. Keep the mulch 2’ from the base of tree trunks.

4. Evaluate any injury to trees that should occur during construction. Notify the Consulting Arborist so that appropriate treatments can be applied.

5. Prohibit the dumping and/or storage of excess soil, chemicals, debris, equipment or other materials within the **TREE PROTECTION ZONE**.

6. Require that any tree pruning needed for clearance during construction be performed by a Certified Arborist and not by construction personnel.

Our procedures included assessing trees for observable defects in structure. This is not to say that trees without significant defects will not fail. Failure of apparently defect-free trees does occur, especially during storm events. Wind forces, for example, can exceed the strength of defect-free wood causing branches and trunks to break. Wind forces coupled with rain can saturate soils, reducing their ability to hold roots, and blow over defect-free trees. Although we cannot predict all failures, identifying those trees with observable defects is a critical component of enhancing public safety.

Furthermore, trees change over time. Our inspections represent the condition of the tree at the time of inspection. As trees age, the likelihood of failure of branches or entire trees increases. Annual tree inspections are recommended to identify changes to tree health and structure. In addition, trees should be inspected after storms of unusual severity to evaluate damage and structural changes. Initiating these inspections is the responsibility of the client and/or tree owner.

Summary

Nine hundred ninety-one (991) trees 8 in. and greater in diameter were evaluated at the Notre Dame de Namur University site in Belmont. Blue gum (324 trees or 33% of the population) and coast live oak (423 trees or 43%) were the most common species encountered. Both species were primarily found in large stands located on undeveloped portions of the campus. Blue gums were mostly in fair (133 trees) to poor (100 trees) condition, while coast live oaks were mostly in fair (220 trees) to good (129 trees). Coast redwoods had been planted in small stands throughout the campus and were in good condition. The few individuals of the remaining 52 species of trees tended to be in fair condition.

Average tree condition was fair (457 trees or 46% of the population), with 31% rated in good condition (308 trees), 22% in poor condition (221 trees) and five (5) dead trees (≤1%). See Table 1, page 3 for a summary of condition by species.

The City of Belmont defines certain native trees with a diameter of 10 in. (or stems totalling 10 in.) or greater and all trees with a single stem of 14 in. (or stems totalling 18 in.) or greater as a *protected* tree. Six hundred nineteen (619) trees were *protected* which were included in the assessment.

Two hundred twenty-nine (229) trees had high suitability for preservation, 387 were moderate, and 340 were low (Table 2, page 13). I recommend focusing preservation efforts on those trees with high suitability for preservation. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

If you have any questions regarding my observations or recommendations, please contact me.

HortScience | Bartlett Consulting



Allegra Mautner, Consulting Arborist & Urban Forester
ISA Certified Arborist No. WE-10369A
ISA Tree Risk Assessment Qualified
American Society of Consulting Arborists, Member

Exhibits

Tree Assessment Map

Tree Assessment Form

Tree Inventory Map

Notre Dame de Namur
University Campus
Belmont, CA

Prepared for:
Stanford University
Redwood City, CA

February 2022
updated August 2022
updated February 2023

N

No Scale

Notes:
Base map provided by:
BKF
San Jose, CA

Numbered tree locations with no survey point were approximately located in the field

Trees inventoried were 10" in diameter and greater.

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Tree Assessment

Notre Dame de Namur University
Belmont, California
February 2023

HORT SCIENCE
BARTLETT CONSULTING
Divisions of The F.A. Bartlett Tree Expert Company

Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
1	Raywood ash	10	No	3	Low	Planted in irrigated turf; multiple attachments arising at 7'; tight branches with included bark; small dead branches and twigs.	Academic Core
2	Raywood ash	11	No	4	Moderate	Planted in irrigated turf; multiple attachments arising at 7'; tight branches with included bark; small dead branches and twigs.	Academic Core
3	Raywood ash	11	No	3	Low	Planted in irrigated turf; codominant stems arising at 7'; tight branches with included bark; dead branches and twigs; sunburn; girdling root.	Academic Core
4	Valley oak	18	Yes	4	Moderate	Planted in irrigated turf; multiple attachments arising at 11'; all branches arising on S side.	Academic Core
5	Valley oak	18	Yes	3	Moderate	Planted in irrigated turf; multiple attachments arising at 9'; narrow limbs with included bark; crowded by #4.	Academic Core
6	Valley oak	15	Yes	4	Moderate	Good structure; upright branching; crowded by #7 with girdling root.	Academic Core
7	Coast redwood	27	Yes	3	Moderate	Good structure; thin canopy.	Academic Core
8	Coast redwood	26	Yes	3	Moderate	Good structure; minor root injury; large surface roots; canopy unbalanced to S side.	Academic Core
9	Coast redwood	26	Yes	3	Moderate	Good structure; thin canopy.	Academic Core
10	Coast redwood	21	Yes	3	Moderate	2' trunk wound at 3', good wound wood; crowded by #9 & 12; good structure.	Academic Core
11	Coast redwood	22	Yes	3	Moderate	Unbalanced crown to S; crowded by #10.	Academic Core
12	Coast redwood	23	Yes	3	Moderate	5' from road; good structure.	Academic Core
13	Coast redwood	10	Yes	1	Low	Dead top half; fungus on trunk to 15'.	Academic Core
14	Coast redwood	35	Yes	4	High	Good structure; vigorous canopy; large surface roots.	Academic Core
15	Coast redwood	22	Yes	4	High	Good structure; vigorous canopy.	Academic Core
16	Coast redwood	19	Yes	4	High	Good structure; vigorous canopy; large surface roots.	Academic Core

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17	Raywood ash	10	No	3	Moderate	Planted in irrigated turf; multiple attachments arising at 7'; dead twigs; sunburn.	Academic Core
18	Raywood ash	10	No	3	Low	Planted in irrigated turf; multiple attachments arising at 7'; dead twigs; sunburn.	Academic Core
19	Chinese pistache	10	No	2	Low	Multiple attachments at 6'; decay from ground to 6'; dead stems; multiple heading cuts.	Academic Core
20	Norway maple	10	No	4	Moderate	Multiple attachments at 6'; spreading canopy; some water sprouts.	Academic Core
21	Norway maple	15	Yes	3	Low	Multiple attachments arising at 6'; dead stem on E; dead branches and twigs throughout canopy.	Academic Core
22	Blue atlas cedar	11	No	4	Moderate	Codominant stems arising at 7'; vigorous stem.	Academic Core
23	Norway maple	18	Yes	2	Low	Codominant stems arising at 7'; included bark on most attachments; trunk wound from base to 7' on S with white laminar rot.	Academic Core
24	Canary Island pine	19	Yes	4	Moderate	Slight bow to S in upper canopy; denser canopy.	Academic Core
25	Canary Island pine	25	Yes	4	Moderate	Good structure; some overextended branches over walkway.	Academic Core
26	Chinese elm	10	No	4	Moderate	Multiple attachments arising at 9'; spreading canopy.	Academic Core
27	Deodar cedar	23	Yes	3	Moderate	Good structure; thin canopy.	Academic Core
28	Deodar cedar	18	Yes	3	Moderate	Good structure; thin canopy.	Academic Core
29	Coast redwood	20	Yes	4	High	Planted in irrigated turf; good structure; slightly thin canopy on N.	Academic Core
30	Hollywood juniper	14,9	Yes	4	Moderate	1' from road; codominant stems arising at base; N lean.	Academic Core
31	Hollywood juniper	10,10,10,10,9,9	Yes	3	Low	1' from concrete pad; 2' from road; multiple attachments arising at base; stems with past failures; thin canopy with end weight.	Academic Core

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32	Coast redwood	28	Yes	2	Low	Planted in irrigated turf; good structure; very thin canopy.	Academic Core
33	Coast redwood	48	Yes	5	High	Good structure; vigorous and balanced canopy.	Academic Core
34	Dawn redwood	30	Yes	4	High	Planted in irrigated turf; multiple attachments high in crown with included bark; many heading cuts on limbs over building to W; surface roots with old pruning cuts.	Academic Core
35	Coast redwood	49	Yes	4	High	Planted in irrigated turf; thin canopy on NW; crowding with #34 & 36.	Academic Core
36	Coast redwood	27	Yes	3	Moderate	Planted in irrigated turf; thin canopy; girdling roots; poor root flare.	Academic Core
37	Sweetgum	28	Yes	3	Moderate	Planted in irrigated turf; codominant stems arising high in canopy; upright branching with included bark throughout canopy; girdling roots.	Academic Core
38	Deodar cedar	12	No	3	Moderate	S lean; fair structure; thin canopy.	Academic Core
39	Olive	15	Yes	3	Moderate	Planted 1' from brick wall; codominant stems arising at 6'; thin canopy on SW.	Academic Core
40	Olive	14	Yes	4	High	Codominant stems arising at 4'; spreading & vigorous canopy.	Academic Core
41	European white birch	13	No	3	Low	Planted on slope in irrigated turf; multiple attachments at 9'; heading cuts throughout canopy.	Academic Core
42	Sweetgum	22	Yes	3	Low	Planted in irrigated turf 2' from concrete path; codominant stems arising at 15' with included bark; multiple branch failures; girdling roots.	Academic Core
43	Coast redwood	48	Yes	4	High	Root crown at concrete path; good structure; vigorous canopy.	Academic Core
44	Coast redwood	43	Yes	4	High	Good structure; vigorous canopy.	Academic Core
45	Sweetgum	16	Yes	3	Moderate	Codominant stems arising at 10' with included bark; girdling roots.	Academic Core
46	Coast redwood	56	Yes	4	High	3' from concrete path; good structure; high canopy.	Academic Core

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47	Coast redwood	10	Yes	5	High	Planted in irrigated turf; good canopy; balanced structure.	Academic Core
48	Coast redwood	24	Yes	3	Moderate	In irrigated turf; 15' seam on N; thin canopy.	Academic Core
49	Coast redwood	44	Yes	4	Moderate	In irrigated turf; moderate canopy; good structure.	Academic Core
50	Cork oak	15,14,11,10	Yes	3	Low	Multiple attachments arising at 1'; thin canopy; root crown buried by river rock; sooty mold and scale throughout canopy.	Academic Core
51	Deodar cedar	13	No	3	Low	Lost top; some branch failures; fair canopy.	Academic Core
52	Siberian elm	18	Yes	3	Moderate	Codominant stems arising at 12'; sinuous structure; bird nesting cavities on S stem high in canopy; root crown buried in river rock.	Academic Core
53	Siberian elm	18	Yes	3	Moderate	Multiple attachments arising at 11'; dead branch with nesting cavities; poor structure; root crown buried in river rock.	Academic Core
54	Olive	12,8	Yes	4	High	Codominant stems arising at 2' & 6' with included bark; root crown buried in river rock; spreading vigorous canopy; slightly chlorotic on S.	Academic Core
55	Coast live oak	13	Yes	2	Low	Codominant stems arising at 7'; thin canopy; S lean; root crown buried in river rock.	Academic Core
56	Camphor	21	Yes	3	Moderate	Planted in 8' open parkway; multiple attachments at 4' & 5'; thin and slightly chlorotic spreading canopy.	Academic Core
57	Black locust	19,17	Yes	3	Moderate	Codominant stems arising at 3'; multiple attachments throughout canopy; 12" stem removed on N; twig dieback; surface roots buried by river rock.	Academic Core
58	Coast redwood	18	Yes	4	High	Good, dense canopy with some chlorosis; bow to SE.	Academic Core
59	Coast redwood	61	Yes	4	High	Codominant stems from base with good union, seam to 7'; good canopy.	Academic Core

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60	Coast redwood	33	Yes	4	Moderate	Good structure; thinning upper canopy; some chlorosis.	Academic Core
61	Coast live oak	11	Yes	3	Low	Small, narrow crown; bows to SW.	Academic Core
62	Coast live oak	13	Yes	2	Low	Codominant stems arising at 6'; basal decay with trunk wound on S bows to S.	Academic Core
63	Coast live oak	11	Yes	3	Moderate	Small narrow canopy bows to SE.	Academic Core
64	Monterey pine	35	Yes	3	Low	S lean; dead branches and thin canopy; overextended branches.	Academic Core
65	Coast live oak	12	Yes	3	Low	Removed codominant stem at base; failed attachment at 3'; NE lean; spreading canopy.	Academic Core
66	Coast redwood	19	Yes	2	Low	Thin, chlorotic canopy; good structure; dead branches.	Academic Core
67	Coast live oak	17	Yes	3	Moderate	Severe S bow; vigorous canopy.	Academic Core
68	Monterey cypress	39	Yes	3	Moderate	Multiple attachments high in canopy; included bark and tight branch unions; slightly thin canopy.	Academic Core
69	Coast live oak	13,9	Yes	3	Low	Codominant stems arising at 3'; growing under #68.	Academic Core
70	Coast live oak	20,11	Yes	3	Moderate	Codominant stems arising at 1' with opening then joining again at 3'; codominant stems arising at 9'; spreading canopy.	Academic Core
71	Coast live oak	19,18	Yes	3	Moderate	Codominant stems arising at base with seam to 3'; spreading canopy.	Academic Core
72	Coast live oak	19,17	Yes	3	Moderate	Codominant stems arising at 4' with included bark; severe NE lean over walkway.	Academic Core
73	Coast live oak	17,13	Yes	2	Low	Codominant stems arising at 5'; ivy engulfing canopy; growing under #71; thin canopy.	Academic Core
74	Black locust	15	Yes	3	Low	S lean; high crown.	Academic Core
75	Sweetgum	16	Yes	2	Low	On slope; topped.	Academic Core
76	Sweetgum	20	Yes	2	Low	Bottom of slope 3' from retaining wall; topped; multiple attachments at 14' with included bark; nesting cavities.	Academic Core

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77	Sweetgum	24	Yes	2	Low	On slope; multiple attachments at 5'; sunken bark with fruiting bodies; topped.	Academic Core
78	Sweetgum	16	Yes	2	Low	Bottom of slope 3' from retaining wall; multiple attachments with included bark high in canopy; topped.	Academic Core
79	Sweetgum	14	Yes	1	Low	On slope; topped; mostly dead; nesting cavities in trunk.	Academic Core
80	Sweetgum	22	Yes	3	Low	Bottom of slope 3' from retaining wall; multiple attachments with included bark arising at 13'; topped.	Academic Core
81	Sweetgum	22	Yes	2	Low	On slope; topped; girdling roots on S.	Academic Core
82	Sweetgum	18	Yes	2	Low	Bottom of slope 3' from retaining wall; topped; small canopy.	Academic Core
83	Sweetgum	19	Yes	1	Low	Bottom of slope 3' from retaining wall; fruiting bodies and splitting trunk; topped.	Academic Core
84	Strawberry tree	10,8,8	Yes	3	Low	Multiple attachments arising at 1'; canker and cracking stems; heading cuts on several attachments; vigorous canopy.	Academic Core
85	Silver dollar gum	23	Yes	3	Moderate	7' from building; codominant stems high in canopy; upright branching; thin canopy.	Academic Core
86	Silver dollar gum	21	Yes	3	Moderate	6' from building; codominant stems high in canopy; upright branching; thin canopy.	Academic Core
87	Silver dollar gum	18	Yes	3	Moderate	4' from building; codominant stems high in canopy; upright branching; thin canopy.	Academic Core
88	Photinia	13,8	Yes	2	Low	Multiple attachments arising at base; splitting at base with rot; dead twigs throughout canopy.	Academic Core
89	Jacaranda	10,8,6,5,4,3	Yes	2	Low	Multiple attachments arising at base; dead, decaying stems; branch and twig dieback.	Academic Core
90	Jacaranda	15	Yes	3	Moderate	Multiple attachments arising at 6'; twig dieback; upright branching.	Academic Core

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91	Jacaranda	11	No	2	Low	Multiple attachments arising at 4'; fungal bodies in past pruning cuts.	Academic Core
92	Jacaranda	10,6,5,5,3	Yes	3	Moderate	Multiple attachments arising at base; good canopy.	Academic Core
93	Coast live oak	11	Yes	2	Low	Planted in 5' parking lot median; multiple attachments arising at 7'; thin canopy; twig dieback.	Academic Core
94	Coast live oak	12	Yes	3	Low	Planted in 5' parking lot median; large branch scar at 5'; pitching on trunk; heading cuts for clearance; twig dieback; leaf chlorosis.	Academic Core
95	Coast live oak	12	Yes	3	Low	Planted in parking lot island; epicormic sprouts; thin; chlorotic canopy.	Academic Core
96	Coast live oak	11	Yes	3	Moderate	Planted in 10' parking lot island; codominant stems arising at 7'; thin canopy; trunk wound on N.	Academic Core
97	Coast live oak	28,19,15	Yes	3	Moderate	2' from parking lot; multiple attachments arising at 3' with included bark; spreading canopy; slightly thin.	Academic Core
98	Monterey pine	31	Yes	2	Low	Multiple attachments arising at 3'; dead top; W; stem with severe lean over road.	Academic Core
99	California pepper	19,18,14,13,11	Yes	3	Moderate	Multiple attachments arising at base; stems likely stump sprouts; good canopy.	Academic Core
100	Coast live oak	16	Yes	4	Moderate	Multiple attachments at 7'; slightly thin spreading canopy.	Academic Core
101	Floss silk tree	12	No	3	Low	Good structure; leaf chlorosis; branch dieback.	Academic Core
102	Coast live oak	15	Yes	4	High	Multiple attachments a arising at 9'; vigorous spreading canopy.	Academic Core
103	Coast live oak	16	Yes	3	Moderate	Multiple attachments at 5'; poor branch attachments; severe N lean; stunted leaves.	Academic Core
104	Coast live oak	15	Yes	4	High	Codominant stems arising at 8'; spreading canopy; good structure.	Academic Core
105	Monterey pine	19	No	0	-	Dead.	Academic Core

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106	Monterey pine	21	Yes	2	Low	Multiple attachments arising at 4' with included bark; RTB; thin canopy.	Academic Core
107	Blue gum	26,20	Yes	3	Low	Codominant stems arising at 4' with included bark; twig dieback.	Academic Core
108	Mulberry	10	No	0	-	Dead.	Academic Core
109	Monterey pine	22	Yes	3	Low	RTB; good structure; thin canopy; stunted growth.	Academic Core
110	Monterey pine	16	Yes	4	Moderate	Great structure; good canopy.	Academic Core
111	Monterey pine	24	Yes	3	Low	RTB; thinning canopy; crossing branches; flagging.	Academic Core
112	Monterey pine	14	Yes	2	Low	Codominant stems arising at 4'; RTB; thin canopy.	Academic Core
113	Coast live oak	16,14,11,10	Yes	3	Moderate	On slope; multiple attachments arising at base; sunken union at base; boring activity at base; thin spreading canopy.	Academic Core
114	Deodar cedar	19	Yes	3	Moderate	Thin slightly chlorotic canopy; good structure.	Academic Core
115	Coast live oak	17	Yes	4	High	Multiple attachments arising at 9'; boring activity with seeping; good canopy.	Academic Core
116	Coast live oak	15	Yes	4	High	Good structure; vigorous canopy.	Academic Core
117	Coast live oak	14	Yes	3	Moderate	Codominant stem removed at 2'; SE bow over road; slightly thin canopy.	Academic Core
118	Coast live oak	14	Yes	2	Low	Codominant stems arising at 9'; severe SW bow; thin canopy.	Academic Core
119	Coast live oak	10	Yes	2	Low	Codominant stems arising at 5'; severe SW bow; thin canopy.	Academic Core
120	Coast live oak	19	Yes	3	Moderate	Codominant stems arising at 11'; severe SW bow; fair canopy.	Academic Core
121	Coast live oak	11	Yes	3	Low	Codominant stems arising high in canopy; high narrow crown; slightly sparse.	Academic Core
122	Coast live oak	11	Yes	3	Low	Codominant stems arising at 3'; sweep in trunk at 2'; thin suppressed canopy.	Academic Core
123	Coast live oak	17,15	Yes	3	Moderate	Codominant stems arising at 2' with bulging union; thin spreading canopy.	Academic Core

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124	Coast live oak	11	Yes	3	Low	Unbalanced crown; slight N lean; thin suppressed crown.	Academic Core
125	Coast live oak	12	Yes	3	Moderate	Bowed trunk to N; vigorous small canopy.	Academic Core
126	Coast live oak	10,9	Yes	3	Moderate	Codominant stems arising at 3'; fair spreading canopy.	Academic Core
127	Coast live oak	11,8	Yes	3	Moderate	N lean; boring activity; small thin canopy; small olive at base.	Academic Core
128	Coast live oak	12	Yes	4	High	N lean; small vigorous canopy; upright branching.	Academic Core
129	Coast live oak	17	Yes	4	High	Sinuous trunk; slightly sparse canopy.	Academic Core
130	Coast live oak	22,12	Yes	4	High	On slope in channel; codominant stems arising at 2' & 9'; wide spreading canopy.	Academic Core
131	Blue gum	62,27,26	Yes	4	Moderate	Multiple attachments arising at 3' & 7' with included bark; spreading vigorous canopy.	Academic Core
132	Yellow willow	12,10,8,6, 6	Yes	3	Low	Multiple attachments arising at base; wide thin canopy; branch and twig dieback; multiple branch failures.	Academic Core
133	Coast live oak	10	Yes	3	Low	2' from asphalt; suppressed canopy; NW bow.	Academic Core
134	Coast live oak	12	Yes	3	Low	2' from asphalt; codominant stems arising at 5'; small canopy; NE lean.	Academic Core
135	Coast live oak	13,12	Yes	3	Low	1' from asphalt; codominant stems arising at base with included bark; thin spreading canopy.	Academic Core
136	Coast live oak	13	Yes	3	Low	5' from asphalt; codominant stems arising at 4'; 3' trunk wound on S with rot; spreading canopy; bow to S.	Academic Core
137	Coast live oak	18	Yes	3	Moderate	1' from road; thin canopy; upright structure.	Academic Core
138	Coast live oak	19	Yes	3	Moderate	1' from road; codominant stems arise at 7'; lean to S; 2' trunk wound on N with root and boring activity.	Academic Core
139	Coast live oak	11,8,5	Yes	3	Moderate	Adjacent to HV lines; multiple attachments arise at 1' with included bark; good canopy.	Academic Core
140	Monterey pine	24	Yes	4	Moderate	3' from concrete path; E lean; overextended branches.	Academic Core

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141	Monterey pine	19	Yes	3	Low	S lean; crowded and thin canopy.	Academic Core
142	Monterey pine	16	Yes	2	Low	Under HV lines; multiple attachments arise at 13'; S lean; topped for clearance.	Residential Edge
143	Coast live oak	12	Yes	2	Low	Under HV lines; codominant stems arise at 4' with included bark; severe S lean; topped for clearance.	Residential Edge
144	Coast live oak	11	Yes	2	Low	Under HV lines; codominant stems arise at 4' with included bark; topped for clearance.	Residential Edge
145	Coast live oak	14,10	Yes	3	Moderate	Adjacent to HV lines; codominant stems arise at 1'; upright structure.	Residential Edge
146	Coast live oak	17,14,13	Yes	2	Low	Adjacent to HV lines; S lean; boring activity throughout trunk; topped for utilities.	Residential Edge
147	Coast live oak	14,8	Yes	3	Moderate	Adjacent to HV lines; codominant stems arise at base; crown reduced for utilities; sinuous trunk; good canopy.	Residential Edge
148	Coast live oak	18	Yes	2	Low	Under HV lines; severe bow to E; cracking at base; topped for lines; trunk sprouts.	Residential Edge
149	Coast live oak	21	Yes	3	Moderate	Adjacent to HV lines; codominant stems arise at 7'; lean to N.	Residential Edge
150	Monterey pine	28	Yes	4	Moderate	Great structure; small girdling root on N.	Residential Edge
151	Coast live oak	10,10	Yes	3	Moderate	On retaining wall; codominant stems arise at 3' with included bark; N lean; sinuous structure.	Residential Edge
152	Coast live oak	14,10	Yes	2	Low	Suppressed under #153; under HV lines; reduced for clearance; S lean; thin small canopy.	Residential Edge
153	Coast live oak	24,18	Yes	4	High	Codominant stems arise at 3'; upright structure; multiple attachments high in canopy with good unions; spreading canopy.	Residential Edge
154	Silk tree	14	Yes	4	High	Multiple attachments arise at 6' with good unions; good spreading canopy.	Residential Edge
155	Japanese maple	21	Yes	2	Low	Multiple attachments arise at 5'; decay in stem; multiple wounds from past failures; thinning canopy.	Residential Edge

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156	Japanese maple	24	Yes	3	Moderate	1' from parking lot with river rock at base; multiple attachments arise at 5' with included bark; small stem has 1' wound with decay; W lean.	Residential Edge
157	Japanese maple	13,11	Yes	2	Low	2' from parking lot with river rock at base; multiple attachments arise at 3'; dead top; decay in trunk.	Residential Edge
158	Victorian box	11	No	2	Low	1' from parking lot; codominant stems arise at 4'; trunk wound; thin chlorotic canopy; N lean.	Residential Edge
159	Coast live oak	11	Yes	3	Moderate	Crowded in stand; boring activity around trunk at 2'; great structure; small canopy.	Residential Edge
160	Coast live oak	10	Yes	3	Moderate	Codominant stems arise at 6'; upright structure; crowded.	Residential Edge
161	Coast live oak	11	Yes	3	Moderate	Multiple attachments at 6'; W lean; unbalanced thin canopy.	Residential Edge
162	Coast live oak	11,9	Yes	3	Moderate	Codominant stems at 2' with included bark; narrow attachments throughout canopy; vigorous crown; SE lean.	Residential Edge
163	Mulberry	23	Yes	2	Low	Unbalanced crown to S; removed codominant trunks arise from 8'; topped.	Residential Edge
164	Monterey pine	22	Yes	3	Moderate	4' from parking lot; sinuous trunk; overextended limbs; thin canopy; RTB.	Residential Edge
165	Monterey pine	19	Yes	2	Low	5' from parking lot; sinuous trunk; slight W lean in upper canopy; past failures; overextended limbs.	Residential Edge
166	Coast live oak	10	Yes	4	Moderate	Codominant stems arise at 4'; suppressed by eucalyptus; good spreading canopy.	Residential Edge
167	Blue gum	23	Yes	3	Moderate	Codominant stems arise at 9'; N lean; thin sinuous canopy.	Residential Edge
168	Coast live oak	11,8	Yes	3	Moderate	Codominant stems arise at 2'; spreading canopy; suppressed by #168 & 169.	Residential Edge
169	Blue gum	19	Yes	3	Moderate	Great structure; thin small canopy.	Residential Edge
170	Blue gum	17	Yes	3	Low	Severe N lean.	Residential Edge

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171	Coast live oak	13,10,10,8	Yes	3	Low	Multiple attachments arise at base; suppressed very thin canopy.	Residential Edge
172	Coast live oak	17,13,12,12	Yes	3	High	Multiple attachments arise at 2' with included bark & boring activity; good spreading canopy.	Residential Edge
173	Monterey pine	25	Yes	4	Moderate	Upright stem; unbalanced canopy to W; from crowding with #174; large surface roots.	Residential Edge
174	Monterey pine	24	Yes	3	Moderate	Sinuous upright stem; thin canopy.	Residential Edge
175	Monterey pine	26	Yes	3	Moderate	Codominant stems arise high in canopy; sinuous trunk; RTB.	Residential Edge
176	Monterey pine	18	Yes	3	Low	Sinuous trunk; W lean; thin canopy.	Residential Edge
177	Blackwood acacia	19	Yes	3	Low	Severe SW lean; small high canopy.	Residential Edge
178	Blackwood acacia	27	Yes	3	Low	Multiple attachments arise high in canopy; included bark; thin chlorotic canopy.	Residential Edge
179	Blackwood acacia	10	No	3	Low	Resprout from dead stump; poor structure; small high canopy with multiple attachments.	Residential Edge
180	Coast live oak	32,13	Yes	3	Moderate	Codominant stems arise at base; basal wound on W; large trunk wound from failed stem at 3'; severe NE lean; good spreading canopy.	Residential Edge
181	Coast live oak	17	Yes	2	Low	Sinuous trunk; cavity at base; rot along entire trunk; thin high small canopy.	Residential Edge
182	Coast live oak	17	Yes	2	Low	20' seam starts at 12' with oozing and rot; small canopy; slight SE lean.	Residential Edge
183	Coast live oak	20	Yes	3	Moderate	Codominant stems arise at 8'; SE lean; thin high canopy.	Residential Edge
184	Blackwood acacia	14,14	Yes	3	Low	Codominant stems arise at base; stems with severe leans to E; & W; small high canopy.	Residential Edge
185	Coast live oak	22	Yes	3	Moderate	Multiple attachments arise at 7' with good unions; bleeding and lesions on S; good spreading canopy.	Residential Edge
186	Coast live oak	17,16,15	Yes	3	Low	Multiple attachments arise at base; S lean; good canopy; wounds on N of stems.	Residential Edge

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187	Coast live oak	18	Yes	3	Low	Codominant stems arise at 4'; wound with seam on N; good spreading canopy.	Residential Edge
188	Coast live oak	10,10	Yes	3	Moderate	Codominant stems arise at base; boring activity; SW lean; good canopy.	Residential Edge
189	Blue gum	17	Yes	2	Low	Codominant stems arise at 6'; stem removals at base; small high canopy.	Undeveloped North
190	Blue gum	41	Yes	3	Moderate	Codominant stems arise at 4' with included bark; S; stem with SW lean; N; stem thin high canopy.	Undeveloped North
191	Blue gum	65	Yes	3	Moderate	Multiple attachments arise at 3' with included bark; SW; stem has dead top; thinning upper canopy.	Undeveloped North
192	Blue gum	19	Yes	3	Low	Sinuous trunk with N lean; thin small high canopy.	Residential Edge
193	Blue gum	18	Yes	3	Low	Sinuous trunk; N lean high in canopy; branch dieback.	Residential Edge
194	Blue gum	23	Yes	3	Moderate	W lean; slightly unbalanced canopy.	Residential Edge
195	Blue gum	20	Yes	4	Moderate	Slight S lean; good canopy; great structure.	Residential Edge
196	Blue gum	48	Yes	3	Moderate	Codominant stems arise at 5'; boring activity; vigorous spreading canopy; overextended limbs.	Residential Edge
197	Blue gum	19	Yes	4	Moderate	Codominant stems arise high in canopy; upright structure; good canopy.	Residential Edge
198	Blue gum	14	Yes	3	Moderate	Codominant stems arise high in canopy; small high canopy.	Residential Edge
199	Blue gum	20,11	Yes	3	Low	Codominant stems arise at 3'; sinuous stem; small high canopy.	Residential Edge
200	Blue gum	16	Yes	2	Low	Fruiting body at base; thin small high canopy.	Residential Edge
201	Blue gum	28,13	Yes	2	Low	Codominant stems arise at 2'; large stem mostly dead.	Residential Edge
202	Blue gum	11	No	2	Low	Codominant stems arise high in canopy; W lean; thin high small canopy.	Residential Edge
203	Blue gum	17,12	Yes	2	Low	Codominant stems arise at 3'; N lean.	Residential Edge
204	Blue gum	16	Yes	2	Low	Codominant stems arise high in canopy; N lean; twig dieback.	Residential Edge

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205	Blue gum	16	Yes	2	Low	Fungus at base; thin high small canopy; S lean.	Residential Edge
206	Blue gum	15	Yes	2	Low	Thin small high canopy.	Residential Edge
207	Blue gum	23,15	Yes	3	Low	Codominant stems arise at 3'; SE lean.	Residential Edge
208	Blue gum	11	No	3	Moderate	Narrow vigorous canopy.	Residential Edge
209	Blue gum	11	No	3	Low	Sinuous trunk; small high canopy.	Residential Edge
210	Blue gum	20	Yes	3	Moderate	Thin high canopy; great structure.	Residential Edge
211	Blue gum	17	Yes	3	Moderate	Small high canopy; good structure.	Residential Edge
212	Blue gum	16	Yes	2	Low	NE lean; thin small high canopy; failures high in canopy.	Residential Edge
213	Blue gum	13	No	2	Low	Codominant stems arise high in canopy; thin canopy; branch dieback.	Residential Edge
214	Blue gum	18,12,9	Yes	2	Low	Codominant stems arise at base and 3'; SW lean; sinuous trunk.	Residential Edge
215	Blue gum	30	Yes	3	Moderate	Boring activity; slight SW lean; slightly thin canopy; great structure.	Residential Edge
216	Blue gum	17,15,14,11	Yes	2	Low	Multiple attachments arise at base; sinuous trunks; thin canopy.	Residential Edge
217	Blue gum	17	Yes	2	Low	Codominant stems arise high in canopy; cankers high in thin canopy; branch & twig dieback; dead top.	Residential Edge
218	Blue gum	12	No	2	Low	Codominant stems arise high in canopy; thin high canopy; dead top.	Residential Edge
219	Blue gum	10	No	1	Low	Multiple attachments at 5'; decay on SE; half of trunk; vigorous canopy.	Residential Edge
220	Blue gum	11	No	2	Low	Leaning on #216 with trunk wound; thin high canopy.	Residential Edge
221	Blue gum	20,18,14	Yes	3	Low	Multiple attachments arise at 1'; N; stem with severe E lean; thin canopy; dead stump at base.	Residential Edge
222	Blue gum	13	No	2	Low	Thin sinuous suppressed canopy; SE lean.	Residential Edge
223	Blue gum	11	No	2	Low	Thin small high canopy.	Academic Core

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224	Blue gum	21	Yes	3	Moderate	Codominant stems at 4'; E lean; vigorous canopy.	Academic Core
225	Blue gum	13	No	2	Low	Thin high small canopy.	Residential Edge
226	Blue gum	24,10	Yes	3	Low	Codominant stems arise at 3'; S; stem has wound with decay at base; thin canopy.	Residential Edge
227	Blue gum	20	Yes	3	Low	Thin canopy; good structure.	Residential Edge
228	Blue gum	11	No	2	Low	Sinuous trunk; thin small high canopy.	Residential Edge
229	Blue gum	12	No	2	Low	Conflicting with small stem; thin high canopy.	Residential Edge
230	Blue gum	14,8	Yes	2	Low	Codominant stems arise at base; E lean; branch dieback.	Academic Core
231	Blue gum	12	No	2	Low	E lean; unbalanced thin high canopy.	Academic Core
232	Blue gum	14,12	Yes	2	Low	Codominant stems arise at 1'; N; stem E lean; thin canopy.	Academic Core
233	Blue gum	17	Yes	2	Low	NE lean; thin high canopy.	Academic Core
234	Blue gum	16	Yes	2	Low	Small high crown.	Academic Core
235	Blue gum	17	Yes	2	Low	Small high crown.	Academic Core
236	Blue gum	24	Yes	3	Moderate	Thin high crown.	Academic Core
237	Blue gum	38	Yes	3	Moderate	Fruiting bodies on trunk wound; multiple attachments high in canopy; slight E lean; vigorous growth.	Academic Core
238	Blue gum	28	Yes	3	Moderate	Thinning upper canopy.	Academic Core
239	Blue gum	36	Yes	4	High	Great structure; good canopy; some overextended limbs.	Academic Core
240	Blue gum	21	Yes	3	Moderate	Good structure; small high canopy.	Academic Core
241	Blue gum	27	Yes	2	Low	Poor structure in upper canopy; high canopy.	Academic Core
242	Blue gum	17	Yes	3	Low	Small high crown; on steep slope.	Residential Edge
243	Blue gum	23	Yes	3	Moderate	Sinuous trunk; unbalanced canopy to SE.	Residential Edge
244	Blue gum	14	Yes	2	Low	Sweep in trunk at 3'; sinuous trunk; leaning on #245; thin small canopy.	Residential Edge

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245	Coast live oak	11,9	Yes	3	Moderate	Codominant stems arise at 1' with included bark; unbalanced canopy to SE; good canopy.	Academic Core
246	California pepper	18,10,10	Yes	3	Low	Multiple attachments arise at 2'; decay in all 3 stems from base; spreading canopy.	Residential Edge
247	Coast live oak	15	Yes	3	Low	Multiple attachments arise at 11'; reduced for HV lines; good spreading canopy.	Residential Edge
248	Coast live oak	20,6	Yes	4	Moderate	Codominant stems arise at 2'; multiple attachments arise throughout crown; good spreading canopy; reduced for HV lines.	Residential Edge
249	Coast live oak	11	Yes	3	Moderate	On property line above retaining wall; E lean; under HV lines; small canopy.	Legacy Zone
250	California pepper	27	Yes	2	Low	On property line; stem failure at base with extensive rot; thin high canopy; under HV lines.	Legacy Zone
251	Canary Island date palm	44	Yes	4	Moderate	4' from building; 10' brown trunk; great canopy; under HV lines.	Legacy Zone
252	Jacaranda	11	No	3	Moderate	3' from building; dead stem at base; small high canopy; SE bow.	Legacy Zone
253	Jacaranda	12,8	Yes	3	Moderate	Codominant stems arise at base & 4'; vigorous upright canopy.	Legacy Zone
254	Dracaena palm	12,7,6,5,5, 3,3	Yes	3	Moderate	Multiple attachments at 2'; branch dieback; chlorotic leaves.	Legacy Zone
255	Canary Island date palm	42	Yes	3	Moderate	Base not visible, covered in ferns; corrected lean at 8' to S; brown trunk to 15'; some leaf chlorosis.	Legacy Zone
256	Glossy privet	10,9	Yes	3	Moderate	Codominant stems arise at 1'; surface roots; good canopy.	Legacy Zone
257	English yew	15	Yes	3	Moderate	Thinning chlorotic canopy.	Legacy Zone
258	English yew	10,6,5,5	Yes	4	High	Multiple attachments arise at 2'; good dense canopy.	Legacy Zone
259	Canary Island date palm	34	Yes	4	High	Brown trunk to 30'; slight S lean; some dead fronds.	Legacy Zone

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260	Glossy privet	12,9,6,6,6, 4	Yes	3	Low	Multiple attachments arise at base; rot and fruiting bodies at base; dense canopy.	Legacy Zone
261	Japanese maple	10	No	4	Moderate	Suppressed by #260; S lean; multiple attachments at 4'; good canopy.	Legacy Zone
262	Coast live oak	23	Yes	3	Moderate	Multiple attachments arise at 4'; seeping on trunk; good spreading canopy.	Laxague Drive
263	Coast live oak	11	Yes	3	Low	Suppressed by #262; sinuous trunk; small high canopy.	Laxague Drive
264	Manna gum	53	Yes	2	Low	Thin high canopy; branch dieback.	Laxague Drive
265	Manna gum	58	Yes	3	Moderate	Codominant stems arise at 6'; multiple attachments high in canopy; overextended limbs; twig dieback.	Laxague Drive
266	Canary Island date palm	36	Yes	3	Moderate	Brown trunk to 20'; chlorotic lower fronds.	Legacy Zone
267	Coast redwood	49	Yes	4	High	Unbalanced canopy to S; some overextended limbs.	Legacy Zone
268	Dawn redwood	29	Yes	2	Low	Decay at base through tree; stunted top; thin canopy.	Legacy Zone
269	Coast redwood	55	Yes	5	High	Excellent specimen; great structure and canopy.	Legacy Zone
270	Dawn redwood	58	Yes	3	Moderate	Decay from base to 5' with good wound wood; slight N lean; good canopy; surface roots.	Legacy Zone
271	Dawn redwood	65	Yes	4	High	Decay in several locations at base; excellent structure; good canopy; surface roots.	Legacy Zone
272	Dawn redwood	14	Yes	4	High	Crowded by #271 & 273; good structure; thin canopy.	Legacy Zone
273	Dawn redwood	74	Yes	4	High	Slight N lean; some decay at base; great structure; good canopy; surface roots.	Legacy Zone
274	Japanese maple	31	Yes	2	Low	Multiple attachments arise at 3' and throughout crown; bark sloughing around entire base; N lean; spreading canopy.	Legacy Zone

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275	Japanese maple	22,20,12	Yes	3	Moderate	Codominant stems arise at 2' & 3'; multiple attachments throughout canopy with tight unions and included bark; spreading canopy; N lean.	Legacy Zone
276	Coast redwood	45	Yes	5	High	Great structure; excellent canopy; owl droppings.	Legacy Zone
277	Coast redwood	36	Yes	4	High	Thinning upper canopy; great structure.	Legacy Zone
278	Coast redwood	37	Yes	4	High	Slightly unbalanced canopy to S; good foliage; surface roots.	Legacy Zone
279	English holly	13,11	Yes	1	Low	Codominant stems arise at base with included bark; very thin canopy; branch and twig dieback.	Legacy Zone
280	Ginkgo	32	Yes	4	High	Great structure; dead top.	Legacy Zone
281	Chinese pistache	14	Yes	4	High	Codominant stems arise at 8'; good spreading canopy; girdling root on N.	Legacy Zone
282	Crabapple	11	No	3	Low	Codominant stems splitting at 7'; multiple attachments throughout crown with narrow attachments and included bark.	Legacy Zone
283	Ginkgo	18	Yes	4	High	Multiple attachments arise at 7'; upright vigorous canopy.	Legacy Zone
284	Australian bush cherry	58	Yes	4	High	Multiple attachments arise at 2, 4, & 7'; included bark on stem arising on street side; multiple past failures in upper canopy; vigorous crown.	Legacy Zone
285	Monterey pine	57	Yes	3	Moderate	Codominant stems arise at 9'; multiple attachments arise high in canopy with included bark; frequent flagging with twig & branch dieback; thin crown.	Legacy Zone
286	Coast live oak	25,23	Yes	3	Low	Codominant stems arise at base; S lean towards structure and road; decay and fruiting bodies at base of large stem.	Legacy Zone
287	Canary Island date palm	43	Yes	3	Moderate	Growing under #285; dead fronds at canopy base; brown trunk to 20'; thinning trunk with brown leaf edges.	Legacy Zone

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288	Leyland cypress	15	Yes	2	Low	Growing under #289; codominant stems arise at 6 & 8'; very thin canopy; crossing branches.	Laxague Drive
289	Monterey pine	26	Yes	3	Low	Multiple attachments arise high in canopy; vigorous canopy starts high on stem.	Laxague Drive
290	Coast live oak	28,22	Yes	2	Low	Codominant stems arise at base; larger stem completely hollow; thin spreading canopy.	Laxague Drive
291	Coast live oak	37,30	Yes	4	High	On retaining wall; codominant stems arise at 2'; S lean on both stems; dense spreading canopy.	Laxague Drive
292	Coast live oak	19	Yes	4	High	Codominant stems arise at 9'; N lean over path; spreading canopy.	Laxague Drive
293	Monterey pine	43	Yes	3	Moderate	Multiple attachments arise high in crown; thin high canopy; overextended branches.	Laxague Drive
294	Karo	16	Yes	3	Low	Multiple attachments arise at 9'; poor structure; S lean; growing under #293.	Laxague Drive
295	Coast live oak	23	Yes	3	Moderate	Multiple attachments arise at 9' with included bark; several heading cuts and past failures; dense spreading canopy; S lean; ivy on trunk.	Laxague Drive
296	Karo	12	No	2	Low	Multiple attachments arise at 8'; dead top; poor structure.	Laxague Drive
297	Coast live oak	27	Yes	4	High	Codominant stems arise at 8'; slight SW lean; good spreading canopy.	Laxague Drive
298	Coast live oak	20	Yes	3	Moderate	Codominant stems arise at 11'; unbalanced canopy and lean to S; thin canopy with epicormic sprouting.	Laxague Drive
299	Karo	13,6,5	Yes	3	Low	Multiple attachments arise at 1' with included bark; S lean; very poor structure.	Laxague Drive
300	Karo	10	No	2	Low	Growing under #297 & 298; decay at base; S lean; small high crown.	Laxague Drive
301	Windmill palm	12	No	3	Moderate	Brown trunk to 5'; brown leaf tips.	Laxague Drive
302	Coast live oak	38	Yes	4	High	Sinuous trunk; vigorous spreading canopy.	Laxague Drive
303	Dawn redwood	42	Yes	4	High	Windblown canopy; some overextended branches.	Laxague Drive

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304	Coast redwood	35	Yes	4	High	Great structure; high slightly thin crown.	Laxague Drive
305	Blackwood acacia	32	Yes	3	Low	Codominant stems arise high in crown; S lean; thin top.	Laxague Drive
306	Coast live oak	30	Yes	4	High	Multiple attachments arise at 6'; NW lean; extensive sapsucker activity on N; stem; spreading canopy.	Laxague Drive
307	Olive	21	Yes	4	High	Multiple attachments arise high in crown; S lean; vigorous upright crown.	Laxague Drive
308	Coast redwood	56	Yes	3	Moderate	4' from road; very thin upper canopy; good structure.	Laxague Drive
309	Monterey pine	24	Yes	4	High	Above retaining wall; slight bend in trunk at base; great structure & canopy.	Laxague Drive
310	Coast live oak	19	Yes	4	High	Codominant stems arise at 13'; good spreading canopy; 4' from building.	Laxague Drive
311	Coast live oak	15	Yes	3	Moderate	Codominant stems arise at 3' with included bark; thin upright crown.	Laxague Drive
312	Coast live oak	19,15	Yes	3	Moderate	Codominant stems arise at 3'; thin spreading canopy.	Laxague Drive
313	Coast live oak	15,10	Yes	3	Low	Codominant stems arise at base with included bark; N; stem reduced for HV lines.	Laxague Drive
314	Coast live oak	14,13	Yes	3	Low	Codominant stems arise at base; boring activity; thin spreading canopy.	Laxague Drive
315	Monterey cypress	17	Yes	3	Low	Codominant stems arise at 2' with 7' seam; crowded stems.	Laxague Drive
316	Silk oak	27	Yes	3	Moderate	Multiple attachments arise high in crown.	Laxague Drive
317	Monterey cypress	22	Yes	2	Low	Multiple attachments arise high in crown; lost top; thin high crown; poor structure.	Laxague Drive
318	Blue gum	47	Yes	3	Moderate	Trunk sprouts; thin upper canopy.	Laxague Drive
319	Blue gum	40	Yes	2	Low	Codominant stems arise at 5'; topped high in canopy.	Laxague Drive
320	Blue gum	26	Yes	2	Low	Codominant stems arise high in thin small crown.	Laxague Drive

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321	Blue gum	26	Yes	2	Low	Topped; stem sprouts; no canopy.	Laxague Drive
322	Blue gum	40	Yes	3	Moderate	Lean & unbalanced crown to W.	Laxague Drive
323	Blue gum	54	Yes	2	Low	Codominant stems arise at 3'; topped; stem sprouts no canopy.	Laxague Drive
324	Blue gum	46	Yes	3	Moderate	Thin high crown.	Laxague Drive
325	Blue gum	23	Yes	3	Moderate	Trunk sprouts; thin high crown.	Laxague Drive
326	Blue gum	38,24	Yes	3	Moderate	Codominant stems arise at base; N; stem with N lean; fair canopy.	Academic Core
327	Blue gum	31	Yes	2	Low	Thin high crown; epicormic sprouts.	Academic Core
328	Blue gum	42	Yes	4	Moderate	Good structure; slightly thin high crown.	Academic Core
329	Blue gum	42	Yes	4	Moderate	Straight trunk; high canopy; dead branch.	Academic Core
330	Blue gum	43	Yes	3	Low	Past stem failure high in crown with cuts below; thin high crown.	Laxague Drive
331	Blue gum	21,19,12	Yes	3	Moderate	Codominant stems arise at base; small stem suppressed by others; good canopy.	Laxague Drive
332	Blue gum	20,14	Yes	2	Low	Codominant stems arise at base; small thin high crown; epicormic sprouts on S; stem.	Laxague Drive
333	Coast live oak	13,11	Yes	3	Moderate	Codominant stems arise at 1'; at road.	Laxague Drive
334	Coast live oak	12	Yes	1	Low	Topped at 10'.	Laxague Drive
335	Coast live oak	13	Yes	3	Moderate	At road; codominant stems arise at 6'; slightly thin crown.	Laxague Drive
336	Blue gum	25	Yes	2	Low	Unbalanced thin crown to N; heading cut.	Laxague Drive
337	Blue gum	22	Yes	2	Low	Unbalanced crown to N; thin and high.	Laxague Drive
338	Blue gum	20	Yes	3	Moderate	Thin high crown.	Laxague Drive
339	Blue gum	16	Yes	2	Low	Sinuous trunk; high crown with poor structure.	Laxague Drive
340	Blue gum	13	No	2	Low	N lean; thin high crown unbalanced to N; epicormic sprouts.	Laxague Drive
341	Blue gum	25	Yes	4	Moderate	Slightly thin high crown.	Laxague Drive
342	Blue gum	12	No	3	Moderate	N lean; sinuous high crown.	Laxague Drive

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343	Blue gum	19	Yes	2	Low	N bow; thin high crown.	Laxague Drive
344	Blue gum	12	No	2	Low	Thin high crown; branch dieback.	Laxague Drive
345	Blue gum	48,15	Yes	4	High	Multiple attachments arise at 3'; unbalanced slightly thin crown to S.	Laxague Drive
346	Blue gum	11	No	4	Moderate	Slightly thin crown.	Laxague Drive
347	Blue gum	39	Yes	3	Moderate	Crown slightly bowed S; to road.	Laxague Drive
348	Blue gum	47	Yes	4	Moderate	Multiple attachments at 5' with included bark; N lean; good canopy.	Laxague Drive
349	Blue gum	37,25	Yes	4	High	Codominant stems arise at base; good structure; slightly thin crown.	Laxague Drive
350	Blue gum	36	Yes	1	Low	Mostly dead; epicormic sprouts.	Laxague Drive
351	Blue gum	27	Yes	4	Moderate	Bow to S; high in crown; good vigor.	Laxague Drive
352	Blue gum	15,14	Yes	3	Low	Codominant stems arise at 1'; S lean conflicting with #351.	Laxague Drive
353	Blue gum	26,13	Yes	3	Moderate	Codominant stems arise at 1'; slightly thin canopy; N; stem N lean.	Laxague Drive
354	Monterey cypress	13	No	3	Moderate	Multiple attachments high in crown; N bow.	Laxague Drive
355	Blue gum	23	Yes	3	Low	S bow; thin crown; epicormic sprouts.	Laxague Drive
356	Coast live oak	27	Yes	3	High	Bend in trunk at 5'; 5' long wound trunk at bend with good response growth; sinuous trunk; good spreading crown.	Laxague Drive
357	Coast live oak	14,8,6	Yes	3	Moderate	Multiple attachments arise at 2'; low spreading canopy; suppressed under #356.	Laxague Drive
358	Coast live oak	20	Yes	4	High	Codominant stems arise at 4'.	Laxague Drive
359	Coast live oak	12,10	Yes	4	High	S lean.	Laxague Drive
360	Valley oak	12	Yes	4	High	Codominant stems arise at 9'.	Ralston Frontage
361	Coast live oak	14	Yes	3	Moderate	Codominant stems arise at 8' with seam; lean with unbalanced slightly thin crown to S.	Ralston Frontage

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362	Coast live oak	12,9	Yes	3	Moderate	Codominant stems arise at 1'; slightly thin suppressed canopy.	Ralston Frontage
363	Coast live oak	15	Yes	4	High	Codominant stems arise at 4'; unbalanced vigorous canopy to S.	Ralston Frontage
364	Coast live oak	12	Yes	4	High	Codominant stems arise at 6'; bow at 1'.	Ralston Frontage
365	Blue gum	45	Yes	4	Moderate	N bow; twig dieback at top.	Ralston Frontage
366	Blue gum	51	Yes	4	High	Codominant stems arise at 6'; NW lean; good vigor.	Laxague Drive
367	Coast live oak	12	Yes	3	Moderate	Multiple attachments arise at 9'; SE lean with unbalanced slightly thin crown.	Laxague Drive
368	Coast live oak	11,8	Yes	4	High	Codominant stems arise at 2' with included bark.	Laxague Drive
369	Coast live oak	24	Yes	4	High	Multiple attachments arise at 6'; good spreading canopy.	Laxague Drive
370	Coast live oak	19	Yes	4	High	Codominant stems arise at 9'; NE bow.	Laxague Drive
371	Coast live oak	12	Yes	3	Moderate	Codominant stems arise at 6'; slightly thin canopy.	Laxague Drive
372	Coast live oak	10,10,9	Yes	2	Low	Multiple attachments arise at base; N; stem dead with hypoxylon; thin upright canopy.	Laxague Drive
373	Coast live oak	10,9,9	Yes	3	Moderate	Multiple attachments arise at 3'; thin spreading crown.	Laxague Drive
374	Coast live oak	12	Yes	4	High	Multiple attachments arise at 8'.	Laxague Drive
375	Coast live oak	11	Yes	2	Low	N rotted with fungus from base to 4'; small high crown.	Laxague Drive
376	Coast live oak	10,9	Yes	4	High	Codominant stems arise at base; N lean.	Laxague Drive
377	Coast live oak	14	Yes	4	High	Multiple attachments arise at 7'; bow to N; over road.	Laxague Drive
378	Red ironbark	11,8	Yes	2	Low	Codominant stems arise at base; kino with seeping; thin crown.	Laxague Drive
379	Red ironbark	11,11,7	Yes	2	Low	Codominant stems arise at base & 3'; kino with seeping; thin crown.	Laxague Drive
380	Red ironbark	31,22,11	Yes	3	Low	Multiple attachments arise at 1'.	Laxague Drive

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381	Red ironbark	10	No	3	Low	Suppressed canopy under #280.	Laxague Drive
382	Red ironbark	24,7,6,5,5	Yes	2	Low	Multiple attachments arise at 8'; thin upper canopy; past failures.	Laxague Drive
383	Red ironbark	23,17	Yes	3	Low	Codominant stems arise at 3' and throughout canopy; thin upper crown.	Laxague Drive
384	Red ironbark	20,20	Yes	2	Low	Codominant stems arise at base; dying top; past failures.	Laxague Drive
385	Coast live oak	12,7	Yes	2	Low	Codominant stems arise at 4'; rot on S; thin small crown.	Laxague Drive
386	Coast live oak	10	Yes	4	High	Codominant stems arise at 8'.	Laxague Drive
387	Coast live oak	11,10,8	Yes	2	Low	Multiple attachments arise at 2'; decay in trunk; thin crown.	Laxague Drive
388	Coast live oak	13,11	Yes	3	Moderate	Codominant stems arise at base with small cavity; slightly thin spreading crown.	Laxague Drive
389	Red ironbark	12,11,7,7	Yes	2	Low	Multiple attachments arise at base; very thin crown; poor structure.	Laxague Drive
390	Coast live oak	16	Yes	2	Low	Boring activity and rot from base to 3'; thin crown.	Laxague Drive
391	Coast live oak	12	Yes	2	Low	Cavity and rot at base; thin unbalanced crown.	Laxague Drive
392	Valley oak	18	Yes	3	Moderate	Multiple attachments arise at 4'; poor structure; thin spreading canopy.	Laxague Drive
393	Coast live oak	11	Yes	4	High	Codominant stems arise at 9'.	Laxague Drive
394	Coast live oak	17	Yes	4	High	Codominant stems arise at 4'; N lean.	Laxague Drive
395	Coast live oak	16	Yes	3	Moderate	Multiple attachments arise at 9'; small cavity at base; old branch dieback.	Laxague Drive
396	Coast live oak	12,5	Yes	3	Moderate	Suppressed under #397; codominant stems arise at 6'; upright crown.	Laxague Drive
397	Blue gum	35	Yes	4	High	Slight N lean.	Laxague Drive
398	Blue gum	23	Yes	4	Moderate	NW bow in upper crown.	Laxague Drive
399	Blue gum	41,19	Yes	4	High	Codominant stems arise at base; great canopy.	Laxague Drive
400	Blue gum	44	Yes	4	High	Great canopy; slightly unbalanced to N.	Laxague Drive

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401	Blue gum	26	Yes	3	Moderate	Unbalanced crown with bow to NE; over road.	Laxague Drive
402	Coast live oak	14	Yes	4	High	Multiple attachments at 9'; N bow.	Laxague Drive
403	Coast live oak	14	Yes	3	Moderate	Codominant stems at 10'; sinuous trunk with W lean.	Laxague Drive
404	Coast live oak	15	Yes	4	High	Codominant stems at 7'; N bow; canopy suppressed by #405.	Laxague Drive
405	Coast live oak	20	Yes	4	High	Codominant stems at 9'; sinuous trunk.	Laxague Drive
406	Coast live oak	14	Yes	4	High	S bow.	Laxague Drive
407	Coast live oak	10	Yes	3	Moderate	Severe SW lean.	Laxague Drive
408	Coast live oak	10	Yes	3	Moderate	Boring at base; very thin canopy.	Laxague Drive
409	Coast live oak	11	Yes	3	Moderate	Multiple attachments at 9'; thin crown.	Laxague Drive
410	Coast live oak	12	Yes	3	Moderate	Multiple attachments at 5'; thin crown; suppressed; past top failure.	Laxague Drive
411	Blue gum	35	Yes	4	Moderate	W lean.	Laxague Drive
412	Blue gum	44	Yes	3	Moderate	Codominant stems high in crown; twig and branch dieback.	Laxague Drive
413	Blue gum	23	Yes	3	Moderate	Unbalanced crown to W.	Laxague Drive
414	Blue gum	36	Yes	4	High	NW lean with unbalanced crown.	Laxague Drive
415	Blue gum	44	Yes	3	Moderate	Codominant stems arise at 3'; N lean; thin high crown.	Laxague Drive
416	Blue gum	14	Yes	2	Low	N bow; twig and branch dieback.	Laxague Drive
417	Blue gum	87	Yes	3	Moderate	Codominant stems arise at base with included bark; N lean; twig and branch dieback with epicormic sprouts.	Laxague Drive
418	Blue gum	35	Yes	3	Moderate	Thin high crown; good structure.	Laxague Drive
419	Blue gum	20	Yes	2	Low	Small high crown with bow over road.	Laxague Drive
420	Blue gum	19	Yes	2	Low	Twig and branch dieback in upper canopy.	Laxague Drive
421	Blue gum	32	Yes	3	Moderate	Thin high crown.	Laxague Drive
422	Blue gum	22	Yes	3	Moderate	High crown with W bow.	Laxague Drive

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423	Blue gum	35,22	Yes	3	Low	At road displacing asphalt; unbalanced crown to E.	Laxague Drive
424	Blue gum	36	Yes	4	High	Slight N lean; high crown.	Laxague Drive
425	Blue gum	24	Yes	3	Moderate	Small high crown.	Laxague Drive
426	Blue gum	29	Yes	3	Moderate	Small high unbalanced crown.	Laxague Drive
427	Blue gum	17	Yes	4	Moderate	Narrow canopy.	Laxague Drive
428	Blue gum	26	Yes	2	Low	Twig dieback; epicormic sprouts.	Laxague Drive
429	Blue gum	41	Yes	3	Moderate	Twig dieback; high crown.	Laxague Drive
430	Blue gum	14	Yes	3	Moderate	E lean conflicting with #429; vigorous crown.	Laxague Drive
431	Blue gum	18	Yes	2	Low	Dead top; epicormic sprouts.	Laxague Drive
432	Blue gum	19	Yes	2	Low	Growing under #433; epicormic sprouts.	Laxague Drive
433	Blue gum	22	Yes	3	Moderate	High crown; dead branch.	Laxague Drive
434	Blue gum	23	Yes	3	Moderate	W bow in crown.	Laxague Drive
435	Blue gum	17	Yes	3	Moderate	Branch dieback high in crown; N lean.	Laxague Drive
436	Blue gum	25	Yes	3	Low	Unbalanced crown to W; high crown; epicormic sprouts.	Laxague Drive
437	Blue gum	21	Yes	3	Moderate	Branch dieback at top; epicormic sprouts.	Laxague Drive
438	Blue gum	20	Yes	3	Moderate	Sinuous trunk with SE lean.	Laxague Drive
439	Blue gum	21	Yes	3	Moderate	Sinuous trunk; high crown.	Laxague Drive
440	Blue gum	27	Yes	3	Low	At road lifting asphalt; epicormic sprouts.	Laxague Drive
441	Blue gum	24	Yes	3	Moderate	S lean; small high crown.	Laxague Drive
442	Blue gum	13	No	3	Low	Suppressed by #443.	Laxague Drive
443	Blue gum	45	Yes	4	High	High crown.	Laxague Drive
444	Blue gum	27	Yes	4	Moderate	Next to parking; lifting asphalt; twig dieback upper canopy.	Laxague Drive
445	Blue gum	19,19	Yes	4	Moderate	Codominant stems at base; S; stem with S lean.	Ralston Frontage
446	Blue gum	19	Yes	3	Moderate	Severe S lean conflicting with #448.	Ralston Frontage
447	Blue gum	14	Yes	3	Low	Thin high crown with bow to SE.	Ralston Frontage

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
448	Blue gum	21	Yes	4	Moderate	Upper canopy with SW bow.	Ralston Frontage
449	Blue gum	34	Yes	3	Low	Branch dieback in upper canopy; removed codominant at 7'; sulphur fungus on trunk; SW bow.	Ralston Frontage
450	Deodar cedar	40	Yes	4	High	Upright branch with included bark; good structure; vigorous crown.	Ralston Frontage
451	Coast live oak	14	Yes	4	High	Codominant stems with solid union arise at 5'.	Ralston Frontage
452	Deodar cedar	15	Yes	4	High	Sweep in trunk with correction to S; crowded with #451.	Ralston Frontage
453	Southern magnolia	12	No	2	Low	In 10' median; multiple attachments arise at 7'; thin chlorotic crown.	Ralston Frontage
454	Coast redwood	26	Yes	4	Moderate	Thin on E, windward side; 2' basal wound with good response wood.	Ralston Frontage
455	Coast redwood	23	Yes	4	High	Slightly thin on E in conflict with #455 & 457.	Ralston Frontage
456	Coast redwood	24	Yes	4	High	Thin on E, windward side; great structure.	Ralston Frontage
457	Coast live oak	13	Yes	2	Low	Codominant stems arise at 6' with includes bark; thin chlorotic unbalanced crown to S lean over sidewalk to S; growing under #458.	Ralston Frontage
458	Coast live oak	15,10	Yes	3	Moderate	Codominant stems arise at 1' with included bark and bulge; S lean with unbalanced crown; thin crown.	Ralston Frontage
459	Coast live oak	10	Yes	2	Low	Codominant stems arise at 11'; severe S lean; thin high small crown.	Ralston Frontage
460	Coast live oak	10	Yes	3	Moderate	Codominant stems arise at 6'; slightly thin unbalanced crown to S.	Ralston Frontage
461	Coast live oak	15	Yes	3	Moderate	Codominant stems arise at 10'; severe E lean with unbalanced crown; healthy crown.	Ralston Frontage
462	Coast live oak	10	Yes	3	Low	Sinuous trunk; small high crown; suppressed by surrounding trees.	Ralston Frontage
463	Coast live oak	16	Yes	3	Moderate	Codominant stems arise high in crown; upright branches with tight unions and included bark.	Ralston Frontage

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464	Coast live oak	10	Yes	2	Low	Codominant stems arise high in crown; upright branches with tight unions and included bark; thin high small crown.	Ralston Frontage
465	Coast live oak	16	Yes	3	Moderate	Codominant stems arise at 4'; tight branch unions with included bark; thin high small crown.	Ralston Frontage
466	Coast live oak	21	Yes	2	Low	1' from road; codominant stems arise at 5' with included bark and seeping; N lean over road; streetside damage over road; thin high crown.	Ralston Frontage
467	Monterey cypress	45	Yes	3	Moderate	Multiple attachments arise at 3'; crowded branches; unbalanced crown from driveway side pruning; vigorous crown.	Ralston Frontage
468	Monterey cypress	18	Yes	2	Low	Codominant stems arise at 8'; upright branches with tight unions; unbalanced crown to N; from shading by #467; trunk wounds and rot on both stems.	Ralston Frontage
469	Monterey cypress	15	Yes	2	Low	Severe sweep high in crown with correction; thin high small unbalanced crown to S.	Ralston Frontage
470	Coast live oak	25	Yes	3	Moderate	Codominant stems arise at 10' with included bark; slightly thin crown; slight SE lean.	Ralston Frontage
471	Coast live oak	17	Yes	2	Low	Codominant stems arise high in crown with included bark; very thin high small crown.	Ralston Frontage
472	Coast live oak	19	Yes	3	Moderate	Lean to SE; with sweep high in crown; vigorous crown.	Ralston Frontage
473	Coast live oak	12	Yes	2	Low	Sinuous trunk with lean to S; poor structure; suppressed by #472 & 474.	Ralston Frontage
474	Coast live oak	35	Yes	4	High	Codominant stems arise high in crown with good union; slightly thin spreading crown.	Ralston Frontage
475	Coast live oak	23	Yes	4	High	Codominant stems arise high in crown; small high crown.	Ralston Frontage

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
476	Coast live oak	18	Yes	4	High	Codominant stems arise at 11' with good union; spreading canopy stems lean in opposing directions.	Ralston Frontage
477	Coast live oak	17	Yes	3	High	Sinuous trunk with S lean; suppressed by surrounding group; vigorous crown.	Ralston Frontage
478	Coast live oak	18	Yes	3	High	Codominant stems arise at 9' with included bark; stems with poor structure from suppression by #466; vigorous spreading canopy.	Ralston Frontage
479	Coast live oak	12	Yes	2	Low	Codominant stems arise at 4' with good union; suppressed by #476-481; thin small spreading crown.	Ralston Frontage
480	Coast live oak	22	Yes	3	High	Codominant stems arise at 8' with included bark; lean to S; with unbalanced spreading vigorous crown.	Ralston Frontage
481	Coast live oak	20	Yes	4	High	Sinuous trunk with poor structure; vigorous spreading crown.	Ralston Frontage
482	Coast live oak	10	Yes	3	Moderate	Multiple attachments arise at 3'; poor structure; vigorous spreading crown.	Ralston Frontage
483	Coast live oak	15,8	Yes	4	High	Codominant stems arise at base; N; smaller stem with lean over fence; large stem with great structure; branch wound with bleeding likely from mechanical damage over sidewalk and road.	Ralston Frontage
484	Coast redwood	29	Yes	5	High	In 8' open parkway; great structure; healthy canopy.	Ralston Frontage
485	Coast redwood	27	Yes	5	High	In 8' open parkway; great structure; healthy canopy.	Ralston Frontage
486	Coast redwood	30	Yes	5	High	In 8' open parkway; great structure; healthy canopy.	Ralston Frontage
487	Coast redwood	31	Yes	4	High	Unbalanced crown to S; enlarged base.	Ralston Frontage
488	European beech	16	Yes	4	High	Upright branches; spreading crown.	Ralston Frontage

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489	Coast redwood	58	Yes	4	Moderate	Trunk 6" from HV lines; unbalanced crown from clearance for utilities; vigorous crown.	Ralston Frontage
490	Coast redwood	68	Yes	4	High	Unbalanced slightly thin crown to E.	Ralston Frontage
491	Coast redwood	64	Yes	4	High	Excellent structure; slightly thin crown.	Ralston Frontage
492	Coast redwood	73	Yes	5	High	Excellent structure; vigorous crown.	Ralston Frontage
493	Coast redwood	63	Yes	4	High	Excellent structure; thin crown.	Ralston Frontage
494	Canary Island date palm	36	Yes	4	Moderate	At curb for parking lot; brown trunk to 6'; healthy crown.	Ralston Frontage
495	Deodar cedar	38	Yes	3	Low	In 4x5' tree well, lifting asphalt; codominant stems arise at 10' & high in crown; stems high in crown wrap around each other with included bark; overextended branch over building.	Ralston Frontage
496	Windmill palm	10	No	3	Moderate	Brown trunk to 8'; chlorotic leaf tips.	Ralston Frontage
497	Windmill palm	10	No	3	Moderate	Brown trunk to 6'; chlorotic leaf tips.	Ralston Frontage
498	Coast live oak	20	Yes	3	Moderate	Multiple attachments arise at 2' with included bark; 2' from building; vigorous crown.	Ralston Frontage
499	Coast live oak	18	Yes	4	Moderate	Multiple attachments arise at 5'; fence embedded in trunk; vigorous spreading crown.	Ralston Frontage
500	Coast live oak	12	Yes	3	Moderate	6" from #499; severe N lean; small high vigorous crown.	Ralston Frontage
501	Canary Island date palm	45	Yes	4	Moderate	Against chain link fence; brown trunk to 2'; vigorous growth.	Ralston Frontage
502	Coast live oak	23,18,11	Yes	4	Moderate	Multiple attachments arise at 1' with included bark; conflicting with #501; spreading vigorous crown.	Ralston Frontage
503	Blue gum	16	Yes	4	High	Excellent structure; vigorous crown.	Ralston Frontage
504	Canary Island date palm	44,36	Yes	4	Moderate	Codominant stems arise at base; brown trunk to 18' & 6'; smaller stem with vigorous crown; larger stem with chlorotic dense crown.	Ralston Frontage
505	Canary Island date palm	48	Yes	4	High	Brown trunk to 5'; minor leaf chlorosis.	Ralston Frontage

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506	Canary Island date palm	44	Yes	4	High	Brown trunk to 12'; minor leaf chlorosis.	Ralston Frontage
507	Canary Island date palm	34	Yes	3	Moderate	Brown trunk to 18'; crowded by #506 and 508; minor leaf chlorosis.	Ralston Frontage
508	Coast live oak	16,15	Yes	3	Moderate	Codominant stems arise at 2'; partially failed on creek bank; severe S lean; vigorous spreading crown.	Ralston Frontage
509	Coast live oak	12	Yes	3	Moderate	Codominant stems arise at 9'; S lean; sinuous trunk.	Ralston Frontage
510	Blue gum	40	Yes	3	Moderate	Trunk covered in ivy to high crown; thin high crown; twig dieback.	Ralston Frontage
511	Coast live oak	10	Yes	2	Low	Pruned for clearance for shed; S lean; thin small canopy.	Ralston Frontage
512	Blue gum	51	Yes	3	Moderate	Multiple attachments arise at 12' with included bark; sweeping stems with S leans; vigorous crown.	Ralston Frontage
513	Blue gum	19	Yes	4	High	Slight W lean; good canopy.	Ralston Frontage
514	Blue gum	31	Yes	2	Low	Codominant stems arise at 3' with included bark; 8' trunk scar on W; stem.	Ralston Frontage
515	Blue gum	45	Yes	4	High	Thin high crown.	Ralston Frontage
516	Blue gum	20	Yes	4	High	Narrow canopy.	Ralston Frontage
517	Canary Island date palm	46	Yes	4	High	Brown trunk to 6'; crowded with surrounding small trees; growing under #515.	Ralston Frontage
518	Coast live oak	25	Yes	4	High	Codominant stems arise at 4'; unbalanced crown with slight lean to S; vigorous crown.	Ralston Frontage
519	Blue gum	59	Yes	3	Moderate	Codominant stems arise at 6' with narrow attachment and included bark; unbalanced crown with slight lean to SW.	Ralston Frontage
520	Coast live oak	13	Yes	4	High	Slight S lean; good crown.	Ralston Frontage
521	Coast live oak	16	Yes	4	High	Sinuous trunk; good crown.	Ralston Frontage

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522	Coast live oak	17	Yes	4	High	Sinuous trunk with slight S lean; crowded with #521; vigorous crown.	Ralston Frontage
523	Blue gum	58	Yes	3	Moderate	Unbalanced crown to S; with slight lean; branch and twig dieback.	Ralston Frontage
524	Coast live oak	14	Yes	3	Moderate	Codominant stems arise at 11'; S lean; suppressed crown; growing under #523.	Ralston Frontage
525	Valley oak	14	Yes	3	Moderate	S lean; poor structure.	Ralston Frontage
526	Plum	12	No	3	Moderate	Multiple attachments arise at 7' with included bark; N lean.	Ralston Frontage
527	Plum	12,11,6	Yes	2	Low	Multiple attachments arise at 1'; one stem with decayed center; tight unions; crowded stems.	Ralston Frontage
528	Coast live oak	21	Yes	4	High	Codominant stems arise at 5' with included bark; vigorous spreading canopy.	Ralston Frontage
529	Fremont cottonwood	21	Yes	3	Moderate	In creek; N lean over creek; branch dieback with rot.	Ralston Frontage
530	Coast live oak	22	Yes	4	High	Sinuous trunk with bowed top to S; vigorous crown.	Ralston Frontage
531	Coast live oak	19	Yes	3	Moderate	Multiple attachments at 9'; SW lean with bowed top; dead branch.	Ralston Frontage
532	Coast live oak	22	Yes	4	High	Slight W lean with bowed top; vigorous spreading canopy.	Ralston Frontage
533	Coast live oak	12	Yes	3	Moderate	On creek bank; S lean; thin high crown.	Ralston Frontage
534	Coast live oak	15	Yes	3	Moderate	On creek bank; SW lean and bow; high vigorous crown.	Ralston Frontage
535	Coast live oak	19	Yes	4	High	In creek; severe S lean; ivy on base; high vigorous crown.	Ralston Frontage
536	Coast live oak	24	Yes	4	High	Codominant stems high in crown with good union; slight SE lean with unbalanced crown; spreading canopy.	Ralston Frontage
537	Coast live oak	10	Yes	3	Moderate	Severe N lean; drooping crown.	Ralston Frontage
538	Coast live oak	19	Yes	3	Moderate	Codominant stems arise at 6'; lean and bow; thin spreading crown.	Ralston Frontage

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539	Coast live oak	14	Yes	3	Moderate	Sharp NE bow high in crown; SE lean; thin high crown.	Ralston Frontage
540	Blue gum	96	Yes	3	Low	Multiple attachments arise at 1' with included bark; thin crown; branch and twig dieback; pruned dead wood; SE lean.	Ralston Frontage
541	Coast live oak	13	Yes	4	Moderate	5' from road; unbalanced crown to S; for clearance over road.	Ralston Frontage
542	Coast live oak	10	Yes	3	Moderate	S lean; poor structure; thin unbalanced crown; suppressed under #540.	Ralston Frontage
543	Coast live oak	13,12,11,10	Yes	4	High	Multiple attachments arise at 3' with included bark; high spreading crown.	Ralston Frontage
544	Coast live oak	14	Yes	4	High	Codominant stems arise high in crown; small high crown.	Ralston Frontage
545	Coast live oak	12,7	Yes	3	Moderate	Codominant stems arise at 1'; severe E lean; thin small high chlorotic crown.	Ralston Frontage
546	Coast live oak	24,23	Yes	4	High	Codominant stems arise at 2'; minor boring activity at base; good spreading canopy.	Ralston Frontage
547	Coast live oak	19	Yes	4	High	Sinuous trunk; narrow crown.	Ralston Frontage
548	Coast live oak	32	Yes	4	High	Codominant stems arise at 12' with good union; good spreading canopy.	Ralston Frontage
549	Coast live oak	21	Yes	4	High	Codominant stems arise at 5'; bowed spreading crown.	Ralston Frontage
550	Coast live oak	18	Yes	4	High	Codominant stems arise high in crown; great structure; great canopy.	Laxague Drive
551	Coast live oak	10	Yes	4	High	Codominant stems arise high in crown; sinuous trunk; vigorous crown.	Laxague Drive
552	Blue gum	28	Yes	2	Low	Codominant stem removed at 3'; narrow crown; twig and branch dieback.	Laxague Drive
553	Yellow willow	34	Yes	2	Low	In creek; multiple attachments arise high in crown; ganoderma on both sides; failed branches in crown; N bow high in crown.	Laxague Drive

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554	Coast live oak	13	Yes	4	High	Codominant stems arise at 9' with good union; good spreading canopy; growing under #553.	Laxague Drive
555	Blue gum	50	Yes	4	High	2' from road; narrow attachment on branch mid-trunk; slightly thin crown.	Laxague Drive
556	Coast live oak	18,14	Yes	4	High	Codominant stems arise at 1' with included bark; sinuous trunk; good crown.	Laxague Drive
557	Blue gum	23	Yes	2	Low	Dead crown with bow; trunk sprouts.	Laxague Drive
558	Blue gum	62	Yes	3	Moderate	Codominant stems arise at 10'; both stems with severe S bow high in crown; vigorous crown.	Laxague Drive
559	Blue gum	30,28	Yes	3	Moderate	Codominant stems arise at 4' with included bark; 3rd stem removed at 4'; thin high crown.	Laxague Drive
560	Blue gum	72	Yes	3	Moderate	Multiple attachments arise at 5' with included bark; twig and branch dieback high in crown; S bow on all stems.	Laxague Drive
561	Blue gum	26	Yes	3	Moderate	Twig dieback high in crown; trunk sprouts.	Laxague Drive
562	Blue gum	52	Yes	3	Moderate	Codominant stems arise at 7' with included bark; high bowed crown.	Laxague Drive
563	Blue gum	42,38	Yes	4	High	Multiple attachments arise at 3'; narrow stem attachments; some stems with S bow high in crown; vigorous crown.	Laxague Drive
564	Blue gum	67	Yes	4	High	Codominant stems arise at 8'; bowed crown high in canopy; healthy crown; boulder embedded on S.	Laxague Drive
565	Canary Island date palm	34	Yes	5	High	Brown trunk to 18'.	Laxague Drive
566	Coast redwood	12	Yes	5	High	4' from fence; great structure; great crown.	Laxague Drive
567	Coast redwood	17	Yes	3	Moderate	Thin crown; sinuous trunk; stress cone crop.	Laxague Drive
568	Coast redwood	12,7	Yes	3	Moderate	Codominant stems at base; corrected lean; slightly thin crown.	Laxague Drive
569	Coast redwood	17	Yes	4	Moderate	Lost top; vigorous crown.	Laxague Drive
570	Coast redwood	13	Yes	3	Moderate	Codominant stems high in crown; slightly thin crown at top.	Laxague Drive

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571	Coast redwood	13,7	Yes	3	Moderate	Codominant stems arise at base; thin crown.	Laxague Drive
572	Coast redwood	14	No	0	-	Dead.	Laxague Drive
573	Coast redwood	19	Yes	3	Moderate	Thin crown.	Laxague Drive
574	Coast redwood	15	Yes	4	Moderate	Slightly thin crown.	Laxague Drive
575	Coast redwood	15	Yes	3	Moderate	Thin stunted top.	Laxague Drive
576	Coast redwood	10	Yes	4	High	Slightly stunted top.	Laxague Drive
577	Coast redwood	16	Yes	3	Moderate	Codominant stems arise at 9'; corrected lean; slightly thin upper crown.	Laxague Drive
578	Coast redwood	13	Yes	3	Moderate	Corrected lean; thin crown.	Laxague Drive
579	Canary Island date palm	33	Yes	4	Moderate	Brown trunk to 16'; pruned on W for HV lines.	Laxague Drive
580	Canary Island date palm	37	Yes	4	High	On creek bank; brown trunk to 8'; crowded with #581.	Laxague Drive
581	Canary Island date palm	38	Yes	4	High	On creek bank; brown trunk to 8'; crowded with #580.	Laxague Drive
582	Blue gum	28	Yes	4	High	Codominant stems arise at 11' with included bark; S lean and bow; vigorous crown.	Laxague Drive
583	Blue gum	30	Yes	3	Moderate	Codominant stems arise at 7' with 8' seam; S lean; suppressed top.	Laxague Drive
584	Blue gum	34	Yes	1	Low	Topped; no crown; some trunk sprouts.	Laxague Drive
585	Blue gum	17	Yes	1	Low	Topped; no crown; some trunk sprouts.	Laxague Drive
586	Blue gum	36,16	Yes	3	Moderate	Codominant stems arise at 3'; smaller stem topped; twig and branch dieback; narrow crown.	Laxague Drive
587	Blue gum	65	Yes	4	High	Multiple attachments arise at 6' with included bark; good spreading canopy; twig dieback.	Laxague Drive
588	Blue gum	62	Yes	3	Moderate	Codominant stems arise at base with included bark; lean and bow to SW; overextended branches; vigorous crown.	Laxague Drive

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589	Blue gum	45	Yes	3	Moderate	Codominant stems arise at 6' with included bark; narrow attachment between stems; narrow crown; twig and branch dieback at top.	Laxague Drive
590	Blackwood acacia	15	Yes	3	Low	Severe S lean and bow; 2' trunk wound at 4' with decay.	Laxague Drive
591	Bailey acacia	12	No	4	Moderate	On creek bank; good structure; healthy crown.	Laxague Drive
592	Bailey acacia	13	No	4	Moderate	On creek bank; severe S lean; good canopy.	Laxague Drive
593	Blue gum	50	Yes	4	High	On creek bank; codominant stems arise at 12'; narrow branch attachments; vigorous crown.	Laxague Drive
594	Blue gum	18	Yes	1	Low	15' snag with trunk sprouts.	Laxague Drive
595	Blue gum	28,24,13	Yes	4	High	Multiple attachments arise at 2' with included bark; small stem topped at 15'; W lean; vigorous sinuous crown.	Laxague Drive
596	Blue gum	12	No	2	Low	Stems removed at 3'; trunk sprouts.	Laxague Drive
597	Blue gum	19,18,17	Yes	3	Moderate	Multiple attachments arise at base with included bark; all trunks bow high in crown; twig dieback; trunk sprouts.	Laxague Drive
598	Blue gum	41	Yes	4	High	Codominant stems arise at 8' with included bark; twig dieback high in crown.	Laxague Drive
599	Blue gum	28,23	Yes	2	Low	Codominant stems arise from base; one stem topped high in crown; twig and branch dieback; trunk sprouts.	Laxague Drive
600	Blue gum	16,14,13,13	Yes	3	Moderate	Multiple attachments arise from base with good attachments; crowded stems; twig and branch dieback high in crown; trunk sprouts.	Laxague Drive
601	Blue gum	28,28,25	Yes	3	Moderate	Multiple attachments arise from base with good attachments; crowded stems; twig and branch dieback high in crown; trunk sprouts.	Laxague Drive
602	Blue gum	42	Yes	3	Moderate	Codominant stems arise high in crown with good union; twig and branch dieback high in crown; trunk sprouts.	Laxague Drive

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603	Blue gum	26,21,16,14	Yes	4	High	Multiple attachments arise from base with some included bark; some stems with bow over sidewalk high in crown.	Laxague Drive
604	Blue gum	51	Yes	4	High	Codominant stems arise at 10'; tight union; some twig dieback in upper canopy.	Laxague Drive
605	Blue gum	73	Yes	4	High	Codominant stems arise at base and 15'; good crown with branches overhanging road.	Laxague Drive
606	Blue gum	30,20	Yes	2	Low	Codominant stems arise at base; topped at 15'.	Laxague Drive
607	Blue gum	24	Yes	1	Low	Large cavity at base; topped at 15'.	Laxague Drive
608	Blue gum	38	Yes	4	High	Large stem removed at base; small high crown; trunk sprouts.	Laxague Drive
609	Blue gum	20	Yes	1	Low	Topped at 18'; trunk sprouts.	Laxague Drive
610	Blue gum	25	Yes	3	Low	Dead crown; trunk sprouts.	Laxague Drive
611	Blue gum	56	Yes	4	High	Codominant stems arise at 8'; good crown; good structure; dead branch.	Laxague Drive
612	Blue gum	48	Yes	4	High	Codominant stems arise at 8'; good high crown.	Laxague Drive
613	Blue gum	24,23	Yes	3	Moderate	Codominant stems arise at 3'; twig and branch dieback high in crown.	Laxague Drive
614	Blue gum	28	Yes	3	Low	Bow and lean to S; small cavities at base; twig and branch dieback.	Laxague Drive
615	Blue gum	17	Yes	2	Low	Topped at 25'; trunk sprouts.	Laxague Drive
616	Blue gum	67	Yes	4	High	Codominant stems arise at 8'; SE lean; good crown.	Laxague Drive
617	Blue gum	81	Yes	4	High	Multiple attachments arise at 8'; excellent crown.	Laxague Drive
618	Blue gum	22	Yes	1	Low	Topped at 15'; minor resprouts.	Laxague Drive
619	Blue gum	15	Yes	1	Low	Topped at 15'; minor resprouts.	Laxague Drive
620	Coast live oak	14	Yes	4	High	W lean with unbalanced crown; good spreading canopy.	Laxague Drive
621	Coast redwood	19	Yes	4	High	2' from road; great structure; good canopy.	Laxague Drive

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622	Blue gum	33	Yes	4	High	At parking area; lifting permeable pavers; twig dieback high in crown.	Laxague Drive
623	Blue gum	86	Yes	4	High	Multiple stems arise from 12'; excellent canopy.	Laxague Drive
624	Manna gum	42,15	Yes	4	High	Codominant stems arise at base; excellent canopy and structure.	Laxague Drive
625	Blue gum	28	Yes	4	High	W bow; good crown.	Ralston Frontage
626	Blue gum	40	Yes	4	High	Branch at 4' with some internal decay; slight SE lean; good crown.	Ralston Frontage
627	Blue gum	25	Yes	4	High	Narrow crown; great structure.	Ralston Frontage
628	Blue gum	38	Yes	4	High	Multiple attachments high in crown; great canopy; trunk sprouts.	Ralston Frontage
629	Blue gum	35	Yes	4	High	SE bow high in crown; good canopy.	Ralston Frontage
630	Blue gum	52	Yes	4	High	Codominant stems arise at 6'; both stems with W lean and bow; good canopy.	Ralston Frontage
631	Blue gum	43,19	Yes	3	Moderate	Codominant stems arise at base and 6'; both smaller stems topped at 15'; twig dieback high in crown.	Ralston Frontage
632	Blue gum	19	Yes	1	Low	Topped at 15'; thin resprouts.	Ralston Frontage
633	Blue gum	50	Yes	4	High	Multiple attachments arise at 6'; great canopy.	Ralston Frontage
634	Blue gum	35	Yes	3	Low	Codominant stems arise at 2' with 3' of included bark; one stem topped at 12'; N lean and bow; twig dieback.	Ralston Frontage
635	Blue gum	26	Yes	4	High	Pruning scar at 5'; great structure and canopy.	Ralston Frontage
636	Blue gum	21	Yes	4	High	1' from sidewalk; narrow crown; good canopy.	Ralston Frontage
637	Blue gum	22	Yes	2	Low	1' from sidewalk; twig and branch dieback; trunk sprouts.	Ralston Frontage
638	Blue gum	18	Yes	3	Low	2' from sidewalk; conflicting with #639; narrow crown; twig dieback.	Ralston Frontage
639	Blue gum	19	Yes	3	Low	2' from sidewalk; conflicting with #638; S lean; narrow crown.	Ralston Frontage

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640	Blue gum	30	Yes	4	Moderate	2' from sidewalk; cracking concrete; codominant stems arise at 3'; good narrow crown.	Ralston Frontage
641	Blue gum	24	Yes	3	Moderate	Severe SW lean with correction; soil uplift on N; great crown.	Undeveloped North
642	Blue gum	31	Yes	2	Low	Twig and branch dieback; trunk sprouts.	Undeveloped North
643	Blue gum	13	No	3	Moderate	Removed stem at base with sprouts; sinuous narrow crown.	Undeveloped North
644	Blue gum	28,17,15	Yes	4	High	Multiple attachments arise at base; SE lean; excellent canopy.	Undeveloped North
645	Blue gum	28,19	Yes	4	High	Codominant stems arise at 2'; excellent canopy; some branch dieback with past failures.	Undeveloped North
646	Blue gum	78	Yes	5	High	Great structure; excellent crown.	Undeveloped North
647	Coast live oak	21	Yes	4	High	Bow in trunk at 8'; great crown; great structure.	Undeveloped North
648	Coast live oak	17	Yes	4	High	Slight bow in trunk at 8'; good canopy; good structure.	Undeveloped North
649	Coast live oak	16	Yes	4	High	Codominant stems arise at 4' and 5'; W bow with lean and unbalanced crown; great spreading canopy.	Undeveloped North
650	Blue gum	40	Yes	4	High	Multiple attachments arise at 14'; stem with branch dieback overhanging road; excellent canopy; good structure.	Undeveloped North
651	Blue gum	26	Yes	4	High	Crowded with #650 and #652; slight W lean; excellent canopy.	Undeveloped North
652	Blue gum	52,20	Yes	4	High	Codominant stems arise at 3'; crowded with #651; great structure; great canopy.	Undeveloped North
653	Coast live oak	8	No	3	Low	Multiple trunks arise from 8'; 5' parkway in main parking lot; severe heading cuts for clearance; thin high crown.	Academic Core

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654	Coast live oak	9	No	4	Moderate	Codominant trunks arise from 6'; 5' open parkway; surface roots.	Academic Core
655	Coast live oak	9	No	3	Moderate	5' open parkway in main parking lot; high crown; slight S lean.	Academic Core
656	Coast live oak	9	No	3	Moderate	E of #122; Codominant trunks arise from 10'; lean to E; sinuous trunk; thin high crown.	Academic Core
657	Coast live oak	9	No	3	Moderate	W of #124; lean and bow to E; sinuous trunk; thin high crown.	Academic Core
658	Coast live oak	9	No	3	Moderate	W of #128; Codominant trunks arise from 6'; sinuous stems; W lean; thin high crown.	Academic Core
659	Coast live oak	9	No	3	Moderate	E of #133; Codominant trunks arise from 8'; E lean; sinuous trunk; unbalanced crown.	Academic Core
660	Coast live oak	7,4	Yes	3	Low	Downhill of #373; SE lean and bow; conflicting branches with #371; thin high crown.	Laxague Drive
661	Coast live oak	7,5,4	Yes	3	Moderate	Downhill of #372; Multiple trunks arise from 5'; thin high spreading crown.	Laxague Drive
662	Coast live oak	5,5	Yes	3	Moderate	NW of #358; Codominant trunks arise from 3'; slightly thin crown.	Laxague Drive
663	Coast live oak	7,5	Yes	3	Moderate	Under #411; Codominant trunks arise from 4'; slightly thin spreading crown.	Laxague Drive
664	Coast live oak	6,6	Yes	4	High	W of #584; Codominant trunks arise from 3'; good young tree.	Laxague Drive
665	Coast live oak	9	No	4	High	Roadside of #597; slight W lean; good young tree.	Laxague Drive
666	Coast live oak	9	No	3	Moderate	Creekside of #598; S lean with unbalanced crown; slightly thin crown.	Laxague Drive
667	Coast live oak	14,7	Yes	3	Moderate	Creekside of #600; Codominant trunks arise from base; Multiple trunks arise from 8'; slight S lean; slightly thin crown.	Laxague Drive
668	Coast live oak	6,5,5	Yes	3	Low	S of #159; 5' from curb; planted at wall; under HV lines; Codominant trunks arise from base with included bark.	Residential Edge

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669	Coast live oak	7,6	Yes	3	Moderate	Adjacent to #159; Codominant trunks arise from 2'; narrow crown.	Residential Edge
670	Coast live oak	9	No	4	High	Adjacent to #159; Codominant trunks arise from 7'; good young tree.	Residential Edge
671	Coast live oak	7,7	Yes	3	Moderate	NE of #188; Codominant trunks arise from base; high dense crown.	Residential Edge
672	Coast live oak	9	No	3	Moderate	E of #169; Codominant trunks arise from 4.5'; measured below BH; thin spreading crown; suppressed under eucalyptus grove.	Residential Edge
673	Coast live oak	9	No	3	Moderate	E of #169; Codominant trunks arise from 5'; thin spreading crown; suppressed under eucalyptus grove; S lean.	Residential Edge
674	Coast live oak	6,5,4,4,4,3	Yes	4	High	S of #242 along slope; Codominant trunks arise from 1'; Multiple trunks arise from 4'; good young tree.	Residential Edge
675	Coast live oak	5,4,3	Yes	3	Moderate	SW along slope from #245; Multiple trunks arise from 1; low spreading crown; sinuous trunk.	Academic Core
676	Coast live oak	4,4,2	Yes	4	High	SW along slope from #245; Multiple trunks arise from 2.5'; good young tree.	Academic Core
677	Coast live oak	5,3,2	Yes	3	Moderate	SW along slope from #245; Codominant trunks arise from 1; NW lean and bow; sinuous trunk.	Academic Core
678	Coast live oak	5,4,4	Yes	3	Moderate	SW along slope from #245; Multiple trunks arise from 3'; S lean and bow; sinuous trunk; slightly thin crown.	Academic Core
679	Coast live oak	7,6,5,4,4,3	Yes	3	Moderate	SW along slope from #245; Codominant trunks arise from 1'; Multiple trunks arise from 2'; low spreading crown; sinuous trunk; slightly thin crown.	Academic Core
680	Coast live oak	9,8	Yes	3	Moderate	Next to #334; Codominant trunks arise from 2'; thin sinuous stems; thin high crown.	Laxague Drive
681	Coast live oak	6,5	Yes	3	Low	S downhill of #334; Codominant trunks arise from 3'; thin sinuous stems; thin high crown.	Laxague Drive

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682	Coast live oak	5,5	Yes	3	Low	E along slope from #333; Codominant trunks arise from base; very thin spreading crown; sinuous stems conflicting with adjacent oaks.	Laxague Drive
683	Coast live oak	7,5	Yes	4	High	Near #331; Codominant trunks arise from 4'; good young tree; narrow crown.	Laxague Drive
684	Coast live oak	9	No	4	High	Next to #316; slight W lean; narrow dense crown; Multiple trunks arise from high in crown.	Laxague Drive
685	Blue gum	49	Yes	3	Moderate	Codominant trunks arise from 3'; sparse high crown; poor structure.	Undeveloped North
686	Blue gum	26	Yes	2	Low	Failed codominant stem stem on N side; dead rotted N side; W lean.	Undeveloped North
687	Blue gum	52	Yes	2	Low	Codominant trunks arise from 8' with good union; branch and twig dieback in upper crown; epicormic growth on trunk; spreading crown.	Undeveloped North
688	Blue gum	11,10,9,9, 8,8,8	Yes	2	Low	Multiple trunks arise from 1'; stump sprouts; vigorous sinuous stems.	Undeveloped North
689	Blue gum	24,22,22,2 016	Yes	2	Low	On fence/property line; multiple trunks arise from 1'; stems arising from old stump; vigorous upright crowns.	Undeveloped North
690	Blue gum	14,13	Yes	2	Low	1' from property line; codominant stem 2' with included bark; S lean; sinuous trunks.	Undeveloped North
691	Blue gum	19,18	Yes	2	Low	On fence/property line; codominant stems 2'; stems arising from old stump; vigorous sinuous stems.	Undeveloped North
692	Blue gum	17,16,14	Yes	2	Low	On fence/property line; multiple trunks arise from 2'; stems arising from old stump; vigorous sinuous stems; smallest stem topped at 8' with resprouts.	Undeveloped North
693	Blue gum	18,17,15,1 3,11	Yes	2	Low	On fence/property line; multiple trunks arise from 1'; stems arising from old stump; vigorous upright crowns.	Undeveloped North

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694	Blue gum	15,11,8,8, 7	Yes	2	Low	On fence/property line; multiple trunks arise from 1'; stems arising from old stump; vigorous upright conflicting stems.	Undeveloped North
695	Blue gum	14,12,12,1 1,10,8,8	Yes	2	Low	On fence/property line; multiple trunks arise from 1'; stems arising from old stump; vigorous upright conflicting stems.	Undeveloped North
696	Coast live oak	10,6,6	Yes	3	Low	On fence/property line; multiple trunks arise from 2'; stem on neighboring property embedded in fence; stunted sinuous crowns.	Undeveloped North
697	Coast live oak	13,4	Yes	4	Moderate	On fence/property line; codominant stems 4'; NE lean; vigorous spreading crown.	Undeveloped North
698	Coast live oak	10,8	Yes	3	Moderate	On fence/property line; codominant stems 2' with included bark; S stem with S lean; vigorous spreading crown.	Undeveloped North
699	Coast live oak	12,7	Yes	4	High	At base of rock outcrop; codominant stem like at 3'; spreading vigorous crown.	Undeveloped North
700	Blue gum	9,9	Yes	3	Low	Codominant stem at base; sinuous stems; thin high crowns.	Undeveloped North
701	Blue gum	17,13	Yes	3	Moderate	Codominant trunks arise from base; N lean with S now; vigorous high crown.	Undeveloped North
702	Blue gum	20,12,12,7	Yes	2	Low	Multiple trunks arise from 1'; stump sprouts; W stem with dead top and epicormic growth on stem; vigorous sinuous stems.	Undeveloped North
703	Blue gum	13	No	1	Low	Dead stem with stump sprouts.	Undeveloped North
704	Blue gum	15	Yes	2	Low	Dead top; E lean.	Undeveloped North
705	Blue gum	41	Yes	2	Low	Codominant trunks arise from 5'; poor structure; failed limbs; dead top.	Undeveloped North
706	Blue gum	50	Yes	2	Low	Codominant trunks arise from 3' with included bark; dead top; branch and twig dieback in upper crown.	Undeveloped North

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707	Blue gum	21	No	0	-	Dead; granary tree.	Undeveloped North
708	Blue gum	14	Yes	3	Low	E bow in upper crown; thin sinuous crown.	Undeveloped North
709	Blue gum	28	Yes	2	Low	Multiple trunks arise from high in crown; stem dead on N side; sulfur fungus at base with decay to 10'.	Undeveloped North
710	Blue gum	16	Yes	3	Moderate	Open grown; dead top; upright stem.	Undeveloped North
711	Blue gum	23	Yes	3	Moderate	Open grown; dead top; upright stem.	Undeveloped North
712	Blue gum	22	Yes	3	Moderate	Codominant stems high in crown; dead branches and twigs.	Undeveloped North
713	Blue gum	10,4	Yes	2	Low	Codominant trunks arise from 2' and 8'; largest stem dead; remaining stems vigorous.	Undeveloped North
714	Blue gum	16	Yes	2	Low	Codominant trunks arise from 8'; largest stem with dead top; vigorous resprouts; poor structure.	Undeveloped North
715	Blue gum	14	Yes	2	Low	Codominant trunks arise from 5' and 9'; largest stem dead; poor form and structure; NE lean.	Undeveloped North
716	Blue gum	12	No	2	Low	Dead top; poor structure.	Undeveloped North
717	Blue gum	11	No	1	Low	Mostly dead; S lean.	Undeveloped North
718	Blue gum	17,12	Yes	4	Moderate	Codominant trunks arise from 3' and 10'; low spreading crown.	Undeveloped North
719	Blue gum	13,8	Yes	2	Low	Dead top; E lean and bow; poor form and structure.	Undeveloped North
720	Blue gum	22,4	No	0	-	Dead.	Undeveloped North
721	Blue gum	15,13,12	Yes	2	Low	Codominant trunks arise from base and 3'; largest stem dead; poor form and structure; N lean.	Undeveloped North
722	Blue gum	10	No	2	Low	Dead branches; poor form and structure; thin high crown.	Undeveloped North

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723	Blue gum	11	No	2	Low	Dead top; sulfur fungus at base.	Undeveloped North
724	Blue gum	34,16	Yes	4	Moderate	Codominant trunks arise from 3'; slightly thin spreading crown.	Undeveloped North
725	Blue gum	10,6,5	Yes	1	Low	Multiple trunks arise from base; failing at base; vigorous.	Undeveloped North
726	Blue gum	15,8,4	Yes	2	Low	Multiple trunks arise from base; #725 failed and leaning against; dead branches and twigs.	Undeveloped North
727	Blue gum	34,26,15,14	Yes	3	Moderate	Codominant trunks arise from 2', 3', and 4'; low spreading crown.	Undeveloped North
728	Blue gum	12	No	2	Low	Suppressed; E bow with lean.	Undeveloped North
729	Blue gum	32,28,26,10	Yes	3	Moderate	Multiple trunks arise from 2'; tight unions; conflicting branches: vigorous spreading crown.	Undeveloped North
730	Blue gum	10	No	3	Low	Small narrow crown.	Undeveloped North
731	Blue gum	22,18,16,11	Yes	3	Moderate	Multiple trunks arise from 3'; spreading crown.	Undeveloped North
732	Coast live oak	10	Yes	3	Moderate	Growing out of rocky outcrop; slightly thin spreading crown; shade grown.	Undeveloped North
733	Blue gum	12	No	2	Low	Dead branches; small narrow crown.	Undeveloped North
734	Blue gum	14,6	Yes	3	Moderate	Codominant trunks arise from base; large stem with NW lean and bow; dead twigs.	Undeveloped North
735	Blue gum	11	No	3	Low	Dead branches; slight E lean: sparse crown.	Undeveloped North
736	Blue gum	12	No	2	Low	Root decay; dead tops; poor form and structure.	Undeveloped North
737	Blue gum	12	No	2	Low	Dead branches; thin crown.	Undeveloped North
738	Blue gum	14,10,8	Yes	3	Low	Multiple trunks arise from 2'; dead tops; vigorous growth in lower crown.	Undeveloped North

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739	Blue gum	16,9,7	Yes	4	Moderate	Multiple trunks arise from 2'; vigorous spreading crown; old saw cut on E stem at 6'.	Undeveloped North
740	Blue gum	11	No	3	Low	Codominant trunks arise from 8'; dead branches; NE lean.	Undeveloped North
741	Blue gum	18	Yes	3	Moderate	Codominant trunks arise from 6'; thin high crown.	Undeveloped North
742	Coast live oak	9	No	4	Moderate	Codominant stems 5'; slightly thin spreading crown.	Undeveloped North
743	Blue gum	13	No	3	Moderate	N lean and bow; sinuous trunk; slightly thin spreading crown.	Undeveloped North
744	Blue gum	14	Yes	4	Moderate	E lean; sinuous trunk; slightly thin crown.	Undeveloped North
745	Blue gum	12,11,7	Yes	2	Low	Multiple trunks arise from base; stump resprouts; smallest stem dead; sinuous high crowns.	Undeveloped North
746	Blue gum	15	Yes	3	Low	Codominant trunks arise from 8'; jog in trunk at union; SW lean; thin high crowns.	Undeveloped North
747	Blue gum	12	No	1	Low	Trunk dead with sprouts at base.	Undeveloped North
748	Blue gum	18,18,16,10,10,5	Yes	2	Low	Multiple trunks arise from base; dead branches and twigs; sinuous trunks; spreading crown.	Undeveloped North
749	Blue gum	14,6,5	Yes	3	Moderate	Multiple trunks arise from base; SE lean and bow; vigorous crown.	Undeveloped North
750	Coast live oak	9	No	1	Low	Mostly dead; rot in trunk to dead top; E lean.	Undeveloped North
751	Coast live oak	24	Yes	3	Moderate	Codominant trunks arise from 7', 9', 13', and 15'; pruned for property line on W; vigorous spreading crown.	Undeveloped North
752	Coast redwood	38	Yes	3	Moderate	Good structure; sparse crown on N side.	Undeveloped North
753	Coast live oak	39,32,24	Yes	2	Low	Multiple trunks arise from base; several stems laying on the ground; very thin spreading crown.	Undeveloped North

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754	Coast live oak	20	Yes	4	Moderate	Codominant trunks arise from 9'; E lean; sinuous trunks; slightly thin crown.	Undeveloped North
755	Blue gum	20,15	Yes	3	Moderate	Codominant trunks arise from 2'; thin high crown.	Undeveloped North
756	Canary Island date palm	30	Yes	4	Moderate	Bth 30'; base covered with litter.	Undeveloped North
757	Canary Island date palm	27	Yes	3	Low	Sweep at base with W lean; chlorotic fronds; bth 11'.	Undeveloped North
758	Blue gum	34,16,12,5	Yes	4	Moderate	No tag; growing on rock outcrop; multiple trunks arise from base; vigorous spreading crown.	Undeveloped North
759	Blue gum	29,25	Yes	3	Moderate	Codominant trunks arise from base; N stem with N lean and poor form and structure; S stem with high vigorous crown.	Undeveloped North
760	Blue gum	55	Yes	4	Moderate	Multiple trunks arise from 5'; poor form and structure; vigorous spreading crown.	Undeveloped North
761	Blue gum	17	Yes	3	Low	No tag; on rock outcrop; Codominant trunks arise from 7'; thin high crown.	Undeveloped North
762	Blue gum	14	Yes	3	Moderate	Codominant trunks arise from 6'; E lean and bow; thin high crown; sinuous trunk.	Undeveloped North
763	Blue gum	32,24	Yes	3	Moderate	Codominant trunks arise from 1'; conflicting branches; suppressed on SW; lopsided crown to N; overextended limbs.	Undeveloped North
764	Yellow willow	19	Yes	1	Low	Failed at base.	Undeveloped North
765	Canary Island date palm	36	Yes	4	Moderate	Bth 3'; slightly chlorotic fronds.	Undeveloped North
766	Coast live oak	15	Yes	1	Low	Codominant stems arise at 4'; one stem failed with 2' wound; remaining crown vigorous.	Undeveloped North
767	Coast live oak	12	Yes	4	High	Codominant trunks arise from 6'; E lean and bow; 6" scar at base; vigorous crown.	Undeveloped North
768	Canary Island date palm	32	Yes	4	Moderate	Bth 3'; slightly chlorotic fronds.	Undeveloped North

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769	Coast live oak	10	Yes	3	Moderate	NE lean; narrow straight crown; good young tree.	Undeveloped North
770	Coast live oak	10	Yes	3	Moderate	Codominant trunks arise from 5'; unbalanced crown to S; narrow vigorous crown.	Undeveloped North
771	Coast live oak	14	Yes	3	Moderate	Codominant trunks arise from 6' and 8'; suppressed under 772; unbalanced crown to S.	Undeveloped North
772	Coast live oak	22	Yes	4	High	Codominant trunks arise from 5'; spreading vigorous crown.	Undeveloped North
773	Coast live oak	12,11	Yes	4	Moderate	Codominant trunks arise from 3'; E lean and sweep trip vertical; spreading vigorous crown.	Undeveloped North
774	Blue gum	22,18	Yes	3	Moderate	Codominant trunks arise from 1'; S lean and bow; unbalanced crown to SE.	Undeveloped North
775	Blue gum	24	Yes	3	Moderate	Codominant trunks arise from 9'; sinuous narrow crown; suppressed under 776.	Undeveloped North
776	Blue gum	30,11,6,3	Yes	3	Low	Multiple trunks arise from base and 6'; unbalanced crown to NE; crowded with 775.	Undeveloped North
777	Blue gum	34,32,30,22,17,10,9	Yes	3	Moderate	Multiple trunks arise from base; vigorous spreading crown; past pruning cuts over drainage ditch; conflicting branches.	Undeveloped North
778	Blue gum	42	Yes	4	Moderate	Codominant trunks arise from 5'; vigorous upright crown.	Undeveloped North
779	Blue gum	17,15,8,6	Yes	3	Moderate	Multiple trunks arise from base; upright narrow crown.	Undeveloped North
780	Blue gum	16,11	Yes	3	Moderate	Codominant trunks arise from 2'; NW lean and sweep; narrow crown.	Undeveloped North
781	Coast live oak	9,9,8	Yes	2	Low	Multiple trunks arise from base; 1' scar at 1'; sinuous trunks; sparse crown with epicormic sprouts.	Undeveloped North
782	Blue gum	17,8	Yes	3	Low	Suppressed under #783; Codominant trunks arise from 1'; narrow high crown.	Undeveloped North

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783	Blue gum	90	Yes	4	Moderate	Multiple trunks arise from base fused; multiple trunks arise throughout crown; embedded limb high in crown; spreading vigorous crown.	Undeveloped North
784	Blue gum	39	Yes	4	Moderate	Codominant trunks arise from 6'; unbalanced crown to N from conflicting with #783; vigorous crown.	Undeveloped North
785	Blue gum	47	Yes	4	High	Multiple trunks arise from 9'; vigorous spreading crown.	Undeveloped North
786	Coast live oak	17	Yes	4	Moderate	Codominant trunks arise from 7'; sinuous trunk; unbalanced crown to S; spreading vigorous crown.	Undeveloped North
787	Coast live oak	19	Yes	3	Moderate	Codominant trunks arise from 5' and 7'; wide attachment with seam below; lean to N; suppressed; narrow thin crown.	Undeveloped North
788	Coast live oak	33	Yes	4	High	Codominant trunks arise from 6'; 3' stem failure wound at 4' with excellent wound wood; vigorous spreading crown.	Undeveloped North
789	Coast live oak	17,11	Yes	4	High	Codominant trunks arise from 2' and 7'; slightly thin upright crown.	Undeveloped North
790	Coast live oak	14,10	Yes	3	Moderate	Codominant trunks arise from 3' embedded and wrapping around; S lean with insurance crown; spreading vigorous crown.	Undeveloped North
791	Coast live oak	29,29,19,17	Yes	3	Moderate	Multiple trunks arise from at base; done stems dead or with decay; history of branch failure; specimen tree likely historic; spreading thinking crown.	Undeveloped North
792	Coast live oak	10,9	Yes	3	Moderate	Codominant trunks arise from 2'; slightly thin spreading crown.	Undeveloped North
793	Coast live oak	10	Yes	3	Moderate	At fence; Codominant trunks arise from 9'; SW lean with correction; sinuous trunk; slightly thin narrow crown.	Undeveloped North
794	Coast live oak	14	Yes	4	Moderate	At fence; multiple trunks arise from 6'; S lean and bow; low spreading crown.	Undeveloped North

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795	Coast live oak	10,5	Yes	2	Low	Codominant trunks arise from base and 3'; suppressed; very thin narrow crown.	Undeveloped North
796	Coast live oak	12,11,9,7	Yes	3	Moderate	Multiple trunks arise from base; thin spreading crown unbalanced to S.	Undeveloped North
797	Coast live oak	17	Yes	2	Low	On steep slope; multiple trunks arise from 5'; lean to S; very thin spreading crown.	Undeveloped North
798	Coast live oak	10	Yes	1	Low	Codominant trunks arise from 5'; completely suppressed; bowed limbs; very thin crown.	Undeveloped North
799	Coast live oak	14,13,10	Yes	3	Moderate	Multiple trunks arise from 2'; stem removal at 2'; spreading crown unbalanced to SW due to stem removal.	Undeveloped North
800	Coast live oak	13,11	Yes	3	Low	Codominant trunks arise from base; N stem with mottling and texture; thin spreading crown.	Undeveloped North
801	Coast live oak	14,10	Yes	4	Moderate	Codominant trunks arise from base; vigorous spreading crown.	Undeveloped North
802	Coast live oak	9	No	2	Low	Codominant trunks arise from 7'; boring activity with weeping; 1.5' trunk scary at 1'; thin crown.	Undeveloped North
803	Coast live oak	9	No	2	Low	Codominant trunks arise from 6'; severe lean; sinuous trunk; high slightly thin crown.	Undeveloped North
804	Coast live oak	16	Yes	2	Low	Codominant trunks arise from 5'; thin spreading crown.	Undeveloped North
805	Coast live oak	11	Yes	3	Low	Multiple trunks arise from 7'; failing blue gum limb in crown; small vigorous crown.	Undeveloped North
806	Coast live oak	12	Yes	2	Low	Codominant trunks arise from 8'; sinuous trunk; suppressed; thin narrow unbalanced crown to SW.	Undeveloped North
807	Blue gum	42,38,34	Yes	2	Low	Multiple trunks arise from base; failed 34" stem at base with white rot through base; spreading vigorous crown.	Undeveloped North
808	Coast live oak	19	Yes	4	High	Codominant trunks arise from 9'; spreading vigorous crown.	Undeveloped North
809	Coast live oak	13	Yes	3	Moderate	Codominant trunks arise from 5'; narrow spreading crown.	Undeveloped North

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810	Coast live oak	16	Yes	4	High	Codominant trunks arise from 6'; NE lean; unbalanced narrow crown.	Undeveloped North
811	Coast live oak	13	Yes	3	Moderate	Suppressed next to #811; unbalanced narrow crown to W.	Undeveloped North
812	Coast live oak	19	Yes	4	High	Multiple trunks arise from 8'; vigorous spreading unbalanced crown to E.	Undeveloped North
813	Coast live oak	14	Yes	4	High	Codominant trunks arise from 5' with wide attachment; slightly thin spreading crown.	Undeveloped North
814	Coast live oak	13	Yes	3	Moderate	Multiple trunks arise from 10'; sinuous trunk with jog at 4'; vigorous crown.	Undeveloped North
815	Coast live oak	14	Yes	2	Low	Codominant trunks arise from 9'; saturated soil; cankers at base; W lean; very thin upright crown.	Undeveloped North
816	Coast live oak	10	Yes	1	Low	Lost top at 11'; epicormic sprouts; wildlife cavity.	Undeveloped North
817	Coast live oak	19	Yes	2	Low	Cousins at 4'; rot though trunk; NE lean.	Undeveloped North
818	Coast live oak	17	Yes	3	Moderate	Codominant trunks arise from 8' and 9'; unbalanced crown to S.	Undeveloped North
819	Coast live oak	19	Yes	3	Moderate	Codominant trunks arise from 5'; N lean and bow; thin narrow crown.	Undeveloped North
820	Coast live oak	19	Yes	3	Moderate	Codominant trunks arise from 5' same 6'; unbalanced spreading crown to W.	Undeveloped North
821	Coast live oak	21,11,8	Yes	3	Low	Multiple trunks arise from base; suppressed; thin spreading crown.	Undeveloped North
822	Coast live oak	13	Yes	3	Low	Multiple trunks arise from 8'; suppressed; E lean; sinuous trunk.	Undeveloped North
823	Evergreen ash	19	Yes	4	High	No tag; no access; cannot see base; typical form and structure; vigorous.	Undeveloped North
824	Italian stone pine	24	Yes	1	Low	Failed at base.	Undeveloped North
825	Coast live oak	11	Yes	4	High	Codominant trunks arise from 4.5'; advanced regeneration; good young tree.	Undeveloped North

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826	Coast live oak	11	Yes	3	Moderate	Codominant trunks arise from 8'; narrow high crown; foliage at branch ends.	Undeveloped North
827	Yellow willow	14	Yes	2	Low	Multiple trunks arise from 7'; severe S lean; conflicting with #828.	Undeveloped North
828	Coast live oak	13	Yes	2	Low	Codominant stems 7'; severe S lean; over topped by #827.	Undeveloped North
829	Coast live oak	14	Yes	3	Moderate	Sinuous trunk; unbalanced crown to S.	Undeveloped North
830	Coast live oak	10,4	Yes	4	High	Codominant trunks arise from base; spreading vigorous crown.	Undeveloped North
831	Coast live oak	9	No	2	Low	Severe E lean and bow; 3.5' scar at 3'; rot along trunk; high narrow crown.	Undeveloped North
832	Coast live oak	12	Yes	3	Moderate	E lean; sinuous trunk; high narrow crown.	Undeveloped North
833	Blue gum	27,24,18,10	Yes	4	High	Multiple trunks arise from 3'; vigorous spreading crown; unbalanced crown to SE.	Undeveloped North
834	Coast live oak	12	Yes	4	High	Codominant trunks arise from 4.5'; good young tree.	Undeveloped North
835	Blue gum	28,23	Yes	4	High	Codominant trunks arise from 3'; S trunk with SE sweep; high vigorous crown.	Undeveloped North
836	Blue gum	50	Yes	5	High	Vigorous upright crown.	Undeveloped North
837	Coast live oak	9	No	3	Moderate	Codominant trunks arise from 8'; suppressed.	Undeveloped North
838	Coast live oak	13	Yes	3	Moderate	Severe S lean; sinuous trunk; unbalanced vigorous crown.	Undeveloped North
839	Coast live oak	10,10,7	Yes	3	Low	Codominant trunks arise from 1' and 3'; suppressed; thin crown; ; foliage at branch ends.	Undeveloped North
840	Coast live oak	21,17,15	Yes	2	Low	Multiple trunks arise from base; failed at base; branch tips alive.	Undeveloped North
841	Coast live oak	13	Yes	2	Low	Codominant trunks arise from 4' and 5'; union splitting at 5'; very thin crown.	Undeveloped North

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842	Coast live oak	13,9,6	Yes	3	Low	Multiple trunks arise from 2'; canker at base; unbalanced crown to S.	Undeveloped North
843	Coast live oak	11,8	Yes	3	Moderate	Codominant trunks arise from 2'; unbalanced thin spreading crown to N.	Undeveloped North
844	Coast live oak	10	Yes	2	Low	Codominant trunks arise from 8'; suppressed; high very thin crown .	Undeveloped North
845	Coast live oak	15	Yes	3	Moderate	N lean; sinuous trunk.	Undeveloped North
846	Coast live oak	12	Yes	3	Moderate	Multiple trunks arise from 6'; sinuous trunk; slightly thin crown; foliage at branch ends.	Undeveloped North
847	Coast live oak	9	No	2	Low	Codominant trunks arise from 5'; very thin crown.	Undeveloped North
848	Coast live oak	9	No	2	Low	Codominant trunks arise from 5'; dead top; thin narrow crown.	Undeveloped North
849	Coast live oak	13,11,10,6	Yes	2	Low	Multiple trunks arise from 3'; boring activity; very thin spreading crown; epicormic sprouts.	Undeveloped North
850	Coast live oak	13,8	Yes	2	Low	Codominant trunks arise from 2'; boring activity; very thin spreading crown; epicormic sprouts.	Undeveloped North
851	Coast live oak	10	Yes	2	Low	Codominant trunks arise from 3'; boring activity; very thin spreading crown; epicormic sprouts.	Undeveloped North
852	Coast live oak	16	Yes	4	High	Slightly thin spreading crown.	Undeveloped North
853	Coast live oak	19	Yes	4	High	Multiple trunks arise from 11'; unbalanced crown to S; foliage at branch ends.	Undeveloped North
854	Coast live oak	9	No	3	Moderate	N lean; narrow crown; foliage at branch ends.	Undeveloped North
855	Coast live oak	10	Yes	3	Moderate	Codominant trunks arise from 6'; high narrow crown.	Undeveloped North
856	Coast live oak	9	No	3	Moderate	Codominant trunks arise from 9'; S lean with correction; suppressed.	Undeveloped North
857	Coast live oak	9	No	3	Low	Almost laying on ground; suppressed.	Undeveloped North

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858	Coast live oak	18	Yes	4	High	Codominant trunks arise from 5'; unbalanced spreading vigorous crown to S.	Undeveloped North
859	Coast live oak	21,18,15	Yes	4	High	Codominant trunks arise from 2' and 4'; spreading slightly thin crown.	Undeveloped North
860	Coast live oak	23,17	Yes	4	High	Codominant trunks arise from 2' and 5'; spreading slightly thin crown.	Undeveloped North
861	Coast live oak	19,14,10	Yes	3	Moderate	Multiple trunks arise from 3' with boring activity in attachment; thin spreading crown.	Undeveloped North
862	Coast live oak	12	Yes	3	Moderate	Multiple trunks arise from 11'; sinuous trunk with jog at 9'; foliage at branch ends.	Undeveloped North
863	Coast live oak	21,18,16,14,13	Yes	4	High	Multiple trunks arise from base; slightly thin spreading crown; interior branch dieback; foliage at branch ends.	Undeveloped North
864	Coast live oak	11,10	Yes	3	Moderate	Codominant trunks arise from 3'; high narrow crown; suppressed.	Undeveloped North
865	Coast live oak	12	Yes	3	Moderate	Codominant trunks arise from 6'; severe W lean and bow; high narrow crown.	Undeveloped North
866	Coast live oak	12,5	Yes	3	Moderate	Codominant trunks arise from 1'; unbalanced crown to W; high narrow crown.	Undeveloped North
867	Coast live oak	25	Yes	3	Low	Multiple trunks arise from 6'; thin spreading crown.	Undeveloped North
868	Coast live oak	22,19	Yes	3	Moderate	Codominant trunks arise from 1' and 4'; unbalanced crown to S; slightly thin crown; foliage at branch ends.	Undeveloped North
869	Coast live oak	11	Yes	2	Low	Codominant trunks arise from 5' and 10'; E lean; thin crown; dead branches; foliage at branch ends.	Undeveloped North
870	Coast live oak	15	Yes	4	Moderate	Codominant trunks arise from 5'; sinuous trunk; narrow crown; foliage at branch ends.	Undeveloped North
871	Coast live oak	9	No	2	Low	Codominant trunks arise from 5' and 10'; E lean; thin crown; dead branches; foliage at branch ends.	Undeveloped North
872	Coast live oak	10	Yes	3	Moderate	Codominant trunks arise from 8' and 13'; E lean; foliage at branch ends.	Undeveloped North

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873	Coast live oak	17	Yes	3	Moderate	Codominant trunks arise from 5'; sinuous trunk; foliage at branch ends.	Undeveloped North
874	Coast live oak	16	Yes	3	Moderate	Codominant trunks arise from 1', 6' and 9'; unbalanced crown to S; foliage at branch ends.	Undeveloped North
875	Coast live oak	17,11	Yes	3	Moderate	Multiple trunks arise from 5'; W lean; foliage at branch ends.	Undeveloped North
876	Coast live oak	10	Yes	2	Low	Severe W lean; thin crown; foliage at branch ends.	Undeveloped North
877	Coast live oak	13,8,7	Yes	2	Low	Multiple trunks arise from 2' with wide union; spreading thin crown; foliage at branch ends.	Undeveloped North
878	Coast live oak	15,11,9	Yes	4	Moderate	Codominant trunks arise from 1' and 3'; vigorous spreading crown.	Undeveloped North
879	Coast live oak	11	Yes	3	Moderate	Codominant trunks arise from 7'; narrow crown; foliage at branch ends.	Undeveloped North
880	Coast live oak	18,14,10,5	Yes	4	High	Multiple trunks arise from 1.5'; spreading unbalanced crown to S; foliage at branch ends.	Undeveloped North
881	Coast live oak	17	Yes	3	Moderate	Codominant trunks arise from 4.5'; N lean; foliage at branch ends.	Undeveloped North
882	Coast live oak	17,14	Yes	4	High	Codominant trunks arise from 1'; spreading crown; foliage at branch ends.	Undeveloped North
883	Coast live oak	10	Yes	3	Low	N lean; sinuous trunk; dead branches; rot; epicormic sprouts.	Undeveloped North
884	Coast live oak	14	Yes	3	Moderate	Codominant trunks arise from 8'; spreading thin crown; foliage at branch ends.	Undeveloped North
885	Coast live oak	26	Yes	3	Moderate	Multiple trunks arise from 5'; very thin spreading crown; foliage at branch ends.	Undeveloped North
886	Coast live oak	12,8,7,7,5	Yes	2	Low	Multiple trunks arise from base; suppressed; S lean; crowded branches; thin crown; foliage at branch ends.	Undeveloped North
887	Coast live oak	9	No	2	Low	Severe SE lean; very thin high crown.	Undeveloped North

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888	Coast live oak	14	Yes	3	Moderate	Codominant trunks arise from 5'; slightly thin upright crown.	Undeveloped North
889	Coast live oak	10	Yes	3	Moderate	Cousins at 6'; suppressed; slightly thin upright crown; foliage at branch ends.	Undeveloped North
890	Coast live oak	24,14,13	Yes	4	High	Multiple trunks arise from 2.5'; spreading crown; foliage at branch ends.	Undeveloped North
891	Coast live oak	13	Yes	3	Moderate	Multiple trunks arise from 4.5'; sinuous stems; foliage at branch ends.	Undeveloped North
892	Coast live oak	22	Yes	4	High	Codominant trunks arise from 6'; multiple trunks arise from 7'; spreading slightly thin crown; foliage at branch ends.	Undeveloped North
893	Coast live oak	9,6	Yes	2	Low	Codominant trunks arise from 1'; suppressed; very thin crown; foliage at branch ends.	Undeveloped North
894	Coast live oak	20,14	Yes	4	High	Codominant trunks arise from 1.5'; spreading slightly thin crown; foliage at branch ends.	Undeveloped North
895	Coast live oak	15,12,9,6	Yes	3	Moderate	Multiple trunks arise from base; unbalanced crown to S; foliage at branch ends.	Undeveloped North
896	Coast live oak	21	Yes	3	Moderate	Multiple trunks arise from 4', 6', and along trunk; narrow slightly thin crown; foliage at branch ends.	Undeveloped North
897	Coast live oak	21,15,13	Yes	3	Low	Multiple trunks arise from 2'; thin spreading crown; epicormic sprouts; foliage at branch ends.	Undeveloped North
898	Coast live oak	11	Yes	2	Low	NE lean and bow; suppressed; foliage at branch ends.	Undeveloped North
899	Coast live oak	13,12,9,7	Yes	2	Low	Multiple trunks arise from 1'; spreading thin crown; heavy boring activity; foliage at branch ends.	Undeveloped North
900	Coast live oak	15,9,7,7	Yes	3	Moderate	Multiple trunks arise from base; union along ground 7'; vigorous crown; foliage at branch ends.	Undeveloped North
901	Coast live oak	9,8	Yes	3	Moderate	Codominant trunks arise from 1'; sinuous trunk; unbalanced crown to S; foliage at branch ends.	Undeveloped North
902	Coast live oak	14,13,12,12,10,9,6	Yes	3	Moderate	Multiple trunks arise from 2'; spreading slightly thin crown; foliage at branch ends.	Undeveloped North

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903	Coast live oak	11,11,10,8,8,7,6,6	Yes	3	Moderate	Multiple trunks arise from 2'; spreading slightly thin crown; foliage at branch ends.	Undeveloped North
904	Coast live oak	27	Yes	3	Moderate	Codominant trunks arise from 5' with 3rd failed stem; 3' scar at 5'; spreading vigorous crown.	Undeveloped North
905	Coast live oak	17	Yes	3	Moderate	Multiple trunks arise from 9'; slightly thin unbalanced crown to N.	Undeveloped North
906	Coast live oak	27,15	Yes	4	Moderate	Codominant trunks arise from 3'; multiple trunks arise from 6'; slightly thin spreading crown; foliage at branch ends.	Undeveloped North
907	Coast live oak	10	Yes	4	High	Codominant trunks arise from 5'; good young tree.	Undeveloped North
908	Coast live oak	11	Yes	3	Low	Multiple trunks arise from 6'; thin spreading crown.	Undeveloped North
909	Coast live oak	12,9,9,8,5	Yes	2	Low	Multiple trunks arise from 3'; very thin spreading crown; boring activity; dead branches.	Undeveloped North
910	Coast live oak	22	Yes	3	Moderate	Multiple trunks arise from 5'; slightly thin low spreading crown; boring activity in union.	Undeveloped North
911	Coast live oak	9	No	3	Low	Codominant trunks arise from 5'; S lean; slightly thin spreading crown.	Undeveloped North
912	Coast live oak	16,16,12,5	Yes	2	Low	Multiple trunks arise from 2'; thin spreading crown.	Undeveloped North
913	Coast live oak	13,6,4	Yes	3	Moderate	Multiple trunks arise from 1'; Codominant trunks arise from 6'; unbalanced low spreading crown to S.	Undeveloped North
914	Coast live oak	12	Yes	3	Moderate	Codominant trunks arise from 5'; slightly thin spreading crown.	Undeveloped North
915	Coast live oak	17,9	Yes	3	Moderate	Codominant trunks arise from base; slightly thin spreading crown.	Undeveloped North
916	Coast live oak	24	Yes	2	Low	Multiple trunks arise from 4.5'; S lean; N stem dead; decay through base; thin crown.	Undeveloped North
917	Coast live oak	20,14,13,12	Yes	2	Low	Multiple trunks arise from 2'; very thin low spreading crown.	Undeveloped North

Tree Assessment

Notre Dame de Namur University
Belmont, California
February 2023

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
918	Coast live oak	13	Yes	3	Low	Unbalanced crown to E; suppressed.	Undeveloped North
919	Coast live oak	18,17,17,15	Yes	3	Moderate	Multiple trunks arise from base; thin spreading crown.	Undeveloped North
920	Coast live oak	17	Yes	3	Moderate	Codominant trunks arise from 5'; unbalanced thin spreading crown to E.	Undeveloped North
921	Coast live oak	11	Yes	2	Low	N lean; spreading thin crown.	Undeveloped North
922	Coast live oak	13	Yes	3	Moderate	Multiple trunks arise from 5'; spreading thin crown.	Undeveloped North
923	Coast live oak	14,10,7	Yes	3	Low	Multiple trunks arise from 2'; thin spreading crown.	Undeveloped North
924	Coast live oak	12,11	Yes	3	Moderate	Multiple trunks arise from 4'; upright crown; foliage at branch ends.	Undeveloped North
925	Coast live oak	12,10,6	Yes	3	Moderate	Multiple trunks arise from 1'; upright crown; foliage at branch ends.	Undeveloped North
926	Coast live oak	12	Yes	3	Moderate	Codominant trunks arise from 3'; canker at base; S lean; vigorous crown.	Undeveloped North
927	Coast live oak	12,8,5	Yes	3	Moderate	Multiple trunks arise from 2'; slightly thin spreading crown.	Undeveloped North
928	Coast live oak	10	Yes	2	Low	Suppressed; small thin narrow crown.	Undeveloped North
929	Coast live oak	16,9	Yes	3	Moderate	Codominant trunks arise from 4' and 6'; thin spreading crown.	Undeveloped North
930	Coast live oak	10,8	Yes	3	Moderate	Codominant trunks arise from 3'; thin spreading crown.	Undeveloped North
931	Coast live oak	16	Yes	4	High	Multiple trunks arise from 5'; slightly thin spreading crown.	Undeveloped North
932	Coast live oak	12,11,10,9,6	Yes	4	High	Multiple trunks arise from base; slightly thin spreading upright crown; foliage at branch ends.	Undeveloped North
933	Coast live oak	14,9	Yes	3	Moderate	Codominant trunks arise from base; E lean and bow; foliage at branch ends.	Undeveloped North

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Belmont, California
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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
934	Coast live oak	15	Yes	3	Moderate	Multiple trunks arise from 4.5'; unbalanced crown to SW.	Undeveloped North
935	Coast live oak	19	Yes	4	Moderate	Codominant trunks arise from 8'; multiple trunks arise from 9'; thin spreading crown.	Undeveloped North
936	Coast live oak	28,19,18	Yes	4	High	Multiple trunks arise from 2'; slightly thin spreading crown.	Undeveloped North
937	Coast live oak	11	Yes	4	Moderate	On cliff edge; Codominant trunks arise from 4.5'; sinuous trunk.	Undeveloped North
938	Coast live oak	10,9,6	Yes	3	Moderate	On cliff edge; multiple trunks arise from 2'; slightly thin spreading crown.	Undeveloped North
939	Coast live oak	11	Yes	2	Low	Codominant trunks arise from 5'; thin crown; boring activity and canker at base.	Undeveloped North
940	Coast live oak	10	Yes	2	Low	Codominant trunks arise from 5'; thin crown; boring activity and canker at base.	Undeveloped North
941	Blue gum	50	Yes	3	Low	NW lean; decay at base on NE; branch and twig dieback.	Undeveloped North
942	Coast live oak	10	Yes	3	Low	Unbalanced crown to N.	Undeveloped North
943	Coast live oak	9	No	2	Low	Codominant trunks arise from 5'; thin upright crown.	Undeveloped North
944	Coast live oak	12	Yes	3	Low	Thin upright crown.	Undeveloped North
945	Blue gum	44	Yes	4	High	Slightly thin crown.	Undeveloped North
946	Blue gum	16,12	Yes	3	Moderate	Codominant trunks arise from 3'; E lean.	Undeveloped North
947	Blue gum	23,9	Yes	3	Moderate	Codominant trunks arise from base; E lean.	Undeveloped North
948	Blue gum	26	Yes	3	Moderate	E lean and bow.	Undeveloped North
949	Blue gum	33	Yes	4	High	High crown; slight lean high in crown.	Undeveloped North

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
950	Blue gum	25	Yes	4	High	Sinuous trunk; high crown.	Undeveloped North
951	Blue gum	25	Yes	4	High	Slight S bow with unbalanced crown.	Undeveloped North
952	Blue gum	57	Yes	4	High	Multiple trunks arise from 5'; removed stem with good wound wood at 4'; SW lean with unbalanced crown.	Undeveloped North
953	Coast live oak	10	Yes	4	High	Codominant trunks arise from 4.5'; good young tree.	Undeveloped North
954	Blue gum	15,12	Yes	3	Low	Codominant trunks arise from 2'; E lean conflicting with adjacent tree; high crown.	Undeveloped North
955	Blue gum	31	Yes	3	Low	Branch and twigs dieback in upper crown; E lean and sweep.	Undeveloped North
956	Blue gum	42,22	Yes	4	High	Codominant trunks arise from 3'; Branch and twigs dieback in upper crown; E lean and sweep.	Undeveloped North
957	Blue gum	51	Yes	4	High	Multiple trunks arise from 15'; history of branch failure.	Undeveloped North
958	Coast live oak	32,15	Yes	4	High	Codominant trunks arise from 3' and 5'; low slightly thin spreading crown.	Undeveloped North
959	Blue gum	56	Yes	4	High	Codominant trunks arise from 5'; spreading vigorous crown.	Undeveloped North
960	Coast live oak	14	Yes	4	Moderate	Codominant trunks arise from 10'; NE lean and unbalanced crown.	Undeveloped North
961	Coast live oak	15,14	Yes	4	High	Codominant trunks arise from 2'; spreading crown; foliage at branch ends.	Undeveloped North
962	Coast live oak	10	Yes	2	Low	Codominant trunks arise from 11'; lost leader.	Undeveloped North
963	Coast live oak	11,8	Yes	4	Moderate	Codominant trunks arise from 3' and 8'; SE lean with unbalanced crown.	Undeveloped North
964	Coast live oak	16	Yes	3	Moderate	Codominant trunks arise from 6'; SE lean; slightly thin crown.	Undeveloped North

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
965	Coast live oak	25	Yes	4	High	Codominant trunks arise from 6'; 2 dead small failed stems at base; S stem with S lean.	Undeveloped North
966	Coast live oak	12,10	Yes	4	Moderate	Codominant trunks arise from 4'; SE lean; slightly thin crown.	Undeveloped North
967	Blue gum	20	Yes	3	Moderate	Codominant stems high in crown; N stem with severe S sweep.	Undeveloped North
968	Coast live oak	26,7	Yes	4	Moderate	In rock face on edge of parking lot; Codominant trunks arise from 2' & 4'; pruning cuts over lot with epicormic sprouts.	Undeveloped North
969	Coast live oak	12,7	Yes	4	High	Codominant trunks arise from 1.5' and 6'; vigorous crown.	Undeveloped North
970	Coast live oak	11,7	Yes	4	High	Codominant trunks arise from base; W lean with unbalanced crown.	Undeveloped North
971	Coast live oak	20	Yes	4	High	3' from asphalt; stem removed at 5' with sprouts; Codominant trunks arise from 7'.	Undeveloped North
972	Coast live oak	28,16	Yes	3	Moderate	Codominant trunks arise from 2', 3', and 7'; SE lean; thin spreading crown; large branch removal along parking lot.	Undeveloped North
973	Monterey cypress	38	Yes	3	Moderate	History of branch failures; slight E lean; branch and twig dieback.	Undeveloped North
974	Coast live oak	19	Yes	4	High	Multiple trunks arise from 5'; slight E lean; sapsucker activity high on trunk.	Undeveloped North
975	Valley oak	15	Yes	4	High	Multiple trunks arise from 9'; spreading vigorous crown.	Undeveloped North
976	Coast live oak	26	Yes	2	Low	Codominant trunks arise from 6' and 8'; S stem dead; N stem lost at 7'; thin crown; rot with conk in stem.	Undeveloped North
977	Coast live oak	14	Yes	3	Moderate	Cousins at 7'; N lean; foliage at branch ends.	Undeveloped North
978	Coast live oak	15,13	Yes	4	Moderate	Codominant trunks arise from 2' sand 4'; N lean; foliage at branch ends.	Undeveloped North

Tree Assessment

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Tree No.	Species	Trunk Diameter (in.)	Protected Tree?	Condition 1=poor 5=excellent	Suitability for Preservation	Comments	Vegetation Zone
979	Coast live oak	11,9	Yes	3	Moderate	Codominant trunks arise from 3'; suppressed.	Undeveloped North
980	Coast live oak	13,6	Yes	3	Moderate	Codominant trunks arise from 4'; suppressed; sinuous trunk; lean to N in upper crown.	Undeveloped North
981	Coast live oak	9	No	3	Moderate	Codominant trunks arise from 4.5'; supposed; unsubscribed crown to S.	Undeveloped North
982	Coast live oak	13	Yes	3	Moderate	S lean with unbalanced crown.	Undeveloped North
983	Coast live oak	16	Yes	4	Moderate	Unbalanced crown to N.	Undeveloped North
984	Coast live oak	18,17	Yes	2	Low	Codominant trunks arise from base with rot and split; old stem failure with no response growth on N stem; spreading thin crown.	Undeveloped North
985	Coast live oak	12	Yes	4	High	Multiple trunks arise from 5'; good young tree.	Undeveloped North
986	Coast live oak	9,5,5	Yes	4	High	Multiple trunks arise from 2'; E lean; sinuous trunk.	Undeveloped North
987	Blue gum	20	Yes	4	Moderate	N lean and bow; slightly thin crown.	Undeveloped North
988	Blue gum	16,15	Yes	4	Moderate	Codominant trunks arise from base; both stems with N sweep at base.	Undeveloped North
989	Blue gum	29,16	Yes	3	Moderate	Codominant trunks arise from 2' and 5'; conflicting stems; high crown.	Undeveloped North
990	Blue gum	62	Yes	4	High	Multiple trunks arise from 6'; N stem with N bow; S stems conflicting.	Undeveloped North
991	Blue gum	21	Yes	4	Moderate	Codominant trunks arise from 12'; sinuous trunk; old removed stem at base.	Undeveloped North

APPENDIX D3:
BIOLOGICAL RESOURCES REPORT











H. T. HARVEY & ASSOCIATES

Ecological Consultants

50 years of field notes, exploration, and excellence

Belmont Stanford Campus
Biological Resources Report

Project #4641-02

Prepared for:

Stanford University
415 Broadway, 3rd Floor, MC 8873
Redwood City, CA 94063
Attn: John Donohoe

Prepared by:

H. T. Harvey & Associates

November 7, 2023

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Section 1. Introduction

This report describes the biological resources present in the area of the proposed Stanford University Campus in Belmont, California (hereafter "Stanford Belmont Campus"), the potential impacts of the proposed project on biological resources, and measures necessary to reduce project impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This assessment is based on information in the October 2022 Conceptual Development Plan (CDP) application submitted by Stanford University to the City of Belmont.

1.1 Project Location

The project site is located on the former Notre Dame de Namur University (NDNU) campus at 1500 Ralston Avenue in the City of Belmont, just north of Ralston Avenue (Figures 1 and 2). The approximately 45.65-acre site, consisting of parcels APN 044-360-070 and 044-360-120, is bounded by residential development to the north and northeast, a high school and elementary school to the west and southwest, and a retirement community to the south. An unnamed tributary of Belmont Creek bisects the southern portion of the study area, flowing from west to east parallel to Laxague Drive. The project site is located on the *San Mateo*, *California* 7.5-minute United States Geological Survey (USGS) quadrangle.

1.2 Project Description

Stanford is requesting approval of a CDP (per Belmont Zoning Ordinance Section 12.3.A) to renovate and revitalize the campus in a phased manner during a 30-year timeframe. Stanford intends to develop the buildings and site to support existing and evolving Stanford academic programs and associated residential needs.

The proposed CDP is for a development potential of 700,000 square feet of academic uses and housing (including the preservation of three legacy campus buildings)—an increase of approximately 258,000 square feet beyond the amount of development that was already approved by the City of Belmont for NDNU. The square footage of any proposed housing units would be a subset of the total requested square footage, and could range from 50-200 units, depending upon the programmatic needs of the university. The anticipated population for the Belmont Campus, inclusive of students, faculty, and staff, is estimated to be about 2,500. Parking would be provided dependent upon future program requirements put forth by Stanford and could range from 950-1350 spaces. Stanford would retain at least three existing buildings: Taube Center, Ralston Mansion, and the Madison Art Center.

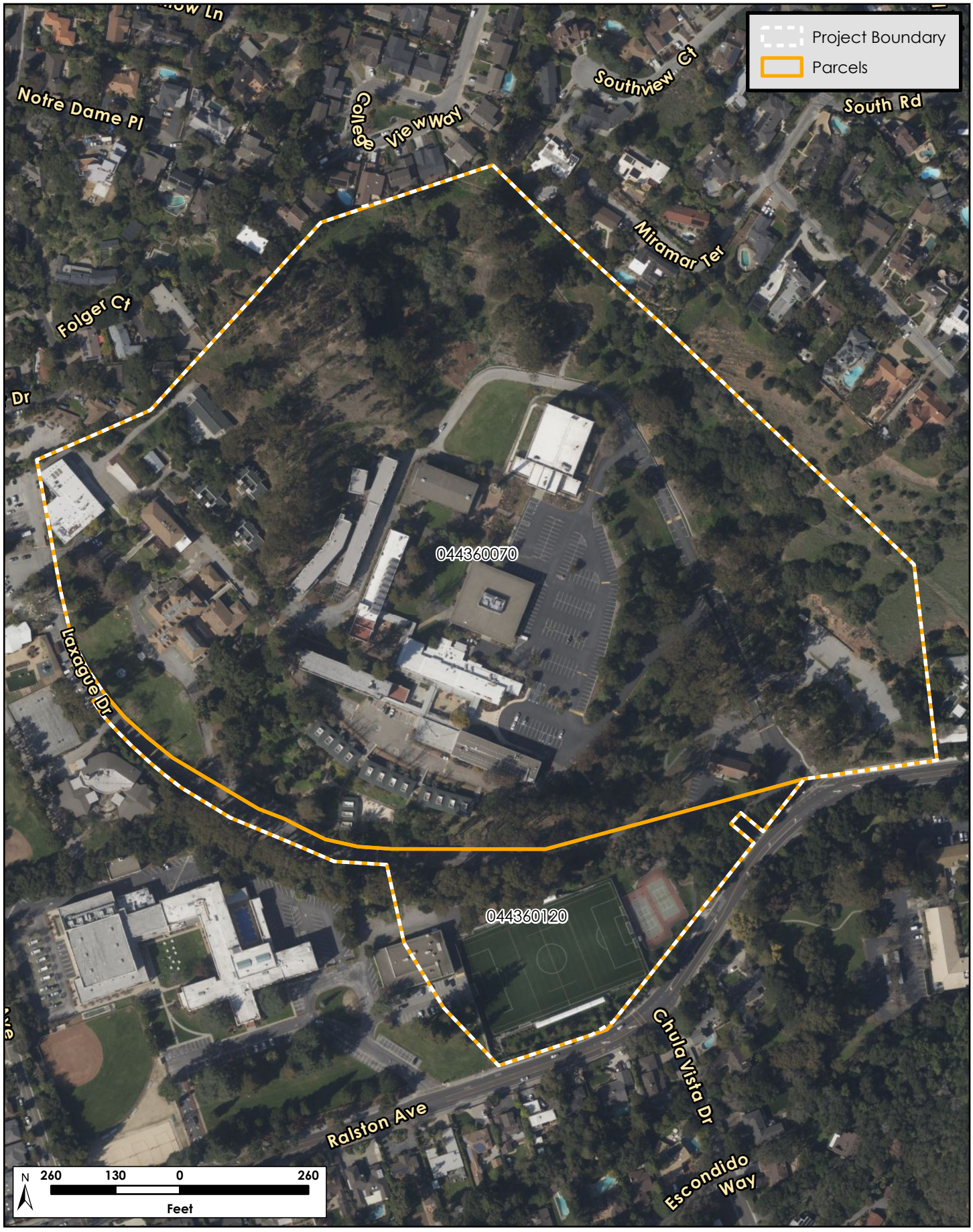
The project will maintain the existing zoning as a Planned Unit Development for academic use, which includes on-site housing. The location is just 5 miles from an existing Stanford campus in Redwood City and 11 miles from the main Stanford campus along the Caltrain corridor, which would easily and conveniently connect all three Stanford campuses.



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Figure 1. Vicinity Map
Belmont Stanford Campus Project
Biological Resources Report (HTH #4641-02)
November 2023



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Figure 2. Project Site
Belmont Stanford Campus Project
Biological Resources Report (HTH #4641-02)
November 2023

1.1.1 Existing and Proposed Zoning

The City of Belmont regulates land uses on the Belmont Campus through the City's General Plan, Planned Unit Development Zoning, a Conceptual Development Plan specific to the site, and any associated Conditional Use Permits and Detailed Development Plans.

1.1.1.1 City of Belmont General Plan

The Belmont Campus is located in the "Institution" land use designation of the City of Belmont General Plan. The General Plan (p. 2-18) states that this designation "applies to educational, cultural, faith-based and health-related services, and it may include a residential component." The General Plan provides that it does not define density and intensity standards for this land use designation, but rather such standards are established for individual sites through the Planned Development zoning process.

General Plan policies specific to "Public/Community Facilities and Institutions" and applicable to the project site are as follows:

- Goal 2.11: Continue to collaborate and partner with Notre Dame de Namur University.
- Policy 2.11-1: Support increased collaboration and partnership with Notre Dame de Namur University on key issues such as master planning, land use, enrollment, economic development, circulation, housing, and open space.

Stanford does not propose any change to the existing General Plan designation of the property.

1.1.1.2 Planned Unit Development Zoning

The Belmont Campus is located in the Planned Unit Development (PD) zoning district. The City's PD district is designed to accommodate various types of uses and is intended to allow flexibility of design, in accordance with the General Plan. An application to establish a PD District must be accompanied by a Conceptual Development Plan, which, once approved, becomes a part of the City's Zoning Map.

The Belmont Campus is subject to an existing Conceptual Development Plan. For the project to proceed, the City must approve either an amendment to the existing Conceptual Development Plan or a new Conceptual Development Plan. Stanford does not propose any change to the project Site's inclusion in the Planned Unit Development Zoning district. However, once approved, the proposed Conceptual Development Plan would supplant, in the City's Zoning Map, the existing Conceptual Development Plan that previously was approved for this property.

1.1.2 Proposed Conceptual Development Plan

1.1.2.1 Proposed Land Uses

Stanford proposes to operate academic facilities and associated academic support uses and housing on the Belmont Campus.

"Academic uses" include facilities used for teaching, learning, research, collaboration, athletics, recreation, performance, and art.

"Academic support uses" include all non-academic uses that facilitate the day-to-day operation of the academic uses. These include activities not conducted by Stanford and commercial uses that meet the following criteria: (1) the use supports academic programs; or (2) the use primarily serves campus faculty, students, staff and program attendees. Examples of support uses include but would not be limited to the following: retail food service; retail book and academic supplies; copy and computer services; childcare; convenience retail; bike shop; transit hub or connection facilities; central energy facility; steam plants; mechanical equipment; water supply infrastructure, distribution and storage; wastewater storage, treatment and reuse facilities; stormwater capture facilities; energy supply infrastructure and equipment including solar energy facilities; heating and cooling facilities; composting facilities; waste recycling and reuse facilities; landscape and service yard operations; art installations, recreation facilities; cellular, radio and similar transmission and reception facilities; storage facilities and containers; and portable trailers used for temporary surge space and construction office.

"Housing uses" proposed for the campus include dormitory-style group housing and apartment-style housing occupied by faculty, staff, postdoctoral scholars, medical residents, visiting scholars, graduate students, undergraduate students, and academic program attendees.

1.1.2.2 Location of Buildings, Structures, and Building Groups

Stanford proposes to rebuild, renovate, and revitalize the Belmont Campus over the course of a 30-year period. During this time, Stanford could elect to occupy and upgrade existing structures for academic and academic support uses on the Belmont Campus prior to implementing the adopted CDP. In this event, Stanford may need to maintain operations located in existing buildings and efficiently transfer then-existing uses, equipment, and occupants from existing buildings to new or expanded buildings.

The precise locations of individual new buildings are not known at this time and would be shown on subsequent Detailed Development Plans submitted to the City for review and approval consistent with the intent of this CDP. The general development areas for proposed new buildings, structures and building groups would be as shown on Figure 3. Density would be concentrated on the existing, developed plateau. Development within the remaining building areas would be more limited and at lower densities.

Currently, the NDNU campus is built out with approximately 318,000 square feet of buildings and was approved in 2000 for over 442,000 square feet, along with a commensurate increase in parking. Stanford proposes increasing the campus square footage to a total of 700,000 square feet, with adequate parking to be provided with each phase of development.

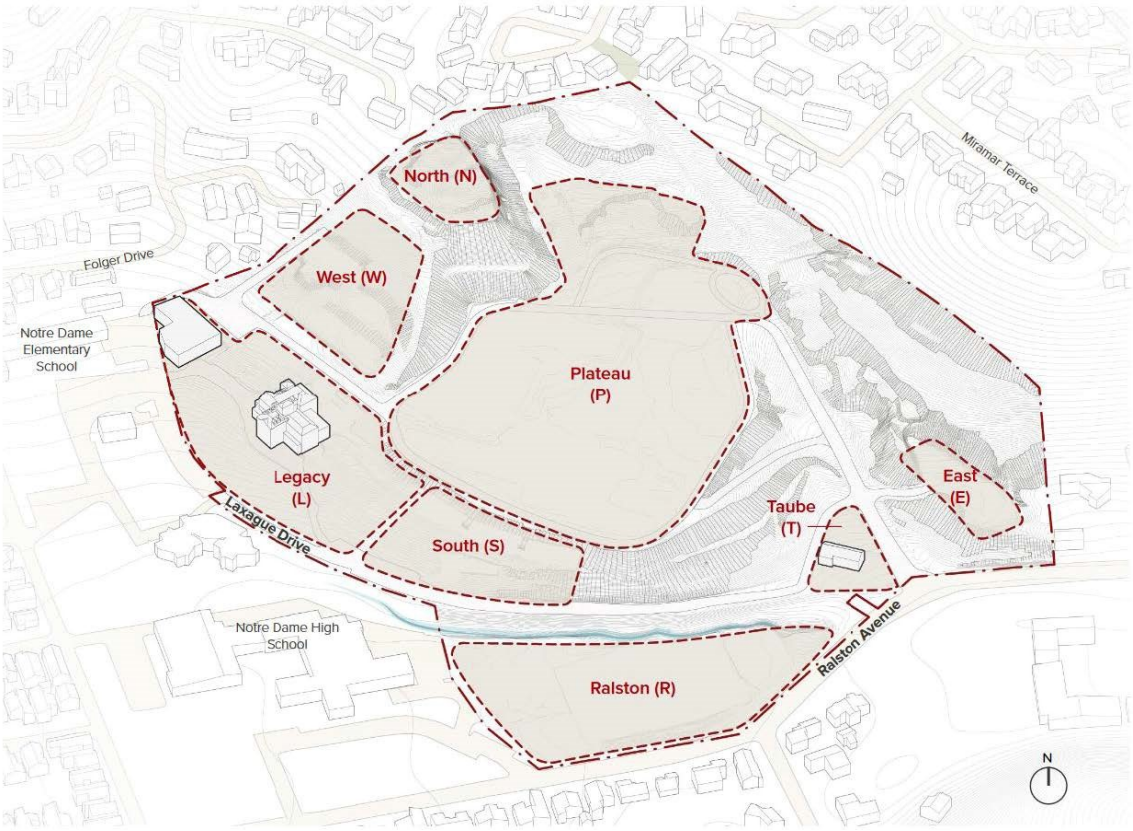


Figure 3. Proposed Development Areas

The designated development areas reflect the existing conditions of the site and identify where development would occur. The overall approach is to redevelop the campus in areas where there has already been existing development. Over time, existing structures would be enhanced or removed, and new replacement structures added, leaving the current natural areas of the site untouched. The "light touch" approach retains the beauty of the site's natural features and topography as amenity, contributing to quality of the Stanford Belmont Campus. Any new building sites that would be on slopes would feature smaller, stepped building footprints.

The new campus design would reflect the village-like character of Belmont while incorporating design features similar to those found on the Stanford campuses, complementing the organic nature of the existing site. Buildings would be nestled into the natural topography and frame the mature existing landscape. Outdoor spaces on the Belmont Campus would promote a diverse variety of programs, activities, and energy levels, ranging from large active communal spaces to secluded lush gardens that help people to decompress, relax, and rejuvenate.

Stanford proposes that housing could be located at any of the building areas shown on Figure 3. Accordingly, such housing is included in the floor areas and height limits described in this CDP. On a site-wide basis, Stanford proposes to construct from 50 to 200 units of housing. Spread across the approximately 45.65-acre site, this would equate to a residential density of 1.1 to 4.4 units per acre. Stanford anticipates that all of the

housing would be dormitory or apartment-style housing, such that housing would be clustered in one or more relatively dense configurations rather than spread at a low density across the project site. Housing may be located in more than one area of the project site. For the residential development anticipated on the Belmont Campus, Stanford proposes a variety and range of potential housing solutions that could work for the coming decades. The housing units envisioned for the campus would be for students, faculty, and/or other program attendees to support the proposed academic use(s).

Additional details on the proposed development can be found in the CDP.

1.1.2.3 Landscape

The landscape framework is depicted in Figure 4. The use of plant material can provide an opportunity to demonstrate Stanford's commitment to sustainability, establish campus continuity, and create meaningful outdoor experiences. Well-designed landscape elements help tell the story of the campus environs including the oak woodland, the interior campus Greenway, and the legacy landscape surrounding the three legacy buildings that will be maintained. The landscape framework, as shown in the approximate locations depicted in Figure 4, would establish typologies that are appropriate to their locations, are resilient, require little supplemental water, and establish a rich palette of plants that provide year-round interest. These materials could also be used in teaching and provide examples of sustainable methods of care.

The campus woodland area would continue to wrap around the perimeter of the site along the steep slopes. This area could provide an opportunity to preserve and manage existing trees, restoring native trees over time. The campus interior typology would restore the center of the plateau as an informal open space with a variety of outdoor spaces that support the adjacent building program. Buildings within this area would provide a handsome backdrop to the natural landscape. Landscape areas within or around plazas, courtyards, walkways, and other parts of the campus public realm would provide visual or textural interest, comfort, or shade. The campus interior landscape would include usable open spaces, like lawns, as well as ornamental plants that highlight building buildings edges, but it would mostly be comprised of native or climate/adaptive plants that require less ongoing maintenance. These native plants would also provide slope stabilization and stormwater infiltration, restoring the edges and transitions between the campus interior landscape on the plateau and the woodland surrounding it. This campus interior landscape would provide an experience of nature while preserving safety by allowing users to see into and through the landscape.

The riparian area is characterized by the existing drainage feed by regional runoff. This area should be maintained as a stormwater drainage feature and any improvements or development within the riparian zone would need to be designed and permitted accordingly. The landscaping in the legacy landscape area is directly related to the legacy structures within the Legacy development area. The plantings in this this area should be rehabilitated or restored in connection with the preservation of the structures in this development area.

The project would comply with Belmont's existing tree ordinance. A complete tree survey has been performed by Bartlett/HortScience. In the undeveloped portions of the site, Stanford expects less than 10 percent of

existing trees would be removed. In each of the development areas, efforts would be made to preserve trees, to the extent feasible, to maintain the established campus feel.



Figure 4. Landscape Framework

1.1.2.4 Sustainable Stormwater Management

The project site lies on an existing hillside, and as such, is subject to stormwater runoff during the winter months. The existing watershed would be preserved and enhanced to direct the majority of stormwater down to and through the central greenway. The central greenway will serve as a site organizing feature to collect, channel, and remediate storm runoff. Runoff will also be allowed to infiltrate into the soil to provide soil moisture for plants and allow for the pretreatment of urban containments from the runoff before it flows under Ralston Avenue to Belmont Creek. This would have many community and ecological benefits, such as providing cleaner air and water as well as flood mitigation, diverse habitat, and beautiful natural spaces. Figure 5 depicts the conceptual approach to sustainable stormwater management.

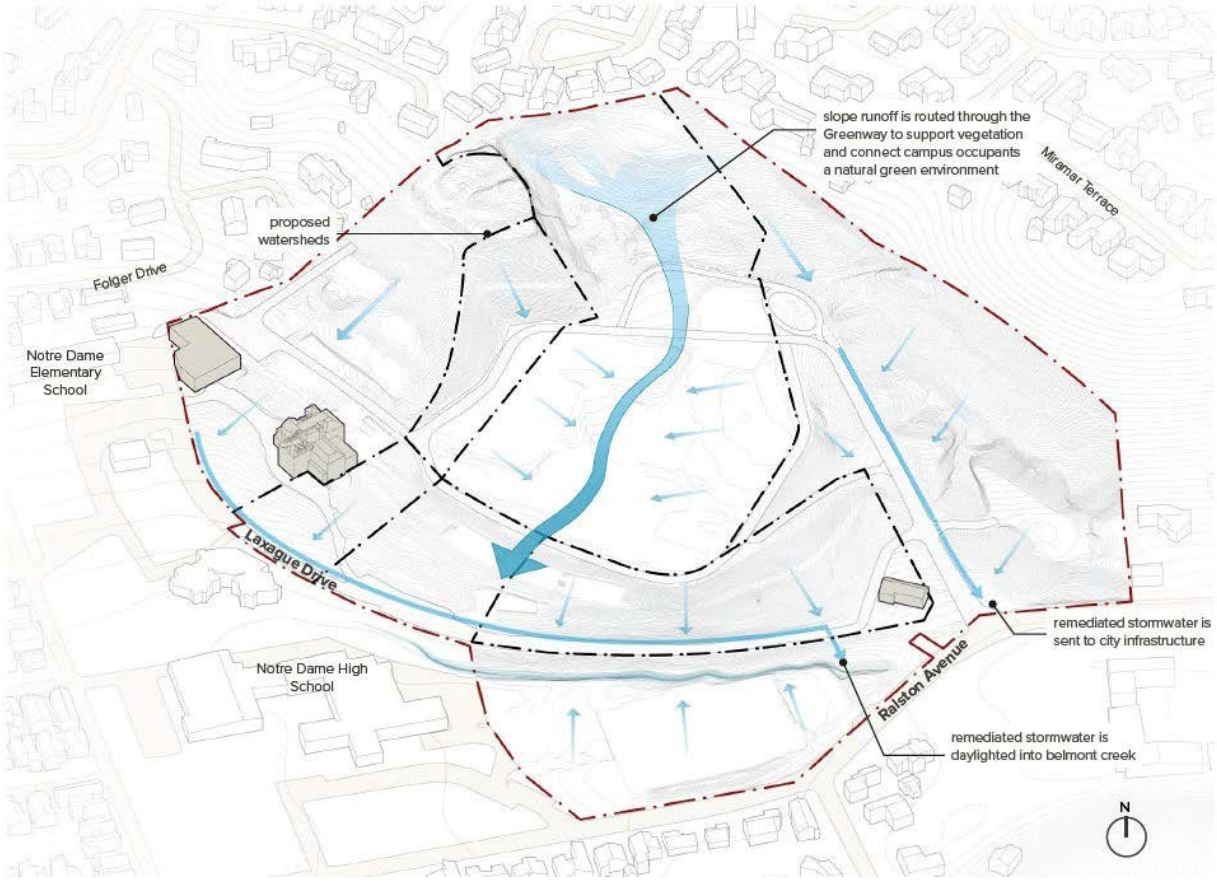


Figure 5. Sustainable Stormwater Management.

1.1.2.5 Sustainability

The project includes several sustainability features. Key features include the following:

- A robust Transportation Demand Management (TDM) program would be implemented to minimize trips in single-occupant vehicles in favor of alternative transportation modes, including public transit, walking, biking, teleworking, carpooling, and vanpooling. The TDM program would incorporate measures designed to achieve the reduction in single-occupant vehicle trip generation rates required by Section 8A.7 of the Belmont Zoning Ordinance.
- All new residential buildings would achieve net zero energy usage. No later than 2030, all new non-residential buildings would achieve net zero energy usage.
- Electric vehicle charging stations would be provided at parking stalls in proportions consistent, at minimum, with then-current code requirements.
- Residential buildings would be entirely electric and would use no natural gas.
- Water-efficient interior plumbing fixtures, appliances, and equipment would be installed in all new buildings.
- Green infrastructure techniques would be used on site to treat stormwater runoff from the project site.

- A minimum of 65% of non-hazardous construction and demolition waste would be recycled and/or salvaged for reuse.
- 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing would be reused or recycled.
- Readily accessible areas that serve the entire campus for deposit, storage and collection of nonhazardous materials, including at a minimum paper, corrugated cardboard, glass, plastics, organic waste, and metals, for recycling would be provided.

In addition to compliance with regulatory standards, the project would include, at a minimum, the following key sustainability features that are not required by regulations or ordinances:

- All electricity used on the Belmont Campus would be generated from renewable sources, either through purchase from the City of Belmont's green energy provider or through other means.
- To the extent feasible, all diesel-powered equipment used for project construction would satisfy Tier 4 standards.

1.1.2.6 Implementation

The Stanford Belmont CDP is intended to be flexible enough to allow for changing and future evolving academic programs of the campus, but definitive enough to ensure that Stanford's vision for the CDP can be achieved.

Development of the campus will likely occur in a series of phases over a 30-year period. Since medium and long-term development is difficult to anticipate, the phasing of campus buildings and parking will depend largely upon the program needs at each stage. Stanford University and the City of Belmont will work together to accommodate a sequence of development that ensures the efficient functioning of campus buildings and facilities consistent with the policies of this CDP.

Section 2. Methods

2.1 Background Review

Prior to conducting a site visit, H. T. Harvey and Associates ecologists reviewed background information on the sensitive biological resources potentially present in and immediately adjacent to the study area (Figure 1). The information reviewed included records from the California Natural Diversity Database (CNDDB 2023) and the California Native Plant Society (CNPS's) Online Rare Plant Inventory (2023), focused on the *San Mateo, California* U.S. Geological Survey (USGS) 7.5-minute quadrangle (where the study area occurs) and nine surrounding quadrangles: *San Francisco South*, *Hunter's Point, Montara Mountain, San Leandro, Redwood Point, Palo Alto, Half Moon Bay, and Woodside*. Our searches focused on the distribution and habitats of vascular plants designated as California Rare Plant Rank (CRPR) 1A, 1B, 2A, 2B, 3, and 4 that occur in any of the USGS quadrangles listed above.

We reviewed CNDDB records for special-status animals and natural communities of concern in the vicinity of the study area, defined in this report as the area within a 2-mile (mi) radius of the study area. Additionally, the Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify soils that underlay the study area (NRCS 2022), and the USFWS's National Wetland Inventory (NWI) Wetlands Mapper was consulted to review pre-existing mapping of aquatic features, including wetlands, streams, and sloughs, that may be present in the study area (NWI 2023). Historical aerial imagery of the study area obtained from Google Earth Pro (Google, Inc. 2023) was also evaluated. Other information reviewed included various technical publications available through the USFWS, California Department of Fish and Wildlife (CDFW), and other sources.

We also reviewed the Belmont 2035 General Plan draft and final EIR (City of Belmont 2017). The study area is part of the Belmont 2035 General Plan, and development on the site is therefore subject to requirements of the General Plan and its EIR, as appropriate.

Although these materials were initially reviewed prior to our 2022 site visits, these materials were re-evaluated in August 2023 to determine whether any substantive changes had occurred over the prior year, to inform the impact assessment.

2.2 Site Visits

H. T. Harvey & Associates wildlife ecologist Emily Malkauskas, B.S., plant ecologist Jillian Pastick, M.S., and associate wildlife ecologist/bat specialist Dave Johnston, Ph.D. surveyed the study area on February 11, 2022. The purpose of this survey was to (1) assess existing biotic habitats and plant and animal communities in the study area, (2) conduct a focused assessment of the potential for existing buildings and trees on the site to support bat roosts, (3) assess the site for its potential to support special-status species and their habitats, and

(4) identify potential jurisdictional habitats (such as Waters of the U.S./State), although a formal wetland delineation was not conducted at that time.

H. T. Harvey ecologists walked transects throughout the study area, examining habitats and observing plant and animal species present. They mapped biotic habitats within the study area using a combination of field observations (recorded via the Apple iPad GIS Kit Pro application) and aerial imagery signatures. Habitat types were distinguished using natural community descriptions discussed in Holland (1986), Sawyer et al. (2009), and CDFW's Vegetation Classification and Mapping (CDFW 2023). Plant species within each habitat were identified using Baldwin et al. (2012). Habitat acreages were calculated using geographic information systems (GIS) and aerial imagery interpretation.

Dr. Johnston assessed the potential for bats to be roosting on the site by examining the exteriors of existing structures and looking for points of ingress/egress, bat guano, and urine staining. He assessed the potential for bats to roost in trees on the site by examining trees and looking for high-quality roost sites such as cavities and deep fissures or flaking bark.

In addition, senior wildlife ecologist Steve Rottenborn, Ph.D., visited the study area on February 27, 2022 to assess habitat conditions.

Section 3. Regulatory Setting

Biological resources on the project site are regulated by a number of federal, state, and local laws and ordinances, as described below.

3.1 Federal Regulations

3.1.1 Clean Water Act

The Clean Water Act (CWA) functions to maintain and restore the physical, chemical, and biological integrity of waters of the U.S., which include, but are not limited to, tributaries to traditionally navigable waters currently or historically used for interstate or foreign commerce, and adjacent wetlands. Historically, in non-tidal waters, U.S. Army Corps of Engineers (USACE) jurisdiction extends to the ordinary high water (OHW) mark, which is defined in Title 33, Code of Federal Regulations, Part 328.3. If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark to the outer edges of the wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may be subject to USACE jurisdiction. In tidal waters, USACE jurisdiction extends to the landward extent of vegetation associated with salt or brackish water or the high tide line. The high tide line is defined in 33 Code of Federal Regulations Part 328.3 as "the line of intersection of the land with the water's surface at the maximum height reached by a rising tide." If there are wetlands adjacent to channelized features, the limits of USACE jurisdiction extend beyond the OHW mark or high tide line to the outer edges of the wetlands.

Construction activities within jurisdictional waters are regulated by the USACE. The placement of fill into such waters must comply with permit requirements of the USACE. No USACE permit will be effective in the absence of Section 401 Water Quality Certification. The State Water Resources Control Board (SWRCB) is the state agency (together with the Regional Water Quality Control Boards [RWQCBs]) charged with implementing water quality certification in California.

Project Applicability: The unnamed intermittent tributary to Belmont Creek is expected to be regulated by the USACE as waters of the U.S.; the limits of USACE jurisdiction extend from the low-flow channel upward on each bank to the OHW mark. In addition, two seasonal wetlands, freshwater marsh habitat in the northern portion of the site, and a willow seepage wetland may be regulated by the USACE. However, whether or not the USACE would consider these wetlands to be waters of the U.S. under the Clean Water Act is currently unclear due to the May 25, 2023 U.S. Supreme Court decision in *Sackett v. Environmental Protection Agency*. That decision limited the definition of waters of the U.S. by including only wetlands that have a continuous surface connection with traditional navigable waters. The seasonal wetlands, freshwater marsh, and willow seepage wetland on the project site do not have a direct connection to navigable waters and therefore may not be considered waters of the U.S. However, the USACE has not yet issued guidance interpreting how the *Sackett*

decision will be applied to determinations regarding whether wetlands such as those on the project site will be regulated as waters of the U.S. For the purposes of this evaluation, the seasonal wetlands, freshwater marsh, and willow seepage wetland are considered to be waters of the U.S., but once the USACE issues such guidance, Stanford can have a wetland delineation performed and verified by the USACE to determine the limits of waters of the U.S. on the project site. If any waters of the U.S. will be impacted by the project, a 404 permit from the USACE will be needed.

3.1.2 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the creation of any obstruction to the navigable capacity of waters of the U.S., including discharge of fill and the building of any wharfs, piers, jetties, and other structures without Congressional approval or authorization by the Chief of Engineers and Secretary of the Army (33 U.S.C. 403).

Navigable waters of the U.S., which are defined in 33 CFR, Part 329.4, include all waters subject to the ebb and flow of the tide, and/or those which are presently or have historically been used to transport commerce. The shoreward jurisdictional limit of tidal waters is further defined in 33 CFR, Part 329.12 as "the line on the shore reached by the plane of the mean (average) high water." It is important to understand that the USACE does not regulate wetlands under Section 10, only the aquatic or open waters component of bay habitat, and that there is overlap between Section 10 jurisdiction and Section 404 jurisdiction. According to 33 CFR, Part 329.9, a waterbody that was once navigable in its natural or improved state retains its character as "navigable in law" even though it is not presently used for commerce as a result of changed conditions and/or the presence of obstructions. Historical Section 10 waters may occur behind levees in areas that are not currently exposed to tidal or muted-tidal influence and meet the following criteria: (1) the area is presently at or below the mean high water line; (2) the area was historically at or below mean high water in its "unobstructed, natural state"; and (3) there is no evidence that the area was ever above mean high water.

As mentioned above, Section 404 of the CWA authorizes the USACE to issue permits to regulate the discharge of dredged or fill material into waters of the U.S. If a project also proposes to discharge dredged or fill material and/or introduce other potential obstructions in navigable waters of the U.S., a Letter of Permission authorizing these impacts must be obtained from the USACE under Section 10 of the Rivers and Harbors Act.

Project Applicability: No Section 10 navigable waters are present on the project site, and thus, no Letter of Permission from the USACE will be necessary.

3.1.3 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects federally listed wildlife species from harm or *take*, which is broadly defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or

accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under the FESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed, threatened, and endangered species under FESA. The USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under FESA but may become listed in the near future and are often included in their review of a project.

Project Applicability: No federally listed or proposed plant species are known or expected to occur on the project site. The only federally listed or proposed animal with reasonable potential to occur on the project site is the California red-legged frog (*Rana draytonii*), federally listed as threatened. This species is unlikely to breed on the site, but its potential occurrence as a nonbreeding dispersant cannot be ruled out. The monarch butterfly (*Danaus plexippus*) is a candidate for federal listing that occurs on the site as a migrant and could potentially breed on the site. If take of the California red-legged frog, and/or the monarch butterfly (if it is listed in the future), could occur as a result of the project, incidental take approval from USFWS would be necessary.

3.1.4 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act governs all fishery management activities that occur in federal waters within the United States' 200-nautical-mile limit. The Act establishes eight Regional Fishery Management Councils responsible for the preparation of fishery management plans (FMPs) to achieve the optimum yield from U.S. fisheries in their regions. These councils, with assistance from NMFS, establish Essential Fish Habitat (EFH) in FMPs for all managed species. Federal agencies that fund, permit, or implement activities that may adversely affect EFH are required to consult with NMFS regarding potential adverse effects of their actions on EFH, and respond in writing to recommendations by NMFS.

Project Applicability: No fish or EFH regulated under Magnuson-Stevens is present on the project site or would be impacted by the project.

3.1.5 Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. Section 703, prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it prohibits the possession of all nests of protected bird species whether they are active or inactive. An *active* nest is defined as having eggs or young, as described by the USFWS in its June 14, 2018 memorandum "Destruction and Relocation of Migratory Bird Nest Contents". Nest starts (nests that are under construction and do not yet contain eggs) and inactive nests are not protected from destruction.

Project Applicability: With the exception of California quail (*Callipepla californica*), which is in a family excluded from coverage under the MBTA, all native bird species that occur on the project site are protected under the MBTA.

3.2 State Regulations

3.2.1 Porter-Cologne Water Quality Control Act

The SWRCB works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region, and may approve, with or without conditions, or deny projects that could affect waters of the state. Their authority comes from the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the U.S. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the state include headwaters, wetlands, and riparian areas. Moreover, the San Francisco Bay Region RWQCB's Assistant Executive Director has stated that, in practice, the RWQCBs claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters, jurisdiction is taken to the top of bank.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. In these new guidelines, as revised April 6, 2021, riparian habitats are not specifically described as waters of the state but instead as important buffer habitats to streams that do conform to the State Wetland Definition. The *Procedures* describe riparian habitat buffers as important resources that may both be included in required mitigation packages for permits for impacts to waters of the state, as well as areas requiring permit authorization from the RWQCBs to impact.

Pursuant to the CWA, projects that are regulated by the USACE must also obtain a Section 401 Water Quality Certification permit from the RWQCB. This certification ensures that a proposed project will uphold state water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the state require Water Quality Certification even if the area occurs outside of USACE jurisdiction. Moreover, the RWQCB may impose mitigation requirements even if the USACE does not. Under the Porter-Cologne, the SWRCB and the nine regional boards also have the responsibility of granting CWA National Pollutant Discharge Elimination System (NPDES) permits and Waste Discharge Requirements for certain point-source and non-point discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources.

Project Applicability: The unnamed tributary to Belmont Creek mentioned in Section 3.1.1 above would be regulated by the RWQCB as waters of the state. The RWQCB's jurisdiction over this stream would extend higher up the stream's banks than the USACE's jurisdiction, extending to the top of bank on each side of the stream. Although no true riparian woodland or forest (e.g., groundwater-dependent vegetation) is associated

with this stream, the RWQCB may also claim jurisdiction out to the driplines of trees that are rooted within the banks of the stream. In addition, the two seasonal wetlands, freshwater marsh habitat, and willow seepage wetland mentioned in Section 3.1.1 are likely to be regulated by the RWQCB as waters of the state, even if the USACE does not regulate them under Section 404. If any waters of the state are impacted by the project, 401 certification (if the impacted features are also regulated by the USACE) or Waste Discharge Requirements (if the impacted features are regulated only by the RWQCB and not USACE) would be necessary.

3.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code, Chapter 1.5, Sections 2050-2116) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with CESA, the CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in *take* of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of *take* under the California Fish and Game Code. The CDFW, however, has interpreted *take* to include the "killing of a member of a species which is the proximate result of habitat modification."

Project Applicability: No plant or animal species listed under CESA are known or expected to occur on the project site.

3.2.3 California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and to refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects. CEQA requires the full disclosure of the environmental effects of agency actions, such as approval of a general plan update or the projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. The State Resources Agency promulgated guidelines for implementing CEQA known as the State CEQA Guidelines.

Section 15380(b) of the State CEQA Guidelines provides that a species not listed on the federal or state lists of protected species may be considered rare if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the FESA and the CESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW or species that are locally or regionally rare.

The CDFW has produced three lists (amphibians and reptiles, birds, and mammals) of "species of special concern" that serve as "watch lists". Species on these lists are of limited distribution or the extent of their

habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review as potential rare species, but do not have specific statutory protection. All potentially rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review per the CEQA Section 15380(b). The CNPS, a non-governmental conservation organization, has developed CRPRs for plant species of concern in California in the CNPS Inventory of Rare and Endangered Plants. The CRPRs include lichens, vascular, and non-vascular plants, and are defined as follows:

- CRPR 1A Plants considered extinct.
- CRPR 1B Plants rare, threatened, or endangered in California and elsewhere.
- CRPR 2A Plants considered extinct in California but more common elsewhere.
- CRPR 2B Plants rare, threatened, or endangered in California but more common elsewhere.
- CRPR 3 Plants about which more information is needed - review list.
- CRPR 4 Plants of limited distribution-watch list.

The CRPRs are further described by the following threat code extensions:

- .1—seriously endangered in California;
- .2—fairly endangered in California;
- .3—not very endangered in California.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing as CRPR 1B or 2 are, in general, considered to meet CEQA's Section 15380 criteria, and adverse effects to these species may be considered significant. Impacts on plants that are included by the CNPS on CRPR 3 also can be considered during CEQA review, but only if the plant species also is separately listed by either the USFWS or CDFW. Plants appearing as CRPR 4 are not considered during CEQA review.

Compliance with CEQA Guidelines Section 15065(a) requires consideration of natural communities of special concern, in addition to plant and wildlife species. Vegetation types of "special concern" are tracked in Rarefind (CNDDB 2022). Further, the CDFW ranks sensitive vegetation alliances based on their global (G) and state (S) rankings analogous to those provided in the CNDDB. Global rankings (G1–G5) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas S rankings are a reflection of the condition of a habitat within California. If an alliance is marked as a G1–G3, all of the associations within it would also be of high priority. The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP's) currently accepted list of vegetation alliances and associations (CDFW 2022).

Project Applicability: All potential impacts on biological resources will be considered during CEQA review of the project in the context of this biological resources report. Project impacts are discussed in Section 6 below.

3.2.4 California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. Canals, aqueducts, irrigation ditches, and other means of water conveyance may also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. A *stream* is defined in Title 14, California Code of Regulations Section 1.72, as "a body of water that follows at least periodically or intermittently through a bed or channel having banks and that supports fish and other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Using this definition, CDFW extends its jurisdiction to encompass riparian habitats that function as a part of a watercourse. California Fish and Game Code Section 2786 defines *riparian habitat* as "lands which contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source." The lateral extent of a stream and associated riparian habitat that would fall under the jurisdiction of CDFW can be measured in several ways, depending on the particular situation and the type of fish or wildlife at risk. At minimum, CDFW would claim jurisdiction over a stream's bed and bank. Where riparian habitat is present, the outer edge of riparian vegetation is generally used as the line of demarcation between riparian and upland habitats.

Pursuant to California Fish and Game Code Section 1603, CDFW regulates any project proposed by any person that will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds." California Fish and Game Code Section 1602 requires an entity to notify CDFW of any proposed activity that may modify a river, stream, or lake. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The LSAA sets reasonable conditions necessary to protect fish and wildlife and must comply with CEQA. The applicant may then proceed with the activity in accordance with the final LSAA.

Certain sections of the California Fish and Game Code describe regulations pertaining to protection of certain wildlife species. For example, Code Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian except as provided by other sections of the code.

The California Fish and Game Code Sections 3503, 3513, and 3800 (and other sections and subsections) protect native birds, including their nests and eggs, from all forms of take. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered *take* by the CDFW. Raptors (e.g., eagles, hawks, and owls) and their nests are specifically protected in California under Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered *take* by the CDFW.

Project Applicability: CDFW would regulate impacts to the unnamed intermittent stream on the project site. Although no true riparian woodland or forest (e.g., groundwater-dependent vegetation) is associated with this stream, the CDFW may also claim jurisdiction out to the driplines of trees that are rooted within the banks of the stream. A CDFW LSAA would be necessary if the project were to impact the stream or its riparian habitat.

Most native bird, mammal, and other wildlife species that occur on the project site and in the immediate vicinity are protected under the California Fish and Game Code. Project impacts on these species are discussed in Section 6.

3.2.5 State Water Resources Control Board Stormwater Regulation

Construction Phase. Construction projects in California causing land disturbances that are equal to 1 acre or greater must comply with state requirements to control the discharge of stormwater pollutants under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the project and it must include the use of best management practices (BMPs) to protect water quality until the site is stabilized.

Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors. Additionally, the Construction General Permit does not extend coverage to projects if stormwater discharge-related activities are likely to jeopardize the continued existence of, or result in take of, any federally listed endangered or threatened species.

Post-Construction Phase. In many Bay Area counties, including San Mateo County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, impervious surfaces, tree planters, grassy swales, bioretention and/or detention basins, among other factors.

Project Applicability. The project will comply with the requirements of the NPDES Statewide Storm Water Permit and Statewide General Construction Permit. Therefore, construction-phase activities would not result in detrimental water quality effects on biological or regulated resources.

3.3 Local Regulations

3.3.1 City of Belmont Ordinance

The City of Belmont provides tree protection under the Municipal Code (Ordinance No. 2017-1120 and Municipal Code Chapter 25: *Trees*). This ordinance details permit requirements for tree related work, including the removal, pruning, and replacement planting of trees. Removal of protected trees generally is illegal without a permit issued by the City and doing so without a permit may result in City enforcement action. The City ordinance permit requirement applies to the following classes of trees: 1) coast live oak, valley oak (*Quercus lobata*), coast redwood, madrone (*Arbutus menziesii*), bay laurel (*Umbellularia californica*), and buckeye (*Aesculus californica*) having a single main stem or trunk of ten inches or more dbh, where dbh is the diameter of a tree at breast height, measured across the widest face of the trunk at four and one-half (4.5) feet above the natural grade, or having up to three of the largest secondary stems totaling ten inches or more dbh, 2) all other species with a main stem or trunk of 14 inches or more dbh; 3) multi-stemmed trees with up to three of the largest secondary stems totaling eighteen inches or more dbh; 4) any trees located on City property, in a designated open space, or in a public street right-of-way; and 5) any trees that have been planted as required mitigation for the previous removal of another tree.

Project Applicability: A tree survey was performed on the site by Bartlett/HortScience, identifying a number of ordinance-sized trees on the project site. The project would comply with Belmont's tree ordinance.

Section 4. Environmental Setting

4.1 General Project Area Description

The project site is located in Belmont in San Mateo County, California (Figure 1). The study area is topographically varied, with steep slopes in the north and northeast parts of the study area surrounding the developed portions of the campus. Elevations range from approximately 81 to 290 feet (ft) (WGS84) (Google, Inc. 2023). The central portion of the site where most of the buildings are concentrated is generally level. Five soil units were mapped within the study area: Fagan loam, 15 to 50 percent slopes, Orthents, cut and fill, 0 to 15 percent slopes, Orthents, cut and fill-Urban land complex, 5 to 75 percent slopes, Urban land, and Urban land-Orthents, cut and fill complex, 5 to 75 percent slopes. The Urban land soils are typical of developed sites and include fill material.

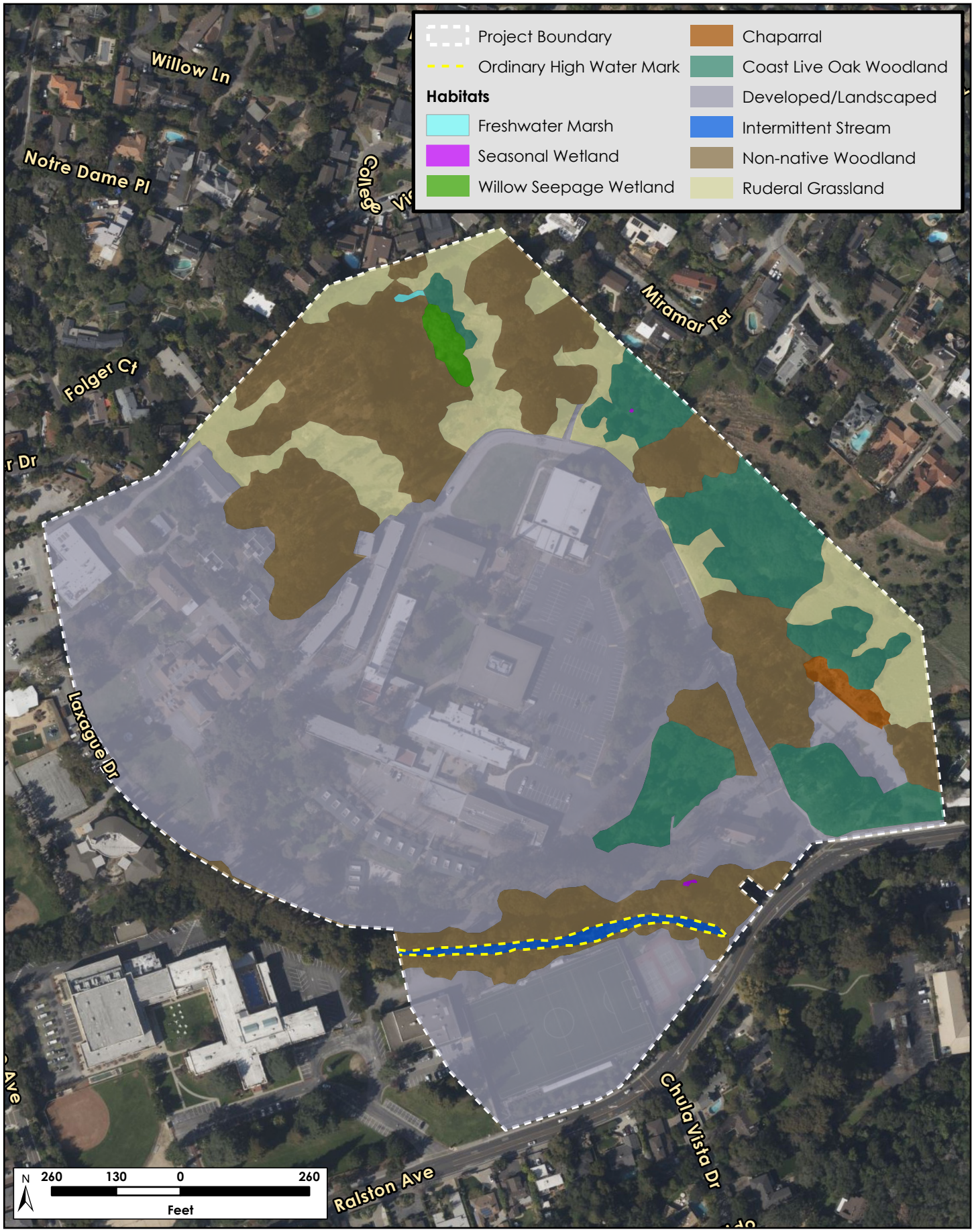
4.2 Habitats

The following land cover/habitat types were mapped within the study area and are described below: developed/landscaped (28.53 acres), non-native woodland (8.97 acres), chaparral (0.20 acre), ruderal grassland (3.44 acres), coast live oak (4.02 acres), willow seepage wetland (0.20 acre), freshwater marsh (0.02 acre), seasonal wetland (0.004 acre), and intermittent stream (0.28 acre) (Figure 6).

4.2.1 Developed/Landscaped

Vegetation. Developed areas are the dominant land cover type in the study area. This land cover type includes all buildings, paved walkways and parking areas, and sports fields associated with the former land uses by NDNU. The developed/landscaped land cover also includes areas that have been planted with landscaping and that have been maintained on an ongoing basis. Landscaping on the site consists of ornamental trees, shrubs, and groundcovers bordering the parking lots and sidewalks on the campus. Common tree and shrub species observed as landscaping include native trees such as coast redwood (*Sequoia sempervirens*), as well as non-native species such as Chinese juniper (*Juniperus chinensis*), Mexican fan palm (*Washingtonia robusta*), red maple (*Acer rubrum*), Peruvian pepper tree (*Schinus molle*), deodar cedar (*Cedrus deodara*), Monterey cypress (*Hesperocyparis macrocarpa*), celtis (*Celtis* sp.), and oleander (*Nerium oleander*). The understory of these landscaped areas includes ornamental grass and herb species such as Mexican sage (*Salvia mexicanus*), New Zealand flax (*Phormium tenax*), Mexican bush sage (*Salvia leucantha*), and Iris sp. (*Iris* sp.).

Wildlife. Developed/landscaped areas of the project site serve as wildlife habitat in a relatively limited capacity, and most wildlife species that occur in these areas are tolerant of frequent human disturbances. Species that use these areas include the nonnative European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), house mouse (*Mus musculus*), and Norway rat (*Rattus norvegicus*), as well as the native raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*). Western fence lizards (*Sceloporus occidentalis*) commonly occur in developed areas, and may bask on road or parking lot surfaces in order to raise their body temperature. Bird species including the



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Figure 6. Habitats Map
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American crow (*Corvus brachyrhynchos*), California scrub-jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), bushtit (*Psaltriparus minimus*), and dark-eyed junco (*Junco hyemalis*) will nest and forage in landscape vegetation in these areas.

H. T. Harvey's focused assessment of the potential for bats to roost in the study area determined that marginally suitable roosting habitat for crevice-roosting bats, such as the pallid bat (*Antrozous pallidus*), California myotis (*Myotis californicus*), Yuma myotis (*Myotis yumanensis*), and Mexican free-tailed bat (*Tadarida brasiliensis*), is present in several of the buildings and trees within the study area. Many of the buildings on-site contain crevices and cavities that could support individual bats, or possibly maternity roosts, of these species. More detailed information on the potential for each of the buildings in the study area to support roosting bats is described below.

- Ralston Hall provides many crevices and cavities throughout the external portion of the building, and it is possible that individual roosts (i.e., roosts used by single bats) or maternity roosts could occur within the internal features of this building. Further, suitable winter roosting habitat for the Townsend's big-eared bat (*Corynorhinus townsendii*) is present within a covered passageway entering this building, though no evidence of roosting bats was detected at this location during the February 2022 survey.

- The Wiegand Gallery and Madison Art Center building contains three stories of exterior rock wall features with crevices suitable for individual roosting bats, though no areas suitable for maternity roosts or large nonbreeding roosts were detected during our examination of the building's exterior.

- The Tabard Center, Dining Hall and Campus Center contain holes and/or crevices in the eaves that could support small numbers of crevice-roosting bats, especially California myotis and big brown bats (*Eptesicus fuscus*).

- Gavin Hall, Toso Residency, New Hall, the Chapel, and a rock cave feature present along Laxague Drive contain night roosting habitat, though no evidence of bats roosting was detected during the February 2022 survey, and no areas suitable for day roosts were detected.

- New Hall, St. Mary's Hall, Julie Billiart Hall, St. Joseph's Hall, and the Chapel contain flashing along roof edges and at the tops of some floors for crevice-roosting bats, such as small numbers of Mexican free-tailed bats and possibly California myotis and big brown bats. No staining or guano pellets were observed below the flashing or on outside walls suggesting bats in larger numbers were not occupying these spaces.

- The Carroll, Kane, Wilkie, and Oaks dorm buildings contain warped shingles that provide potential day-roosting habitat for crevice roosting bats, especially California myotis. Some areas of these outside eastern-facing walls could potentially support a maternity colony.

- The Taube Center contains a tile roof that provides crevices for maternity colonies, especially for those of Mexican free-tailed bats.

- In addition to the flashing habitat described above, St. Joseph's Hall contains cracks in the ceiling of an outside entryway that provides potential day-roosting habitat for small numbers of California myotis, big brown bats, and Mexican free-tailed bats.

- The Bookstore, Cuvilly Hall, and Gleason Gym do not contain habitat that could support roosting bats.

4.2.2 Non-native Woodland

Vegetation. The second most widespread land cover type in the study area was non-native woodland. This land cover type was observed in a number of locations in the study area but was most dominant in the northern part of the site. Large patches of non-native woodland were also observed adjacent to and upslope of the entrance to the campus in the southeast portion of the study area. Additionally, a dense stand of non-native woodland occurs along the unnamed tributary to Belmont Creek. These areas were differentiated from the landscaping in the developed/landscaping land cover type by their more natural and less disturbed structure and appearance, in both the overstory and understory. The understory of non-native woodland is not mowed or planted, and it does not appear that these areas of non-native woodland receive irrigation as was observed in the landscaped parts of the study area.

The species composition of the non-native woodland within the northern and northeastern portion of the study area is dominated by blue gum (*Eucalyptus glabra*) in the overstory, with an understory of Italian thistle (*Carduus pycnocephalus*), milk thistle (*Silybum marianum*), cleavers (*Galium aparine*), chickweed (*Stellaria madia*), ripgut brome (*Bromus diandrus*), and French broom (*Genista monspessulana*).

The non-native woodland in the southern portion of the study area along the unnamed tributary to Belmont Creek contains a higher diversity of non-native tree species. Non-native blue gum, Mexican fan palm, Canary Island date palm (*Phoenix canariensis*), and silver wattle (*Acacia dealbata*), as well as native coast live oak (*Quercus agrifolia*), line the stream. The understory is dominated by English ivy, Himalayan blackberry (*Rubus armeniacus*), crane's bill geranium (*Geranium molle*), Bermuda buttercup (*Oxalis pes-caprae*), and ruderal grass species.

Wildlife. Although the non-native woodland is dominated by non-native plant species, a number of wildlife species are expected to utilize the non-native woodland habitat on the site for breeding and foraging. These include the resident California towhee, mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco, Anna's hummingbird, northern mockingbird (*Mimus polyglottos*), and American crow. Birds that are typically associated with oak habitats, such as the oak titmouse (*Baeolophus inornatus*), will also forage in these non-native woodland patches due to their close proximity to oak woodland areas on and near the site. Raptors such as the Cooper's hawk (*Accipiter cooperii*) may forage for prey in non-native woodlands on the site in small

numbers. It is possible that up to one pair of Cooper's hawks, red-tailed hawks (*Buteo jamaicensis*), or red-shouldered hawks (*Buteo lineatus*) could nest in the patches of non-native woodland habitat on the site, but no active or inactive raptor nests were detected during the site visit, suggesting that raptors have not nested on the site in recent years.

Common mammals such as native striped skunks and nonnative Virginia opossums (*Didelphis virginiana*) will forage on fruit and seeds in non-native woodland habitat on the site. The deer mouse (*Peromyscus maniculatus*) and California mouse (*Peromyscus californicus*) also forage in this habitat, and reptiles found in adjacent grassland habitat, such as the western fence lizard and gopher snake (*Pituophis catenifer*), will forage in non-native woodland habitat. Several black-tailed deer (*Odocoileus hemionus*) were observed in the non-native woodland.

H. T. Harvey's assessment of the potential for bats to roost in the study area determined that potential roosting habitat for crevice-roosting bats, as well as for foliage-roosting bats such as the western red bat (*Lasiurus blossevillii*) and hoary bat (*Lasiurus cinereus*), may occur in the eucalyptus, palm, maple, and oak trees present on-site for individual roosts during winter months, though neither would breed in the study area. For example, several palm and eucalyptus trees contain habitat suitable for individual and maternity roosts of foliage-roosting bats. These trees as well as select maple trees on-site (e.g., those with tag numbers 155, 156, and 157) also contain crevices and exfoliating bark that could support crevice-roosting bats. At least one large coast live oak present on-site also contains a cavity suitable for crevice-roosting bats.

4.2.3 Chaparral

Vegetation. A small patch of chaparral was mapped in the southeast portion of the study area. This habitat was observed on a narrow, rocky slope, just above a parking lot. This patch of chaparral is disturbed and of low quality. Dominant species within the chaparral habitat include coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*) in the shrub layer, as well as wildoats, ripgut brome, and red-stemmed filaree (*Erodium cicutarium*) in the understory. The substrate within this habitat type is extremely rocky. Review of soils in the area confirmed a lack of serpentine conditions (NRCS 2023).

Wildlife. Given the very limited extent of chaparral on the project site, no wildlife species specifically associated with chaparral would occur on the site. Reptiles such as the western fence lizard and gopher snake, as well as small mammals such as the deer mouse and California mouse, would occur in this chaparral. Birds associated with dense cover such as the Bewick's wren (*Thryomanes bewickii*), California towhee, and spotted towhee (*Pipilo maculatus*) may nest in this chaparral, and a variety of migrant and wintering sparrows would use this vegetation for cover.

4.2.4 Ruderal Grassland

Vegetation. Patches of ruderal grassland were mapped in the northern and northeastern parts of the study area, adjacent to the main driveway through the campus. Ruderal grassland was differentiated from lawns observed within developed/landscaped land cover type because they appeared to be less maintained (i.e., they

did not receive regular mowing and irrigation). The patch of ruderal grassland observed upslope of the chaparral land cover type was heavily vegetated with ruderal grass and herb species, including wildoats, ripgut brome, soft brome, bristly ox-tongue, and dandelions. Other patches of ruderal grassland contained less dense vegetation, and some contained rocky outcrops. Dominant species included soft brome and red-stemmed filaree, and scattered California poppy (*Eschscholzia californica*). Some of the more shaded patches of this grassland include annual bluegrass, orchardgrass (*Dactylis glomerata*), and English daisies (*Bellis perennis*).

Wildlife. Wildlife use of grasslands on the project site is limited by the limited extent of the ruderal grassland habitat, the proximity of human disturbance (e.g., from adjacent developments), and the isolation of this habitat from more extensive grasslands in the region. As a result, some of the wildlife species associated with extensive grasslands in the project region, such as the grasshopper sparrow (*Ammodramus savannarum*), are absent from the grasslands on the project site. Nevertheless, a number of resident bird species associated with surrounding developed and woodland areas nest and forage in the ruderal grassland habitat on the site, which includes a number of shrubs and trees. These include the California towhee, mourning dove, lesser goldfinch, dark-eyed junco, Anna's hummingbird, northern mockingbird, and American crow. Several other species of birds use the ruderal grassland habitat on the site during the nonbreeding season. These include the white-crowned sparrow (*Zonotrichia leucophrys*) and golden-crowned sparrow (*Zonotrichia atricapilla*), which forage on the ground or in herbaceous vegetation.

The sparse cover of grassland vegetation on the site, as well as disturbance from regular mowing, limit the availability of food resources for common species of mammals that occur in grassland habitats. Nevertheless, burrows of Botta's pocket gophers (*Thomomys bottae*) are present within this ruderal grassland habitat on the project site. Other rodent species that can potentially occur in this habitat include the California vole (*Microtus californicus*) and deer mouse. Predatory raptors (e.g., hawks, owls, and falcons) likely occur on the site in low densities due to the limited extent of available open foraging habitat in the region; however, small numbers of diurnal raptors such as Cooper's hawks will forage for small mammals on the site during the day, and at night small numbers of nocturnal raptors, such as great-horned owls (*Bubo virginianus*), will forage for nocturnal rodents, such as deer mice.

Several reptile species may occur in the ruderal grassland habitat on the site, including the western fence lizard and gopher snake. Mammals associated with surrounding developed areas such as the native striped skunk, as well as the nonnative Virginia opossum and feral cat (*Felis catus*), are likely to occasionally forage in these grasslands. Common species of bats, such as the Mexican free-tailed bat, may forage aerially over this habitat for insects.

4.2.5 Coast Live Oak Woodland

Vegetation. Patches of coast live oak woodland are present in the eastern and northeastern portions of the study area, intermixed with non-native woodland and ruderal grassland. These patches included dense cover of coast live oak, with an understory dominated primarily by French broom and ruderal grass species. The coast live oak woodland mapped to the southeast of the large parking lot within the center of the campus contains a

paved walkway that switchbacks up a steep slope, connecting the sidewalk near the entrance of the campus to the western end of the large parking area. The overstory of this area was dominated by coast live oak, and the understory consisted primarily of ruderal grass and herb species including ripgut brome, wild oats (*Avena fatua*), soft brome (*Bromus hordeaceus*), Italian thistle, Bermuda buttercup, chickweed, and cleavers.

Wildlife. Woodlands dominated by oaks typically support diverse animal communities in California. Coast live oaks provide cavities, bark crevices, and complex branching growth that create shelter for wildlife species, and these trees produce mast crops that are an important food source for many birds and mammals. However, the patches of coast live oak woodland on the project site are limited in extent, with limited understory vegetation. As a result, this habitat provides fewer structural resources and foraging opportunities for wildlife species compared to more natural and/or more extensive oak woodlands in the region. Nevertheless, birds such as the California scrub-jay, Bewick's wren, chestnut-backed chickadee (*Poecile rufescens*), and oak titmouse may nest and forage in oaks on the project site. Other birds expected to use this habitat are the wintering ruby-crowned kinglet (*Regulus calendula*) and Townsend's warbler (*Setophaga townsendi*). Raptors such as the Cooper's hawk may forage for prey in oak woodlands on the site in small numbers. It is possible that up to one pair of raptors could nest in the patches of oak woodland habitat on the site, but no active or inactive raptor nests were detected during the site visit, suggesting that raptors have not nested on the site in recent years. A Cooper's hawk was observed perched in eucalyptus trees (*Eucalyptus* sp.) immediately adjacent to the southwestern boundary of the site; these and other trees on the project site provide higher-quality nesting habitat for Cooper's hawks and other raptors compared to the oak trees on the site, which occur in smaller patches (as opposed to in a larger woodland area).

Because the oak woodland habitat on the site contains only sparse understory cover and vegetation, amphibian and reptile species that are typically associated with dense leaf cover and coarse woody debris in wooded habitats are not expected to occur here. Reptiles associated with the adjacent grassland habitat, such as the western fence lizard and gopher snake, may forage in these woodland patches. Mammals that forage in grasslands on the site such as the native striped skunk and black-tailed deer and nonnative Virginia opossum and feral cat are expected to forage in this habitat. As mentioned above, at least one large coast live oak present on-site also contains a cavity suitable for crevice-roosting bats.

4.2.6 Willow Seepage Wetland

Vegetation. A small patch of willow seepage wetland was observed in the northern portion of the study area. This wetland was not associated with a waterway; rather, it was associated with a seep on a steep slope. This area contained relatively continuous cover of arroyo willow (*Salix lasiolepis*). Where there are breaks in the cover of willow, other common species associated with seepages, such as Himalayan blackberry and pampas grass (*Cortaderia selloana*) are present. The understory of this scrub vegetation is dominated by a number of non-native and invasive ground cover species including greater periwinkle (*Vinca major*), English ivy (*Hedera helix*), juncus sp. (*Juncus* sp.), and Harding grass (*Phalaris aquatica*).

Wildlife. Due to the very limited extent of the willow seepage wetland on the project site, the lack of pooled water, and its isolation from other wetland habitats, this area does not provide high-quality habitat for wetland-associated wildlife species. Pacific treefrogs (*Pseudacris regilla*) likely use this wetland as a moist refuge during the dry season, though no suitable breeding habitat is present. Otherwise, animals using this willow seepage wetland would be similar to those in the surrounding woodland and grassland habitats.

4.2.7 Seasonal Wetland

Vegetation. Two very small seasonal wetlands were observed within the study area. One near the northeastern boundary of the study area is located at the downslope end of a small swale that appeared to convey stormwater and irrigation runoff away from the adjacent residences. This wetland was small in size, approximately 5 feet by 5 feet in the understory of a coast live oak woodland. Dominant vegetation included common rush (*Juncus effusus*), tall flat sedge (*Cyperus eragrostis*), Italian wild rye (*Festuca perennis*), and curly dock (*Rumex pulcher*). The soil within this shallow depression was saturated, despite the absence of standing water. The second seasonal wetland was observed in a shallow, roadside depression along Laxague Drive. Species composition of vegetation in this seasonal wetland was similar to the seasonal wetland discussed above, being dominated by tall flat sedge, Italian wild rye, and bur clover (*Medicago polymorpha*). Though no standing water was observed at the time of the survey, the soil within this depression was soft and moist.

Wildlife. Due to the very limited extent of the two small seasonal wetlands on the project site, the lack of pooled water, and their isolation from other wetland habitats, these areas do not provide high-quality habitat for wetland-associated wildlife species. Pacific treefrogs likely use these wetlands as moist refugia during the dry season, though no suitable breeding habitat is present. Otherwise, animals using these wetlands would be similar to those in surrounding habitats.

4.2.8 Freshwater Marsh

Vegetation. A small patch of freshwater marsh was mapped in the northern portion of the study area. This freshwater marsh occurs within a small depression on a topographically level portion of a steep slope. This freshwater marsh occurs just upslope of the willow seepage wetland, suggesting that this may be the origin of the seep that supports the willows downslope. Vegetation within the marsh is dominated by hydrophytic species such as cattails (*Typha latifolia*), greater periwinkle, and tall flat sedge. However, the depression also contains upland species such as pampas grass and coyote brush. Approximately 0.5 inch of water was present in the depression at the time of the survey and appeared to trickle downslope. Steep cliffs in the northern portion of the project area, along with this subtle depression located mid-slope, appear to be the result of an old quarry or other anthropogenic activities. However, historical aerials from as far back as 1930 showed what appears to be coast live oak woodland throughout the area (UCSB 2023).

Wildlife. Due to the very limited extent of freshwater marsh on the project site and its isolation from other wetland habitats, this area does not provide high-quality habitat for wetland-associated wildlife species. The pooled water observed in this marsh is too shallow to provide suitable breeding habitat for amphibians, though

Pacific treefrogs likely use this marsh as a moist refuge during the dry season. Otherwise, animals using this marsh would be similar to those in surrounding habitats.

4.2.9 Intermittent Stream

Vegetation. The unnamed tributary to Belmont Creek is an intermittent stream that flows through the study area from the west to the east. The stream originates in the residential development to the west of the study area and exits the study area through a concrete culvert under Ralston Avenue. This culvert extends approximately 800 feet under the memory care center to the southeast before daylighting at Belmont Creek on the south side of Ralston Avenue. The on-site segment of the intermittent stream averaged 3 feet in width, and the bed of the channel was lined with gravel and pebbles. At the time of the survey, the intermittent stream contained approximately 4 inches of flowing water, with occasional pools up to 8 inches deep and one scour hole approximately 24 inches deep. The hydrology of the stream is likely fed by groundwater, stormwater drainage from the surrounding development, and summer inputs from irrigation runoff and other anthropogenic sources. The channel was primarily unvegetated throughout, though small patches of hydrophytic vegetation were present along the channel margins. Although a formal wetland delineation was not carried out as part of this analysis, the extent of the intermittent stream habitat as shown on Figure 4 corresponds with what is expected to be the OHW mark of the unnamed tributary. No true riparian woodland or forest (i.e., groundwater-dependent phreatophytic vegetation) is present.

Wildlife. The intermittent stream provides potential breeding habitat for Pacific treefrogs, and possibly western toads (*Anaxyrus boreas*). However, it lacks deep pools suitable for use as breeding habitat by California red-legged frogs or basking sites by southwestern pond turtles (*Actinemys pallida*). No fish were observed in the channel during site visits. Although it is possible that mallards (*Anas platyrhynchos*) could occasionally forage on aquatic vegetation along the stream, and green herons (*Butorides virescens*) could forage on treefrogs, other aquatic/wetland-associated wildlife species are not expected to use this channel due to its narrow and shallow nature and lack of fish. Wildlife may drink from or bathe in the stream, and trees along the stream would be used by the same species present in the developed/landscaped and non-native woodland habitats.

4.3 Wildlife Movement

Wildlife movement within and in the vicinity of the project site takes many forms, and is different for the various suites of species associated with these lands. Bird and bat species move readily over the landscape in the project vicinity, foraging over and within both natural lands and landscaped areas. Mammals of different species move within their home ranges, but also disperse between patches of habitat. Generally, reptiles and amphibians similarly settle within home ranges, sometimes moving to central breeding areas, upland refugia, or hibernacula in a predictable manner, but also dispersing to new areas. Some species, especially among the birds and bats, are migratory, moving into or through the project vicinity during specific seasons. Aside from bats, there are no other mammal species in the vicinity of the site that are truly migratory. However, the young of many mammal species disperse from their natal home ranges, sometimes moving over relatively long distances in search of new areas in which to establish.

Movement corridors are segments of habitat that provide linkage for wildlife through the mosaic of suitable and unsuitable habitat types found within a landscape while also providing cover. On a broader level, corridors also function as paths along which wide-ranging animals can travel, populations can move in response to environmental changes and natural disasters, and genetic interchange can occur. In California, environmental corridors often consist of riparian areas along streams, rivers, or other natural features.

Because the project site is completely surrounded by extensive urban and suburban development, there are no well-defined or important movement corridors for mammals, amphibians, or reptiles on or through the project site. Some localized wildlife movement occurs along Belmont Creek to the south/southeast of the project site, but no regionally important movement can occur along that creek due to intensive development along both upstream and downstream segments of the creek. Wildlife species may move through the area using cover and refugia as they find them available.

In the context of the surrounding suburban areas of Belmont, the study area stands out as an "oasis" of bird habitat in the urban landscape due to the presence of the intermittent stream and abundance of trees and natural habitat. As a result, the site supports a fairly large number of birds, and during migration, the number of birds may be even higher. Thus, in the context of wildlife movement, the project site provides a potential stopover site for moderate numbers of migrant birds moving along the Pacific Flyway.

Section 5. Special-Status Species and Sensitive Habitats

CEQA requires assessment of the effects of a project on species that are protected by state, federal, or local governments as "threatened, rare, or endangered"; such species are typically described as "special-status species". For the purpose of the environmental review of the project, special-status species have been defined as described below. Impacts on these species are regulated by some of the federal, state, and local laws and ordinances described in Section 3 above.

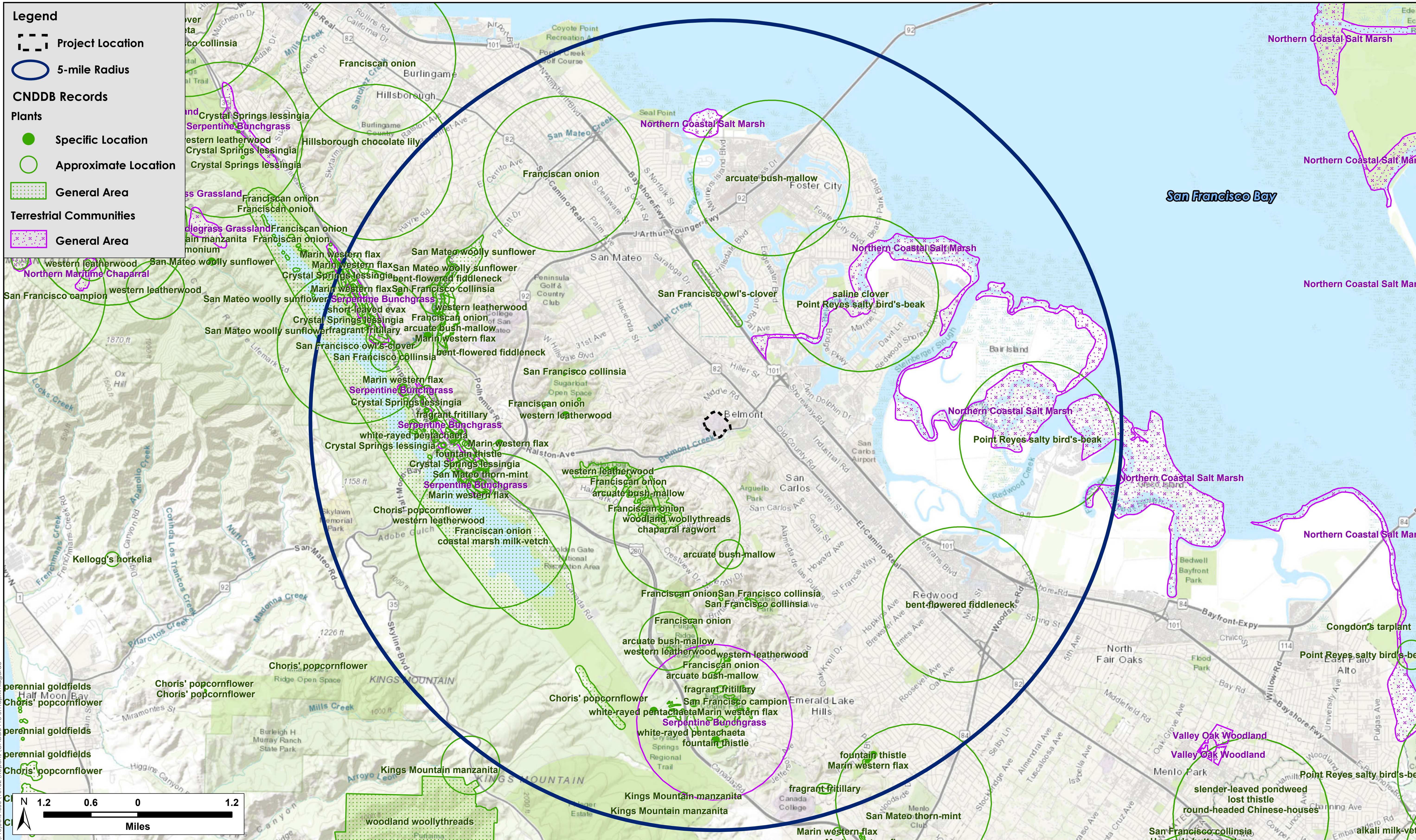
For purposes of this analysis, "special-status" plants are considered plant species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, rare, or a candidate species.
- Identified by the CNPS as CRPR 1A, 1B, or 2.

For purposes of this analysis, "special-status" animals are considered animal species that meet one or more of the following criteria:

- Listed under FESA as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under CESA as threatened, endangered, or a candidate threatened or endangered species.
- Designated by the CDFW as a California species of special concern.
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).

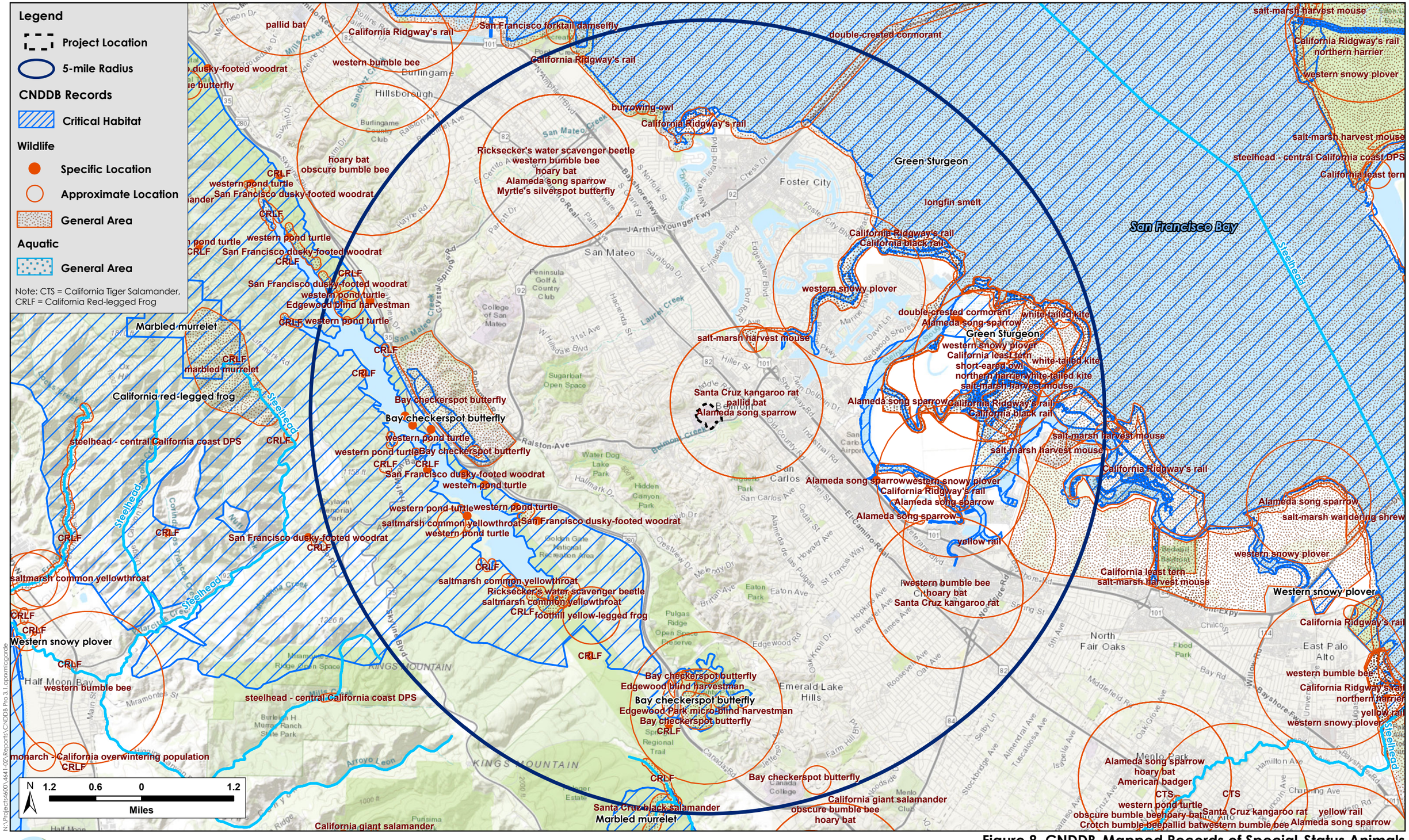
Information concerning threatened, endangered, and other special-status species that potentially occur on the project site was collected from several sources and reviewed by H. T. Harvey & Associates biologists as described in Section 2.1 above. Figure 7 depicts CNDDB records of special-status plant species (and other plant species included by CNPS on a CRPR) in the general vicinity of the project site and Figure 8 depicts CNDDB records of special-status animal species. These generalized maps show areas where special-status species are known to occur or have occurred historically.



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Figure 7. CNDDB-Mapped Records of Special-Status Plants
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Figure 8. CNDDB-Mapped Records of Special-Status Animals
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5.1 Special-Status Plant Species

A list of 95 special-status plant species (and other plant species included by CNPS on a CRPR) thought to have some potential for occurrence within the study area was compiled from queries of the CNPS Inventory (CNPS 2023) and CNDDB (CNDDB 2023). Analysis of the documented habitat requirements and occurrence records associated with all of the species considered allowed us to reject 91 of the 95 species as not having a reasonable potential to occur in or immediately adjacent to the study area for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range on the study area; and/or (4) the species is presumed extirpated. An additional two of the 95 species—Brewer's calandrinia (*Calandrinia breweri*; CRPR 4.2) and California bottle-brush grass (*Elymus californicus*; CRPR 4.3)—are identified only as CRPR 4 species and, therefore, do not qualify as special-status plant species; any impacts on these species would not be significant. The study area is a primarily developed area. However, the coast live oak woodland, ruderal grassland, willow seepage wetland, and chaparral habitats that were mapped along the northeast and southeast boundary of the study area provide moderately suitable habitat for some special-status plants.

At least marginally suitable habitat, edaphic requirements, and elevation range are present on the project site for two special-status plant species: bent-flowered fiddleneck (*Amsinckia lunaris*; CRPR 1B.2) and arcuate bush-mallow (*Malacothamnus arcuatus*; CRPR 1B.2). A description of each species is provided below. Although the presence of these special-status plants is unlikely due to the lack of recent records in the area, and due to the highly disturbed nature of much of the study area, the absence of these two species cannot be confirmed without further surveys.

Bent-flowered Fiddleneck (*Amsinckia lunaris*)

Bent flowered fiddleneck typically occurs in cismontane woodland, coastal bluff scrub, or valley and foothill grassland habitat types. Within these broad habitat types, bent flowered fiddleneck in known to grow in sites that have some previous level of disturbance. The blooming period extends from March through June. A single CNDDB record, Occurrence # 69, occurs within a 5-mi radius of the study area. However, this is an historical record, which was last observed in 1933 (CNDDB 2023). Because this species has the potential to occur in disturbed habitats, there is potential (albeit low) for it to occur within the ruderal grassland and wooded habitat throughout the northeastern portion of the study area.

Arcuate Bush-mallow (*Malacothamnus arcuatus*)

Arcuate bush-mallow typically occurs in chaparral and cismontane woodland habitats and has potential to grown in highly disturbed areas. The blooming period of this species occurs between April and September. The closest record of arcuate bush-mallow to the study area is in Big Canyon Park, south of Pulgas Creek, (CNDDB Occurrence # 16, CNDDB 2023). This record occurs within 5 miles of the study area in chaparral habitat being encroached by French broom. Because this species has the potential to occur in disturbed chaparral habitat, there is potential (albeit low) for it to occur in the southeastern portion of the study area, just east of the parking area. This habitat is similar to that of CNDDB Occurrence #16.

5.2 Special-Status Animal Species

Our review of current CNDDB (2023) records (Figure 8) and other data sources, as well as our extensive experience with other projects in the region, identified a number of special-status animal species that are known to occur in the project region. However, the vast majority of these species were determined to be absent from the Belmont Stanford Campus project site due to a lack of suitable habitat. Species considered for occurrence but rejected, as well as the reasons for their rejection, include the following:

- The federally threatened Bay checkerspot butterfly (*Euphydryas editha bayensis*), which was extirpated from San Mateo County but recently reintroduced to Edgewood County Park, depends on serpentine grasslands because the species' larval food plants are found primarily in this habitat. The Bay checkerspot is determined to be absent from the project site because suitable serpentine grasslands are not present.

- No fish were observed in the unnamed intermittent stream on the site, and no special-status fish such as the Central California Coast steelhead (*Oncorhynchus mykiss*) are expected to occur in this stream due to the absence of suitable habitat conditions and lack of connectivity to occupied habitat.

- The project site lacks suitable aquatic breeding habitat for the California tiger salamander (*Ambystoma californiense*), federally and state listed as threatened. Further, the project site is outside the current range of the species and is separated from occupied habitat by miles of urban development.

- The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) occurs at very few locations in San Mateo County. The closest extant records to the project site occur in the vicinity of the lower and upper portions of Crystal Springs Reservoir, approximately 3 and 6 miles from the site respectively. While the project site contains marginally suitable habitat in the form of pooling water and emergent vegetation within the unnamed stream on-site, all known records of this species in the vicinity are isolated from the study area by dense urban development, roads, and highways. Thus, there is no potential for the San Francisco garter snake to occur in the stream within the study area or in immediately adjacent areas.

- The project site lacks suitable marsh or Bay shoreline habitat for species associated with San Francisco Bay. These species include the federal and/or state listed California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*), as well as the San Francisco common yellowthroat (*Geothlypis trichas sinuosa*) and Alameda song sparrow (*Melospiza melodia pusillula*), both California species of special concern. Therefore, these species are not expected to occur on the project site or close enough to the site to be affected by project activities.

- The project site lacks open habitat extensive enough to be used by nesting loggerhead shrikes (*Lanius ludovicianus*), grasshopper sparrows, or Bryant's savannah sparrows (*Passerculus sandwichensis alaudinus*), or by foraging, nesting, or wintering burrowing owls (*Athene cunicularia*), both California species of special concern.

- The project site lacks appropriately extensive open habitat (and connectivity to open habitat) that could be used by foraging and denning American badgers (*Taxidea taxus*), a California species of special concern. In addition, the project site is surrounded by development that serves as a barrier to badger dispersal to the project site.
- The mountain lion (*Puma concolor*), a candidate for state listing, is unlikely to occur on the project site due to the extent of surrounding urban and suburban development.
- The yellow warbler (*Setophaga petechia*), a California species of special concern when nesting, is an uncommon to rare breeder in wooded riparian habitats in San Mateo County. No suitable riparian habitat for this species is present on the project site.
- Although potential habitat for the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), a California species of special concern, is present on the project site, no woodrat nests were observed during project surveys.
- The southwestern pond turtle is not expected to occur on the project site due to the absence of high-quality habitat along the unnamed intermittent stream and the urban context of the project site.
- The western bumble bee (*Bombus occidentalis*) and Crotch's bumble bee (*Bombus crotchii*), two candidates for state listing, are not expected to occur on the project site due to population declines and range contractions suffered by both species and the lack of any recent occurrences of these species in the project vicinity.

Table 1 provides information on the special-status animal species with some potential to occur on the project site.

Table 1. Special-Status Animal Species Potentially Occurring on the Project Site

Name	*Status	Habitat	Potential for Occurrence on the Project Site
Federal or State Endangered, Threatened, or Candidate Species			
Monarch butterfly (*Danaus plexippus*)	FC	Requires milkweeds (*Asclepias* spp.) for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats. Individuals congregate in winter roosts, primarily in Mexico and in widely scattered locations on the central and southern California coast.	**May be Present as Breeder.** Monarchs are known to form over-wintering congregations in several locations in coastal San Mateo County (CNDDB 2023), but no such congregations are known from the study area or its vicinity. Migrating monarchs are fairly common in the Belmont area, where they forage for nectar and breed on stands of milkweed. Although breeding habitat (i.e., milkweed plants) was not observed on the study area, these plants may not have been detectable during our February 2022 survey; if milkweed is present, monarchs could breed on the site. Further, migrating adults of this species are expected to occur in the study area in small numbers, nectaring on flowers.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation.	**May be Present as Nonbreeder.** The intermittent stream on the project site lacks extensive emergent vegetation and pools of adequate depth to support breeding by California red-legged frogs, but it may function as aquatic nonbreeding and dispersal habitat if a breeding population occurs nearby. Occurrences are known 2.5, 2.8, and 3.1 miles west of the study area near Crystal Springs Reservoir (CNDDB 2023, Figure 8). Undercrossings of I-280 between these occurrences and the upper Belmont Creek watershed provide potential means by which red-legged frogs may disperse to Belmont Creek. Because the nearest known occurrences of California red-legged frogs are so far from the study area and are separated from the study area by I-280, the probability of red-legged frog presence on the project site is low, but in the absence of intensive surveys, the potential for this species' occurrence on the site cannot be ruled out.
California Species of Special Concern			
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats; roosts in caves, rock outcrops, buildings, and hollow trees.	**May be Present as Breeder.** There is a historical occurrence in the vicinity of the study area (CNDDB 2023), and potential roosting habitat is present in crevices and cavities at Ralston Hall and possibly several other buildings. Palm, eucalyptus, and oak trees may also provide suitable roost sites. It is possible that suitable sites for a maternity roost are present, and suitable habitat for small numbers of individually roosting bats or non-maternity roosts is present in additional locations.

Name	*Status	Habitat	Potential for Occurrence on the Project Site
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Roosts in caves and mine tunnels, and occasionally in deep crevices in trees such as redwoods or in abandoned buildings, in a variety of habitats.	**May be Present as Nonbreeder.** Suitable winter roosting habitat for the Townsend's big-eared bat is present within a covered passageway entering Ralston Hall, and it is possible that very small numbers of nonbreeders may occur in the project area. However, owing to human disturbance and the absence of breeding habitat (more extensive, cavernous spaces remote from human activity), there is a low probability of occurrence in the project area.
State Fully Protected Species			
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees; forages in grasslands, marshes, and ruderal habitats.	**May be Present as Breeder.** White-tailed kites nest in trees and forage in open grassland, ruderal, or agricultural habitats. Although the species was not observed in the study area during our February 2022 site visit, kites have been observed in the vicinity during the nesting season, approximately 0.3-mi south of the project site (Cornell Lab of Ornithology 2023), and suitable nesting and foraging habitat is present for this species in the intermixed woodland and grassland in the northern and eastern parts of the study area. Based on our site observations, the areal extent of the study area, and known breeding densities of these species, no more than one pair of white-tailed kites is expected to nest on or adjacent to the study area, if this species is present at all.

Key to Abbreviations: Status: Federally Threatened (FT); Federal Candidate for Listing (FC); State Fully Protected (SP); California Species of Special Concern (CSSC).

5.3 Sensitive Natural Communities and Habitats

5.3.1 CDFW Riparian Habitat

Due to its rarity and disproportionately high habitat values and functions to wildlife, the CDFW considers riparian habitat to be sensitive. As described above in Section 3.2.4, the CDFW would likely claim jurisdiction over areas at, and below, the top of bank lines on either side of the unnamed intermittent stream on the project site. Although no true riparian woodland or forest (e.g., groundwater-dependent vegetation) is associated with this stream, CDFW may also claim jurisdiction over trees that are rooted within the banks of the stream.

5.3.2 Waters of the U.S./State

As described in Sections 3.1.1 and 3.2.1, the unnamed intermittent tributary to Belmont Creek is expected to be regulated by the USACE as waters of the U.S. and by the RWQCB as waters of the state. In addition, two seasonal wetlands, freshwater marsh habitat, and a willow seepage wetland are expected to be regulated as waters of the state by the RWQCB and could possibly be regulated by the USACE.

Section 6. Impacts and Mitigation Measures

CEQA and the State CEQA Guidelines provide guidance in evaluating impacts of projects on biological resources and determining which impacts will be significant. The Act defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project."

Appendix G of State CEQA Guidelines provides a checklist of potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G (Chapter IV) may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

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 habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service"

C. "Have a substantial adverse effect on state or federally protected wetlands (including, 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"

Potential impacts on biological resources as a result of the proposed project were evaluated based on the biological resources present on the project site and the potential for these resources to be impacted by future development activities associated with the Belmont Stanford Campus project. Although general development areas have been identified by Stanford (e.g., as shown in Figure 3), it is possible that additional development activities could occur outside those areas. As a result, we analyzed potential impacts on biological resources based primarily on the presence of those resources on the project site and the potential for some future development to impact those resources, irrespective of the proposed development areas. Thus, impact assessment has been programmatic and is intended to guide future planning and development (e.g., to avoid and minimize impacts), as well as to indicate the mitigation measures that would be necessary if sensitive biological resources were to be impacted.

6.1 Impacts on Special-Status Species: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Mitigation)

6.1.1 Impacts on Regionally Common Habitat Types and Associated Common Plant and Wildlife Species (Less than Significant)

Proposed project activities would result in the permanent removal of some regionally common habitat types, potentially including chaparral, coast live oak woodland, developed/landscaped, non-native woodland, and ruderal grassland. These impacts would reduce the extent of vegetation within the impact area and result in a reduction in the abundance of some of the common plant and wildlife species that occur there. However, the chaparral, coast live oak woodland, developed/landscaped, non-native woodland, and ruderal grassland habitats on the project site occur in a location in Belmont that has been subject to disturbance and fragmentation in the past, and is embedded within a highly developed urban/suburban area such that these habitats do not provide regionally rare or especially high-value habitat for native vegetation, wildlife, or special-status species. In addition, these land cover types are abundant and widespread regionally and are not particularly sensitive. Therefore, impacts on these habitats are considered less than significant under CEQA. Further, because the number of individuals of any common plant or animal species within these habitats, and the proportion of these species' regional populations that could be disturbed, is very small, the project's impacts would not substantially reduce regional populations of these species. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

6.1.2 Impacts on Special-Status Plants (Less than Significant with Mitigation)

At least marginally suitable habitat is present in the open space areas in the northern and eastern portions of the project site for two special-status plant species: bent-flowered fiddleneck and arcuate bush-mallow. Although the presence of these special-status plants is unlikely due to the lack of recent records in the area, and due to the highly disturbed nature of much of the study area, the absence of these two species cannot be confirmed without further surveys, which are best performed closer to the time of proposed construction occurring in these open space areas (if any).

If any of these plants are present on the project site, the project could impact them due to loss of habitat; grading or filling areas supporting these species; trampling or crushing of plants; soil compaction; mobilization of dust onto plants, which can affect their photosynthesis and respiration; and changes to hydrology supporting these plants due to grading or construction in nearby areas. Conservation of rare plant species is important because their populations contribute to preserving genetic resources and help ensure persistence of these rare species. Due to the regional rarity of bent-flowered fiddleneck and arcuate bush-mallow, impacts to more than 10% of a population (by individuals or occupied area) on the project site could contribute to a reduction in this species' genetic resources and would be considered significant under CEQA (impacts to 10% or less of a population would not be expected to cause the extirpation of such a population as long as the remaining plants

are avoided and protected). Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 below will reduce impacts on special-status plants to a less-than-significant level.

Mitigation Measure BIO-1. Pre-Activity Surveys for Special-Status Plants. Prior to initial ground disturbance for project-related activities in ruderal grassland, non-native woodland, and coast live oak woodland (for bent-flowered fiddleneck) and in chaparral habitat (for arcuate bush-mallow) identified on Figure 6 in the northern and eastern portions of the project site, appropriately timed, focused surveys (conducted during the flowering periods [bent-flowered fiddleneck – March through June; arcuate bush-mallow – April through September] for the two potentially occurring species) for bent-flowered fiddleneck and arcuate bush-mallow will be conducted by a qualified plant ecologist on the project site and within a 50-foot surrounding buffer (as access allows) to assess the presence or absence of these species within the construction footprint. The survey will be conducted in a year with sufficient precipitation to detect these species; alternatively, if these species are determined to be detectable in appropriate reference populations (regardless of precipitation), surveys for these species on the project site can be determined to be valid even if precipitation is well below average.

Mitigation Measure BIO-2. Avoidance Buffers. If any special-status plants are detected within the survey area, then in consultation with a qualified plant ecologist, the project proponent will design and construct the proposed project to avoid impacts on at least 90% of the populations of these species detected, to the extent feasible. Avoided special-status plant populations will be protected by establishing and observing a suitable buffer between plant populations and the impact area. All such populations located in the impact area or the identified buffer, and their associated designated avoidance areas, will be clearly depicted on any construction plans. In addition, prior to initial ground disturbance or vegetation removal, the limits of the identified buffer around special-status plants to be avoided will be marked in the field (e.g., with flagging, fencing, paint, or other means appropriate for the site in question). This marking will be maintained intact and in good condition throughout project-related construction activities.

If avoidance is not feasible and more than 10% of a population (by occupied area or individuals) will be impacted by the project as determined by a qualified plant ecologist, Mitigation Measure BIO-3 will be implemented.

Mitigation Measure BIO-3. Preservation and Management of Mitigation Populations. If avoidance of any special-status plant species is not feasible and more than 10% of the population would be impacted, compensatory mitigation will be provided via the preservation, enhancement, and management of occupied habitat for the species, or the creation and management of a new population. To compensate for impacts on these plants, on-site or off-site habitat occupied by the affected species will be preserved, enhanced, and managed in perpetuity at a minimum 1:1 mitigation ratio (at least one plant preserved for each plant affected, and at least one occupied acre preserved for each occupied acre affected), for any impact over the 10% significance threshold. Alternately, seed from the population to be impacted may be harvested and used either to expand an existing population (by a similar number/occupied area to compensate for impacts to these species beyond the 10% significance threshold) or establish an entirely new population in suitable habitat.

Areas proposed to be preserved and enhanced as compensatory mitigation for impacts to special-status plants must contain verified extant populations of the species that is impacted, or in the event that enhancement of existing populations or establishment of a new population is selected, the area must contain suitable habitat for the species as identified by a qualified plant ecologist. Mitigation areas will be managed in perpetuity to encourage persistence and even expansion of this species. The mitigation habitat will be of equal or greater habitat quality compared to the impacted areas, as determined by a qualified plant ecologist, in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and will contain at least as many individuals of the species as are impacted by project activities. The permanent protection and management of mitigation lands will be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A habitat mitigation and monitoring plan (HMMP) will be developed by qualified plant or restoration ecologists and implemented for the mitigation lands. That plan will include, at a minimum, the following information:

- a summary of impacts to the special-status plant species in question, including impacts to its habitat, and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken to enhance (e.g., through focused management that may include removal of invasive species in adjacent suitable but currently unoccupied habitat) the mitigation site for the species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if appropriate (which will be determined by a qualified plant or restoration ecologist);
- proposed management activities to maintain and enhance high-quality habitat conditions for the species;
- a description of habitat and species monitoring measures on the mitigation site, including specific, objective final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. At a minimum, performance criteria will include demonstration that any plant population fluctuations over the monitoring period of a minimum of 5 years for preserved populations and a minimum of 10 years for enhanced or established populations do not indicate a downward trajectory in terms of reduction in numbers and/or occupied area for the preserved mitigation population that can be attributed to management (i.e., that are not the result of local weather patterns, as determined by monitoring of a nearby reference population, or other factors unrelated to management);
- if a new population is established, the new population must contain at least 200 individuals or the same number of impacted individuals, whichever is greater, by year 5. This is to ensure the created population will be large enough to expect to persist and gain sufficient dedicated pollination services. If year 5 is a poor weather year for summer and fall-blooming annual plants and reference populations show a decline, this criteria can be measured in the next year occurring with average or better rainfall; and

- contingency measures for mitigation elements that do not meet performance criteria. For example, if by year 5 (or the next suitable rainfall year after year 5) of monitoring, the project is unable to establish a self-sustaining population of the required number of individuals as described above, the applicant shall preserve and manage an extant population of that same species under a revised HMMP.

Approval of the HMMP by the City of Belmont will be required before project impacts to special-status plants occur.

6.1.3 Impacts on the Monarch Butterfly (Less than Significant)

Monarch butterflies are expected to occur on the project site primarily when foraging and during spring and fall migration. In addition, if milkweed is present, the species may breed on the site in small numbers. However, no evidence of milkweed (e.g., remnants of plants that flowered the prior year) was observed during site surveys, so if milkweed is present, it likely occurs in low abundance. Therefore, the number of eggs, larvae, and pupae of this species that could potentially be impacted by project activities would be low.

If adult monarchs are present during construction, they would fly away from construction equipment or personnel before injury or mortality could occur. If eggs, larvae, or pupae were present in impact areas during construction, they could be lost as a result of vegetation removal, grading, and other construction activities. However, the number of individuals that could possibly be impacted would be low, and would represent a very small proportion of regional populations of the species. Likewise, any habitat for the monarch butterfly that is impacted would represent a very small proportion of regionally available habitat. Therefore, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and project impacts on the monarch butterfly would be less than significant under CEQA.

6.1.4 Impacts on the California Red-legged Frog (Less than Significant with Mitigation)

Although the California red-legged frog is not expected to breed on the site, there is some potential for small numbers of individuals to occasionally occur on the site, particularly in the intermittent stream. If the species is present, project activities could result in the loss of habitat, and injury or mortality of individuals could occur from equipment, vehicle traffic, and worker foot traffic. Petrochemicals, hydraulic fluids, and solvents that are spilled or leaked from construction vehicles or equipment may kill or injure individuals in the stream, and increased turbidity during construction could make predator and prey detection more difficult. Substrate vibrations may cause individuals to move out of refugia, exposing them to a greater risk of predation or desiccation, and may interfere with predator detection, resulting in a decrease in time spent foraging. Increases in human concentration and activity near suitable habitat may result in an increase in native and non-native predators that are attracted to trash left in the activity area. For example, raccoons, American crows, and common ravens (*Corvus corax*) are attracted to trash and prey opportunistically on amphibians.

Indirect impacts on water quality from construction of the project would be avoided and minimized by implementing erosion and sediment control measures, as well as best management practices (BMPs) for work near aquatic environments. Construction projects in California causing land disturbances that are equal to 1

acre or greater must comply with state requirements to control the discharge of storm water pollutants under the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a Notice of Intent must be filed with the SWRCB describing the project. A Storm Water Pollution Prevention Plan must be developed and maintained during the project and it must include the use of BMPs to protect water quality until the site is stabilized. Standard permit conditions under the Construction General Permit require that the applicant utilize various measures including: on-site sediment control BMPs, damp street sweeping, temporary cover of disturbed land surfaces to control erosion during construction, and utilization of stabilized construction entrances and/or wash racks, among other factors.

In many Bay Area counties, including San Mateo County, projects must also comply with the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (Water Board Order No. R2-2015-0049). This permit requires that all projects implement BMPs and incorporate Low Impact Development practices into the design to prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water coming from a site after construction has been completed. In order to meet these permit and policy requirements, projects must incorporate the use of tree planters, grassy swales, bioretention and/or detention basins, among other factors. Compliance with these permit requirements will minimize the potential for impacts on water quality due to increases in erosion, sedimentation, and turbidity as well as releases of pollutants into the creek water.

Because the project site is not known or expected to support large numbers of California red-legged frogs, or to support breeding by this species, impacts on this species' habitat resulting from project activities would not restrict the species' range or result in a substantial reduction in its abundance. As a result, impacts on California red-legged frog habitat are less than significant. However, injury or mortality of individuals could reduce this species' populations, which would be a significant impact under CEQA. Implementation of Mitigation Measure BIO-4 would reduce impacts of the project on California red-legged frogs to less than significant levels.

Mitigation Measure BIO-4. California Red-legged Frog Avoidance and Minimization Measures. The following measures will be implemented for any construction activities within 20 feet of the on-site intermittent stream to minimize impacts on individual California red-legged frogs.

- Prior to the initiation of construction activities, a qualified biologist will determine appropriate relocation sites for any California red-legged frogs that may be observed during the pre-construction survey or biological monitoring activities described below and that need to be relocated.

- Within 48 hours prior to the start of work, qualified biologists will conduct a nighttime survey for California red-legged frogs. The survey will consist of walking the project limits investigating all potential areas that could be used by the California red-legged frog for individuals. Any potential refugia for frogs, including small mammal burrows, will be examined. If any life stage of California red-legged frog is

detected, the qualified biologists will contact the USFWS to determine if relocation of the individuals is appropriate. Only qualified biologists will capture, handle, and monitor the California red-legged frog.

- A qualified biologist will conduct environmental training for the project's work crew. Personnel will be required to attend the presentation which will describe the California red-legged-frog, avoidance and minimization, legal protection of the species, and other related issues. All attendees will sign an attendance sheet along with their printed name, company or agency, email address, and telephone number.

- A qualified biologist will be onsite during all project activities during the first two days of project implementation to look for California red-legged frogs. Subsequently, a qualified biologist will be on-call in case a member of the work crew observes any animal that could potentially be a red-legged frog.

- If a California red-legged frog, or an animal that is thought to potentially be a California red-legged frog, is encountered in the action area, all activities which have the potential to result in the harassment, injury, or death of the individual will be immediately halted. The work crew will contact a qualified biologist, who will visit the site to determine whether the animal is a California red-legged frog and to assess the situation in order to select a course of action that will avoid or minimize adverse effects to the animal. To the maximum extent possible, contact with the frog will be avoided and the applicant will allow it to move out of the potentially hazardous situation to a secure location on its own volition. This procedure applies to situations where a California red-legged frog is encountered while it is moving to another location. It does not apply to animals that are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the species should the individual move away from the hazardous location.

- California red-legged frogs that are in danger will be relocated and released by the qualified biologist to suitable habitat within the same riparian area or watershed, far enough outside the work area that the frogs will not be impacted by project activities.

- The qualified biologist will limit the duration of the handling and captivity of the California red-legged frog to the minimum amount of time necessary to complete the task. If the animal must be held in captivity, it will be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. The container used for holding or transporting the individual will not contain any standing water.

- To prevent the inadvertent entrapment of California red-legged frogs, all excavated, steep-walled holes or trenches will be covered at the end of each work day with plywood or similar materials. If this is not possible, one or more escape ramps constructed of earth fill or wooden planks will be established in the hole. Before such holes or trenches are filled, they will be thoroughly inspected for any animals. If at any time a red-legged frog is found trapped or injured in these holes, the individual will be relocated to the pre-approved relocation site(s).

- All litter and construction debris will be disposed of off-site in accordance with state and local regulations. All trash and debris within the work area will be placed in containers with secure lids before the end of

work each day in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. If containers meeting these criteria are not available, all rubbish will be removed from the project site at the end of each work day.

- Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form will not be used at the project site because California red-legged frogs can become entangled and trapped in them. Any such material found on site will be immediately removed by construction personnel. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials will not be used.

- All construction equipment will be maintained to prevent leaks of fuels, lubricants, or other fluids.

- Because California red-legged frogs are attracted to structures providing cavities; pipes or similar structures that are stored at a construction site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the on-site biologist for these animals before the structure is subsequently buried, capped, or otherwise used or moved in any way. If a California red-legged frog is discovered inside a pipe, the biologist will watch the individual until it has moved out of the work area or may relocate the animal.

6.1.5 Impacts on Common and Special-Status Roosting Bats (Less than Significant with Mitigation)

Common bat species, such as the Yuma myotis and Mexican free-tailed bat, as well as the pallid bat and Townsend's big-eared bat, which are California species of special concern, can potentially roost in buildings and trees on the project site. These common and special-status species are grouped together because project impacts on these species will be similar, and because project avoidance and minimization measures for these species are also similar.

No evidence of a colony of roosting bats was detected in trees or buildings on the site during the February 2022 reconnaissance-level survey, but the presence of a moderate-size colony of a common species of roosting bats or a colony of any size of pallid bats or Townsend's big-eared bats could not be ruled out. Thus, the removal of trees and buildings on the site has the potential to result in the loss of a colony of roosting bats. When buildings or trees containing roosting colonies or individual bats are removed or modified, individual bats can be physically injured or killed, can be subjected to physiological stress from disturbance during torpor, or can face increased predation because of exposure during daylight. In addition, nursing young may be subjected to disturbance-related abandonment by their mothers. Loss of high-quality roost sites could limit populations due to habitat loss.

Impacts on a moderate-sized maternity colony of common species that have potential to occur on the site (i.e., at least 10 big brown bats, 20 Yuma myotis or at least 100 individuals of other non-special-status bat species), or impacts on a pallid bat or Townsend's big-eared bat day roost of any type (i.e., a maternity or non-maternity

colony) or size would be considered a substantial effect on these species as this could have a substantial effect on their regional populations. These population-level thresholds were developed by H. T. Harvey & Associates senior bat biologist Dave Johnson, Ph.D., for these species based on his knowledge of their local populations.

Implementation of Mitigation Measures BIO-5 to BIO-8 will reduce impacts on common and special-status species of roosting bats during construction to less than significant levels under CEQA.

Mitigation Measure BIO-5. Maternity Season Survey. A qualified bat biologist shall conduct a focused survey for roosting bats within all suitable roost trees on the project site that are to be removed and within all buildings that provide suitable bat roost habitat and that will be either removed or modified in such a way as to reduce their suitability for use by roosting bats. This survey will be conducted during the maternity season (generally March 15 – August 31) prior to the start of project construction, to determine presence or absence of a maternity colony, the species present, and an estimate of the colony size, if present. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall consist of a dusk emergence survey when bats can be observed flying out of the roost.

This survey may be combined with the pre-activity survey described under Mitigation Measure BIO-6 below, if desired. However, due to the potential for the presence of a maternity colony to result in a project delay (i.e., maintaining a non-disturbance buffer around the roost), if work will be initiated during the maternity season, it is recommended, but not required, that this survey be conducted in a year prior to the year in which project construction will occur.

If a maternity colony is detected, the exclusion measures described in Mitigation Measure BIO-7 below will be implemented prior to March 15 of the year in which construction occurs to ensure that bats are excluded from the roost prior to the start of construction. In addition, Mitigation Measure BIO-8 will be implemented.

Mitigation Measure BIO-6. Pre-Activity Survey. A pre-activity survey shall be conducted for roosting bats within all buildings and trees on the project site that are slated for removal, and that provide suitable roost sites, in and within 100 feet of project demolition or construction areas. The survey will be conducted by a qualified bat biologist within seven days prior to the start of building demolition or tree removal for the purpose of impact avoidance. If building demolition and/or tree removal will occur in phases, a pre-activity survey will be conducted within seven days prior to the demolition of each building and/or removal of each tree in which suitable roost habitat is present. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall include a dusk emergence survey when bats can be observed flying out of the roost.

If a moderate-sized maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or kind (i.e., a maternity or non-maternity colony), is not detected during the survey, no additional measures are required.

If a moderate-sized maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or kind (i.e., a maternity or non-maternity colony), is present, the qualified bat biologist will identify an appropriate disturbance-free buffer zone appropriate for the species identified to be maintained until either the end of the maternity season or a qualified biologist has determined that all young are volant (i.e., capable of flight) to avoid the loss of dependent young. The exclusion measures described in Mitigation Measure BIO-7 below will be implemented after dependent young are no longer present and prior to the removal of any portion of the tree or building where the roost is located.

Mitigation Measure BIO-7. Bat Exclusion. If bats are present in a building or tree to be removed or disturbed, the individuals shall be safely evicted outside the bat maternity season (approximately March 15 – August 31) and the winter torpor period (approximately October 15 – February 28, depending on weather). Bats present in adjacent areas that may be indirectly disturbed by construction activities will be evicted if a qualified biologist determines that evicting the bats is preferential to allowing the bats to remain in their roosts (e.g., if noise or disturbance from nearby construction will pose a threat to a maternity colony, then the bats will be evicted). Bats may be evicted through exclusion, as directed by a qualified biologist, after notifying the CDFW. The qualified biologist must be present for removal of trees or structures occupied by bats.

- For eviction from roost trees, trimming or removal of trees shall follow a two-step removal process whereby limbs and branches not containing roost habitat are removed on day 1 to disturb the roost, and then the entire tree is removed on day 2.
- Disturbance of or removal of structures containing or suspected to contain active (non-maternity or hibernation) or potentially active common bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal will be completed the subsequent day. Alternatively, exclusion methods may include the installation of one-way doors and/or use of ultrasonic deterrence devices. One-way doors and/or deterrence devices should be left in place for a minimum of two weeks with a minimum of five fair-weather nights with no rainfall and temperatures no colder than 50°F.

Mitigation Measure BIO-8. Compensatory Mitigation. If a maternity colony of common bat species containing at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status bat species, or a pallid bat or Townsend's big-eared bat day roost of any type (maternity or non-maternity) or size, will be destroyed or modified such that it will no longer provide a suitable roost site for bats, replacement roost habitat that is appropriate to the species shall be provided, as determined by a qualified bat biologist. The nature of the replacement roost habitat (e.g., the design of an artificial roost structure) will be determined by a qualified bat biologist based on the number and species of bats detected. Ideally, the roost structure should be installed on the project site. If replacement habitat cannot be placed on the site, exact placement of replacement habitat shall be determined in consultation with a qualified bat biologist.

6.1.6 Impacts on Nesting Birds (Less than Significant)

A single pair of the white-tailed kite (a state fully protected species) could potentially nest on the project site, and multiple pairs of a number of other bird species could nest there as well. Based on the areal extent of suitable habitats within and adjacent to the project site, and known nesting densities of the white-tailed kite, it is likely that no more one pair of white-tailed kites could potentially nest on or immediately adjacent to the project site.

The project would result in the permanent loss of suitable nesting and foraging habitat for the white-tailed kite and many other species of nesting birds. In addition, activities that occur during the nesting season and cause a substantial increase in noise or human activity near active nests may result in the abandonment of active nests (i.e., nests with eggs or young). Heavy ground disturbance, noise, and vibrations caused by project activities could potentially disturb nesting and foraging individuals and cause them to move away from work areas. In the long term, the project will also result in an increase in human activity on the site, potentially subjecting nesting birds to increased human disturbance on an ongoing basis.

No more than one pair of white-tailed kites could be impacted by project activities. The number of nests of other, non-special-status bird species that could be impacted would be greater, but other potentially nesting birds are regionally common and widespread. Therefore, the proportion of regional populations of all potentially impacted nesting birds that could be disturbed is very small. Thus, these impacts do not meet the CEQA standard of having a *substantial* adverse effect, and would not be considered significant under CEQA.

Nevertheless, because all native (and some non-native) birds nesting on and adjacent to the project site are protected by the MBTA and/or California Fish and Game Code, and because construction disturbance and project tree removal during the avian breeding season (February 1 through August 31 inclusive, for most species) could result in the incidental loss of eggs or nestlings, the following measures shall be implemented to avoid conflicts with laws protecting nesting birds.

Mitigation Measure BIO-9. Nesting Bird Avoidance and Minimization Measures. The following measures shall be implemented to avoid and minimize impacts of construction on nesting birds.

- **Nesting-Season Avoidance.** To the extent feasible, commencement of construction activities should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts to nesting birds protected under the MBTA and California Fish and Game Code would be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31, inclusive.

- **Preconstruction/Pre-disturbance Surveys and Buffers.** If it is not possible to schedule commencement of construction activities and/or tree removal between September 1 and January 31, preconstruction surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no active nests shall be disturbed during project implementation. These surveys shall be conducted no

more than seven days prior to the initiation of demolition or construction activities, including tree removal and pruning. During this survey, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, ruderal grasslands, buildings) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no active nests of species protected by the MBTA and California Fish and Game Code shall be disturbed during project implementation.

- **Removal of Nesting Substrate.** Potential nesting substrate (e.g., bushes, trees, snags, grass, and suitable artificial surfaces) that would be impacted by development should be removed during the non-breeding season (i.e., they should be removed between September 1 and January 31), if feasible, to help prevent nesting in the study area.

6.2 Impacts on Sensitive Communities: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Less than Significant with Mitigation)

6.2.1 Impacts on Stream and Wetland Habitats (Less than Significant with Mitigation)

Sensitive natural communities include aquatic, wetland, and riparian habitats, which are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the USACE, RWQCB, CDFW, and/or the USFWS. Project impacts on sensitive natural communities, vegetation alliances/associations, or any such community identified in local or regional plans, policies, and regulations, were considered and evaluated.

The unnamed intermittent stream, seasonal wetlands, willow seepage wetland, and freshwater marsh are all considered sensitive habitats. They are also regulated by various resources agencies, as described in Section 3. Due to the importance of aquatic and wetland habitats in maintaining water quality and providing wildlife habitat, impacts to such habitats are typically considered significant under CEQA.

The nature and extent of potential project impacts on these habitats is unknown. Based on the proposed development areas indicated in Figure 3, it is possible that a portion of the willow seepage wetland could be impacted, but the other aquatic and wetland habitats on the site are outside of proposed development areas. Nevertheless, we have assumed that some development activities could potentially occur anywhere on the project site. If vegetation removal, grading, construction, or other project activities were to occur in areas occupied by the intermittent stream, seasonal wetlands, willow seepage wetland, or freshwater marsh, those sensitive habitats could be lost or degraded due to fill, excavation, modification of hydrology, vegetation removal, or introduction of non-native plants. Impacts on water quality within these features may occur during construction as well, although as discussed in Section 6.1.4, compliance with the NPDES *General Permit for Storm*

Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended) and California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (Water Board Order No. R2-2015-0049) will avoid substantial impacts on water quality.

Despite the relatively low habitat value of these on-site aquatic and wetland habitats, as described in Section 4.2, impacts on these habitats would be considered significant under CEQA due to the regional loss of such sensitive habitats. Implementation of Mitigation Measures BIO-10 and BIO-11 will reduce such impacts to less than significant levels.

Mitigation Measure BIO-10. Impact Avoidance and Minimization. When planning and designing new development on the project site, to the extent feasible, Stanford shall avoid and minimize impacts to the intermittent stream, seasonal wetlands, willow seepage wetland, and freshwater marsh to the maximum extent practicable, and where feasible, shall incorporate a buffer (of at least 10 feet, though larger buffers would be preferable) between new development and these habitats.

Mitigation Measure BIO-11. Restoration and Compensatory Mitigation. If any construction activities in or within 10 feet of intermittent stream, seasonal wetlands, willow seepage wetland and freshwater marsh cannot be avoided, the applicant will restore any temporarily affected habitats in situ by restoring pre-construction elevations, topography, hydrology, and vegetation. The applicant shall compensate for unavoidable permanent loss of any aquatic or wetland habitats through on-site or off-site restoration, creation, or enhancement of similar or higher-quality habitat, the purchase of mitigation credits, or a combination of these two approaches. A qualified biologist shall determine the extent of impacts based on the acreage of overlap of project construction and aquatic or wetland habitat and the linear footage of creek channel within those project impact areas. A minimum of a 1:1 (on an acreage basis for wetlands, ponds, and riparian habitat and a linear footage basis for creeks) replacement-to-loss ratio for in-kind habitat (or equivalent or greater as determined in coordination with the USACE, CDFW, and RWQCB during permitting) is required. Enhancement of existing, low-quality habitats (rather than restoration or creation) is acceptable if a substantial increase in ecological functions and values can be achieved, as determined by a qualified biologist in coordination with the USACE, CDFW, and RWQCB.

If mitigation is to be satisfied through purchase of mitigation credits in an agency-approved mitigation bank, proof of the purchase of credits shall be provided to the City of Belmont prior to the start of activities that impact the aquatic or wetland habitats. If mitigation is to be satisfied through project-specific habitat restoration, creation, or enhancement, the mitigation shall be described in an HMMP, which shall be prepared by a qualified biologist retained by the applicant and submitted to the City for review and approval prior to the start of activities that impact the aquatic or wetland habitats. At a minimum, the HMMP shall include the following:

- A summary of project impacts to jurisdictional habitats;

- The location of all restoration, creation, or enhancement activities;
- Detailed description of all restoration, creation, or enhancement activities;
- Evidence of a suitable water budget to support any restored, created, or enhanced aquatic and riparian habitats;
- The species, amount, and location of plants to be installed in the created habitats;
- The time of year for planting and the method for supplemental watering during the establishment period;
- Management and maintenance activities, such as weeding of invasive plants, providing for supplemental water, and repair of water delivery systems;
- The monitoring period, which shall not be less than five years.
- Criteria for mitigation efforts to be deemed a success; at a minimum, success for vegetated wetlands would include at least seventy-five percent (75%) cover by native vegetation, or seventy-five percent (75%) survival of planted or seeded native riparian vegetation, within the target mitigation acreage by the end of year 5;
- Adaptive management procedures that accommodate the uncertainty that comes with restoration projects. These include, but are not limited to, measures to address colonization by invasive species, unexpected lack of water, excessive foraging of installed plants by native wildlife, and variable climatic conditions. This section will also describe the process by which adaptive management decisions will be made and implemented.
- A description of the financial mechanisms for funding of all monitoring activities and ensuring that the created aquatic and riparian habitats shall be preserved and managed in perpetuity.

6.2.2 Impacts Due to Encroachment into the Stream/Riparian Setback (Less than Significant)

The intermittent stream on the project site is of low habitat quality for aquatic and riparian animal species and lacks true riparian woodland or forest. In addition, existing development is present close to the edge of the channel on both sides. Therefore, if future development reduces the width of the vegetated stream corridor further, no substantial impact on this stream or the habitat value it provides would occur, and such impacts would be less than significant.

6.3 Impacts on Wetlands: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Less than Significant with Mitigation)

The unnamed intermittent stream, seasonal wetlands, willow seepage wetland, and freshwater marsh are all state and/or federally protected aquatic and wetland habitats regulated by various resources agencies. These habitats may be impacted by the project as described in Section 6.2.1. Compliance with the NPDES *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Water Board Order No. 2009-0009-DWQ, as amended and administratively extended) and California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (Water Board Order No. R2-2015-0049) will avoid substantial impacts on water quality within these habitats. Further, implementation of Mitigation Measures BIO-9 and BIO-10 will ensure that impacts on these protected habitats are reduced to less than significant levels.

6.4 Impacts on Wildlife Movement: 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 (Less than Significant with Mitigation)

6.4.1 Impacts on Wildlife Movement (Less than Significant)

For many species, the landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller, disjunct pieces) can have a twofold impact on wildlife: first, as habitat patches become smaller they are unable to support as many individuals (patch size); and second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity).

As discussed in Section 4.3, the project site is completely surrounded by extensive urban and suburban development, and consequently, there are no well-defined or important movement corridors for mammals, amphibians, or reptiles on or through the project site. Some localized wildlife movement occurs along Belmont Creek to the south/southeast of the project site, but no regionally important movement can occur along that creek due to intensive development along both upstream and downstream segments of the creek.

New development and loss of vegetated habitat resulting from the project may reduce localized movements within the project site, and between the project site and adjacent areas. However, because no regionally important movement occurs on the project site, the project will not result in substantial impacts on wildlife movement. Further, the project will not impede the use of any native wildlife nursery sites, including breeding of common, urban-adapted birds. Thus, the project would not interfere with the movement of any native

resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors in the site vicinity, and it would not impede the use of any native wildlife nursery sites.

6.4.2 Impacts due to Bird Collisions (Less than Significant with Mitigation)

Construction of new buildings as a result of the project may increase the risk of avian mortality due to collisions. Glass windows and building facades can result in injury or mortality of birds due to collisions with these surfaces. It has been well documented that glass windows and building façades can result in injury or mortality of birds due to birds' collisions with these surfaces (Klem 2009, Sheppard and Phillips 2015). Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. The greatest risk of avian collisions with buildings occurs in the area within 60 feet of the ground because this is the area in which most bird activity occurs (San Francisco Planning Department 2011, Sheppard and Phillips 2015). In addition, excessive lighting, especially lights pointed skyward, can disorient migrant birds at night, potentially attracting birds into areas where they are at greater risk of colliding with buildings. These risks are highest for buildings in or near areas of high avian activity or movement, such as migratory corridors, large open spaces, large water bodies, and riparian habitats.

Building collisions are a leading cause of anthropogenic-related avian mortality in the United States, second only to predation by free-ranging domestic cats (Loss et al. 2014). Buildings are estimated to result in the mortality of an estimated 365 to 988 million birds per year, or 2–9% of all North American birds, with low-rise buildings such as those in the proposed project accounting for the mortality of an estimated 62–664 million birds (median 246 million) each year (Loss et al. 2014). Most birds that are vulnerable to collisions with low-rise buildings are migrants that move through during the spring and fall (Loss et al. 2014). However, certain groups of birds are also more vulnerable to collisions, including hummingbirds, swifts, waxwings, warblers, nuthatches, tits, and creepers (Loss et al. 2014), all of which occur on or near the project site as migrants, wintering individuals, or year-round residents.

In the context of the surrounding suburban areas of Belmont, the study area stands out as an "oasis" of bird habitat in the urban landscape due to the presence of the intermittent stream and abundance of trees and natural habitat. As a result, the site supports a fairly large number of birds, and during migration, the number of birds may be even higher. The project site is currently occupied by buildings with glazing, and by lighting, but bird collision risk may increase with redevelopment of the site if new buildings have more extensively glazed facades and/or if lighting on the site is more extensive than under existing conditions.

There are no adopted City of Belmont bird-safe design standards. However, impacts from bird collisions could be significant under CEQA if project construction or modification of buildings resulted in substantial increases in glazing or in lighting that could disorient birds. Given the relatively higher habitat quality of the project area, compared with surrounding developed areas, enough migratory birds could be impacted by collisions with

glazing to result in a significant impact. Implementation of Mitigation Measure BIO-12 would reduce impacts due to bird collisions with glazing to less than significant levels.

Mitigation Measure BIO-12. Implement Bird-Friendly Building Design. Due to the potential for bird collisions with the project buildings, the project shall implement the following bird-friendly building design considerations:

- To the extent possible, no more than 10% of the surface area of a façade for any new building or any modification to the façade of an existing building shall have untreated glazing between the ground and 60 feet above ground if, in the opinion of a qualified biologist, that façade faces habitat that is of moderate to high value to migratory birds.
- Bird-friendly glazing treatments may include fritting, netting, permanent stencils, frosted glass, exterior screens, physical grids placed on the exterior of glazing or ultraviolet patterns visible to birds. All bird-friendly glazing on the building shall have a reflectivity of 15% or lower. Bird-friendly glazing used on all project buildings shall meet the following specifications:
    - Vertical elements of the window patterns should be at least 0.25 inches wide at a maximum spacing of 4 inches and/or have horizontal elements at least 0.125 inches wide at a maximum spacing of 2 inches;

      OR
    - Bird-friendly glazing shall have a Threat Factor[1] less than or equal to 30.
- Free-standing clear glass walls, glass skywalks, transparent building corners, glass at rooflines of buildings, glass enclosures (e.g., greenhouses) on rooftops, and free-standing clear glass railings will be avoided where feasible. If any such features are included in the project design, all glazing used in any such features shall be 100% treated with a bird-friendly glazing treatment as specified in the bullet above. The specific areas where bird-friendly glazing is necessary will be identified by a qualified biologist. For transparent glass corners, the required treatment area extends horizontally from a building corner as far the corner as it is possible to see through the corner to the other side of the building.
- All exterior lighting shall be shielded to block illumination from shining outward towards high-quality habitat for migratory birds.
- To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above the fixture) shall be avoided in the project design. All lighting shall be fully shielded to block illumination from shining upward

[1] A material's Threat Factor is assigned by the American Bird Conservancy, and refers to the level of danger posed to birds based on birds' ability to perceive the material as an obstruction, as tested using a "tunnel" protocol (a standardized test that uses wild birds to determine the relative effectiveness of various products at deterring bird collisions). The higher the Threat Factor, the greater the risk that collisions will occur. An opaque material will have a Threat Factor of 0, and a completely transparent material will have a Threat Factor of 100. Threat Factors for many commercially available façade materials can be found by clicking on the "Threat Factor Table" link at https://abcbirds.org/glass-collisions/nyc-threat-factor.

above the fixture. If up-lighting cannot be avoided in the project design, up-lights shall be shielded and/or directed such that no luminance projects above/beyond objects at which they are directed (e.g., trees and buildings) and such that the light would not shine directly into the eyes of a bird flying above the object. If the objects themselves can be used to shield the lights from the sky beyond, no substantial adverse effects on migrating birds are anticipated.

- Exterior lighting shall be minimized (i.e., total outdoor lighting lumens shall be reduced by at least 30% or extinguished, consistent with recommendations from the International Dark-Sky Association [2011]) from 10:00 p.m. until sunrise, except as needed for safety and City code compliance.
- The above-listed bird-friendly design requirements may be waived or modified for specific facades or buildings based on analysis by a qualified biologist indicating that such specific facades or buildings will not pose a collision hazard to birds. Such a waiver will generally not be appropriate for façades facing well-vegetated areas. A waiver may be appropriate, for example, for façades that face developed areas lacking vegetation, water features, or other features that would be particularly attractive to birds.

6.5 Impacts due to Conflicts with Local Policies: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Less than Significant)

6.5.1 Impacts Due to the Removal of Ordinance-Sized Trees (Less than Significant)

The project proposes to remove a number of existing trees on the site, including ordinance-sized trees as defined by the City of Belmont. The applicant would comply with the City of Belmont Municipal Code and submit permit applications for removal or severe damage of all trees on the site that meet the City definition of protected trees. As per the City's protected tree ordinance, protected trees to be removed are typically required to be replaced at a ratio of 1:1, must be replaced with a tree included on the City's preferred species tree list, and may be planted anywhere on the property. The City's tree ordinance would allow the applicant, as an alternative to planting a replacement tree, instead to pay an in-lieu fee established by the City Council. With compliance with the City's tree protection ordinance, project impacts on protected trees would be less than significant.

6.6 Impacts due to Conflicts with an Adopted Habitat Conservation Plan: Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan (No Impact)

The project and project site are not subject to any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

6.7 Cumulative Impacts (Less than Significant)

Cumulative impacts arise due to the linking of impacts from past, current, and reasonably foreseeable future projects in the region. Future development activities in the City of Belmont will result in impacts on the same habitat types and species that will be affected by the proposed project. The proposed project, in combination with other projects in the area and other activities that impact the species that are affected under the project, could contribute to cumulative effects on special-status species. Other projects in the area include both development and maintenance projects that could adversely affect these species and restoration projects that will benefit these species.

The cumulative impact on biological resources resulting from the project in combination with other projects in the region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, CEQA mitigation measures, and permit requirements for each project, as well as compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources would occur.

However, the Belmont General Plan contains conservation measures that would benefit biological resources, as well as measures to avoid, minimize, and mitigate impacts on these resources. Most projects in the region that impact resources similar to those impacted by the proposed project will mitigate their impacts according to CEQA, and projects that require permits from the USACE, RWQCB, CDFW, or other agencies will implement avoidance, minimization, and/or compensatory mitigation measures per the conditions of those permits.

The project would implement a number of avoidance, minimization, and compensatory mitigation measures to reduce impacts on sensitive species and habitats. Thus, the project will not contribute to substantial cumulative effects on biological resources.

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