Appendix B: Biological Resources Report and Tree Assessment

H. T. HARVEY & ASSOCIATES

Ecological Consultants

New Fire Station 25 and Community Park Project
Biological Resources Report

Project #4172-01

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May 3, 2018

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Section 1. Introduction

This report describes the biological resources present in and adjacent to the proposed New Fire Station 25 and Community Park Project, as well as the potential impacts of the proposed project and measures necessary to reduce impacts to less-than-significant levels under the California Environmental Quality Act (CEQA). This report was prepared to facilitate CEQA review of the project by the City of San Mateo.

1.1 Project Description

The 1.6-acre (ac) project site is located in the City of San Mateo and is bounded by Barneson Avenue to the north, Shafter Street to the west, Borel Avenue to the south, and the Borel Middle School to the east (Figures 1 and 2). The project site is currently undeveloped (i.e., no hardscape is present) and is covered primarily by ruderal grasslands, although landscaped areas, including a flower and vegetable garden, are present in the northwestern portion of the project site. The proposed project entails the construction of a new 4,950-square foot (ft^2) fire station at the corner of Shafter Street and Borel Avenue and the transformation of the remainder of the City-owned property into a community park. The proposed fire station has been designed to house and support a typical three-person crew and captain. The proposed facility would include an office, kitchen and dining area, day room, exercise room, private sleeping rooms with shared bathroom facilities, a single engine equipment bay with lockers and storage areas, and an emergency generator. The two-story building would have a maximum height of 35 feet (ft), as measured from the lowest level. Total paved areas associated with the new fire station, including parking, would occupy 8,400 ft^2 of the project site. The remainder of the site would be developed as a community park. Although the park design had not been finalized at the time this report was prepared, features expected to be incorporated include, but are not limited to, walking pathways, a playground, picnic tables, benches, and landscaped vegetation.

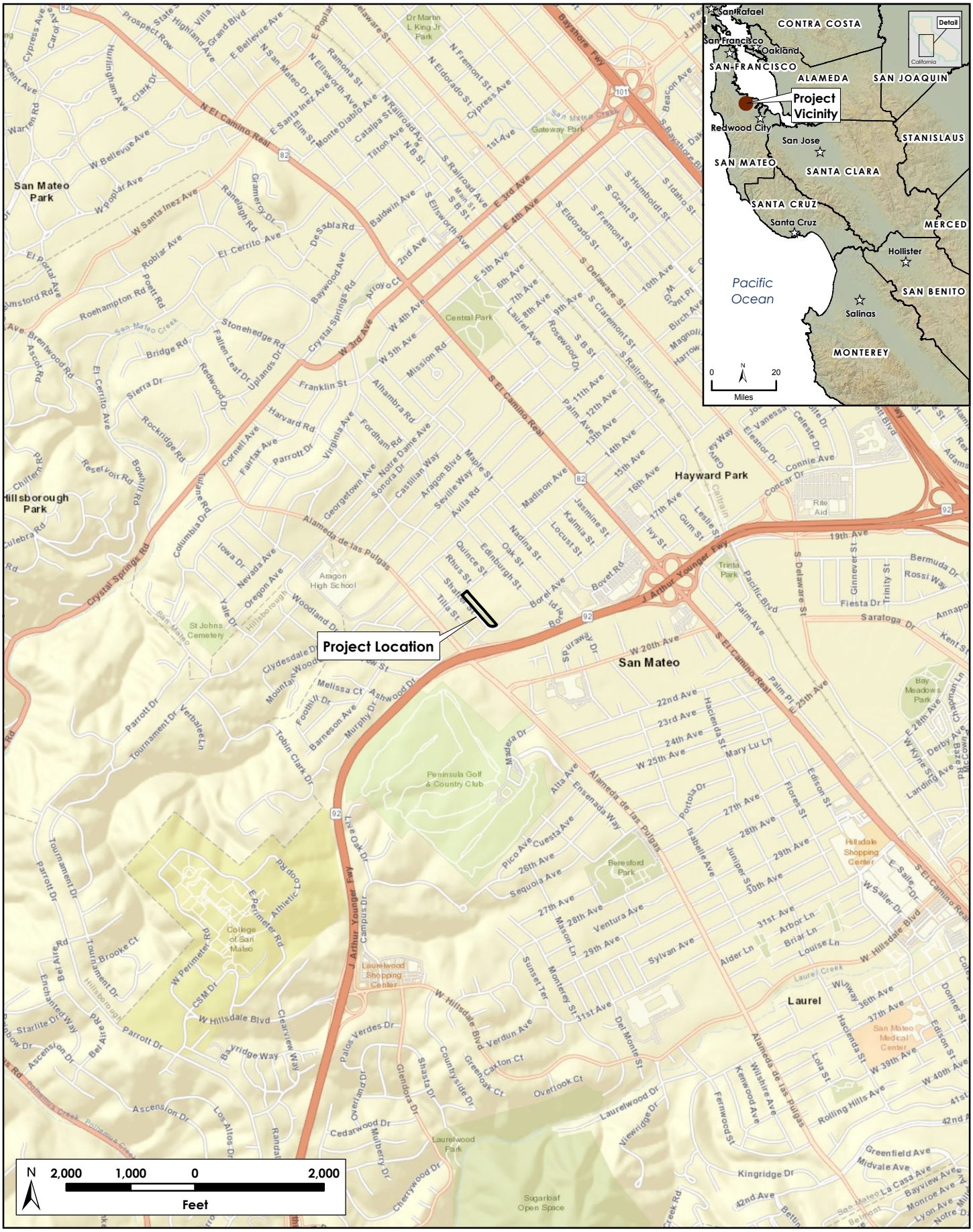

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Figure 1. Vicinity Map

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N:\Projects4100\4172-01\Reports\Fig 2 Project Site.mxd mlagarde

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Figure 2. Project Site

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Section 2. Methods

2.1 Background Review

Prior to conducting field work, H. T. Harvey & Associates ecologists reviewed the project plans and description provided by David J. Powers & Associates, Inc. on April 13, 2018; aerial images (Google Inc. 2018); a U.S. Geological Survey (USGS) topographic map; the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB 2018); and other relevant scientific literature and technical databases. In addition, for plants, we reviewed all species on the current California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B lists occurring in the *San Mateo, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle in which the project is located, as well as the surrounding eight quadrangles (*Montara Mountain, Redwood Point, San Francisco South, Hunters Point, San Leandro, Half Moon Bay, Woodside, and Palo Alto, California*). Quadrangle-level results are not maintained for CRPR 3 and 4 species, so we also conducted a search of CNPS Inventory records for these species occurring in San Mateo County (CNPS 2018). In addition, we queried the CNDDB for natural communities of special concern that occur in the project vicinity. For the purposes of this report, the "project vicinity" encompasses a 5-mile (mi) radius surrounding the project site.

2.2 Site Visit

H. T. Harvey & Associates ecologist Stephen L. Peterson, M.S., conducted a reconnaissance-level field survey of the project site on April 17, 2018. The purpose of this survey was to provide a project-specific impact assessment for the proposed project as described above. Specifically, the survey was conducted to (1) assess existing biotic habitats and general plant and wildlife communities on the project site, (2) assess the potential for the project to impact special-status species and/or their habitats, and (3) identify potential jurisdictional habitats, such as Waters of the U.S./State and riparian habitat. In addition, Mr. Peterson conducted a focused survey for evidence of previous raptor nesting activity (i.e., large stick nests); nests of the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), a California species of special concern; and potential bat roosting habitat.

Section 3. Environmental Setting

3.1 General Project Area Description

The 1.6-ac project site is located in the City of San Mateo in San Mateo County. A review of limited historical aerial photographs indicates that land use on the project site since 1993 has been open space, as it is today. The project site is currently surrounded by dense residential land uses. San Francisco Bay is located approximately 2 mi east of the project site.

Elevation within the project site ranges from approximately 56 to 86 ft above sea level. The site is underlain by one soil type, Urban land-Orthents, cut and fill complex, 0 to 75 percent slopes (NRCS 2018). This soil type has a variable profile to a depth of more than 80 inches, with alluvial material generally occurring throughout the soil profile, and is considered a well-drained soil.

3.2 Biotic Habitats

A reconnaissance-level survey identified one habitat type/land use on the project site: ruderal grassland/landscaped (Figure 3). This habitat is described in detail below.

Photo 1. Ruderal grassland/landscaped habitat on the project site.

3.2.1 Ruderal Grassland/Landscaped

Vegetation. The entire project site is occupied by ruderal grassland/landscaped habitat (Photo 1). The ruderal grassland is composed of non-native grasses such as wild oat (*Avena* spp.), foxtail barley (*Hordeum jubatum*), oxalis (*Oxalis* spp.), and broadleaf plantain (*Plantago major*) interspersed with a variety of annual and perennial herbs such as purple owl's clover (*Castilleja exserta*). A variety of ornamental/landscape shrubs, flowers, and forbs are found in the northwest portion of the project site, part of which is currently used as a flower and vegetable garden plot, including gladiolus (*Gladiolus* sp.), bearded iris (*Iris* sp.), and yucca trees (*Yucca* sp.). In addition, a grove of eucalyptus (*Eucalyptus* sp.) trees is located on the southeast portion of the project site and multiple stands of coast live oak (*Quercus agrifolia*) trees are found along the east and west borders of the project site. Other tree and shrub species found on the project site include California buckeye (*Aesculus californica*), pyracantha (*Pyracantha* sp.), fig (*Ficus* sp.), and pride of Madeira (*Echium candicans*).

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Figure 3. Biotic Habitats and Impacts

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Wildlife. Wildlife use of ruderal grasslands/landscaped habitat on the project site is limited by frequent human disturbance, the abundance of non-native and invasive species, and isolation of the small grassland patch from more extensive grasslands. As a result, wildlife species associated with more extensive grasslands, such as the grasshopper sparrow (*Ammodramus savannarum*) and western meadowlark (*Sturnella neglecta*), are absent from the project site. Most of the bird species using the ruderal grassland during the breeding season nest in landscaped areas on and adjacent to the site, using the ruderal grassland only for foraging. Such species include the mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), dark-eyed junco (*Junco hyemalis*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), and Brewer's blackbird (*Euphagus cyanocephalus*). Similarly, a few species that may nest on nearby buildings, such as the barn swallow (*Hirundo rustica*), black phoebe (*Sayornis nigricans*), and European starling (*Sturnus vulgaris*), also forage on or over the ruderal grassland habitat. Several other species of birds use the ruderal grassland and landscaped areas during the nonbreeding season. These species, which include the golden-crowned sparrow (*Zonotrichia atricapilla*), and white-crowned sparrow (*Zonotrichia leucophrys*), forage on the ground or in herbaceous vegetation, primarily for seeds. The mature eucalyptus and oaks on the project site provide food and nesting opportunities for a variety of bird species, including the chestnut-backed chickadee (*Poecile rufescens*), Anna's hummingbird, California scrub-jay (*Aphelocoma californica*), and American crow. In addition, the mature trees provide potential nesting habitat for raptors such as the Cooper's hawk (*Accipiter cooperii*). However, no old nests of raptors were observed on the site during the reconnaissance survey. Further, an examination of the trees on the site failed to find any large cavities that might provide suitable habitat for a large roosting or maternity colony of bats.

Few species of reptiles and amphibians occur in the ruderal grassland/landscaped habitat on the project site due to its disturbed nature and low habitat heterogeneity. Nevertheless, reptiles such as the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*) may occur in this habitat. Small mammals expected to be present include the native western harvest mouse (*Reithrodontomys megalotis*) and nonnative house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*), and roof rat (*Rattus rattus*). Small burrowing mammals, such as the Botta's pocket gopher (*Thomomys bottae*), are also present. Larger mammals, such as the striped skunk (*Mephitis mephitis*), Virginia opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*) may also occur here.

Section 4. 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 3.0 above.

For purposes of this analysis, "special-status" plants are considered plant species that are:

- Listed under the Federal Endangered Species Act (FESA) as threatened, endangered, proposed threatened, proposed endangered, or a candidate species.
- Listed under the California Endangered Species Act (CESA) as threatened, endangered, rare, or a candidate species.
- Listed by the CNPS as CRPR 1A, 1B, 2, 3, or 4.

For purposes of this analysis, "special-status" animals are considered animal species that are:

- 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 4 depicts CNDDB records of special-status plant species in the general vicinity of the project site and Figure 5 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.

4.1 Special-Status Plant Species

A list of special-status plants with some potential for occurrence in the San Mateo vicinity was compiled using CNPS lists (CNPS 2018) and CNDDB records (CNDDB 2018) and reviewed for their potential to occur on the project site. Based on an analysis of the documented habitat requirements and occurrence records associated with these species, all were determined to be absent from the project site due to at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as

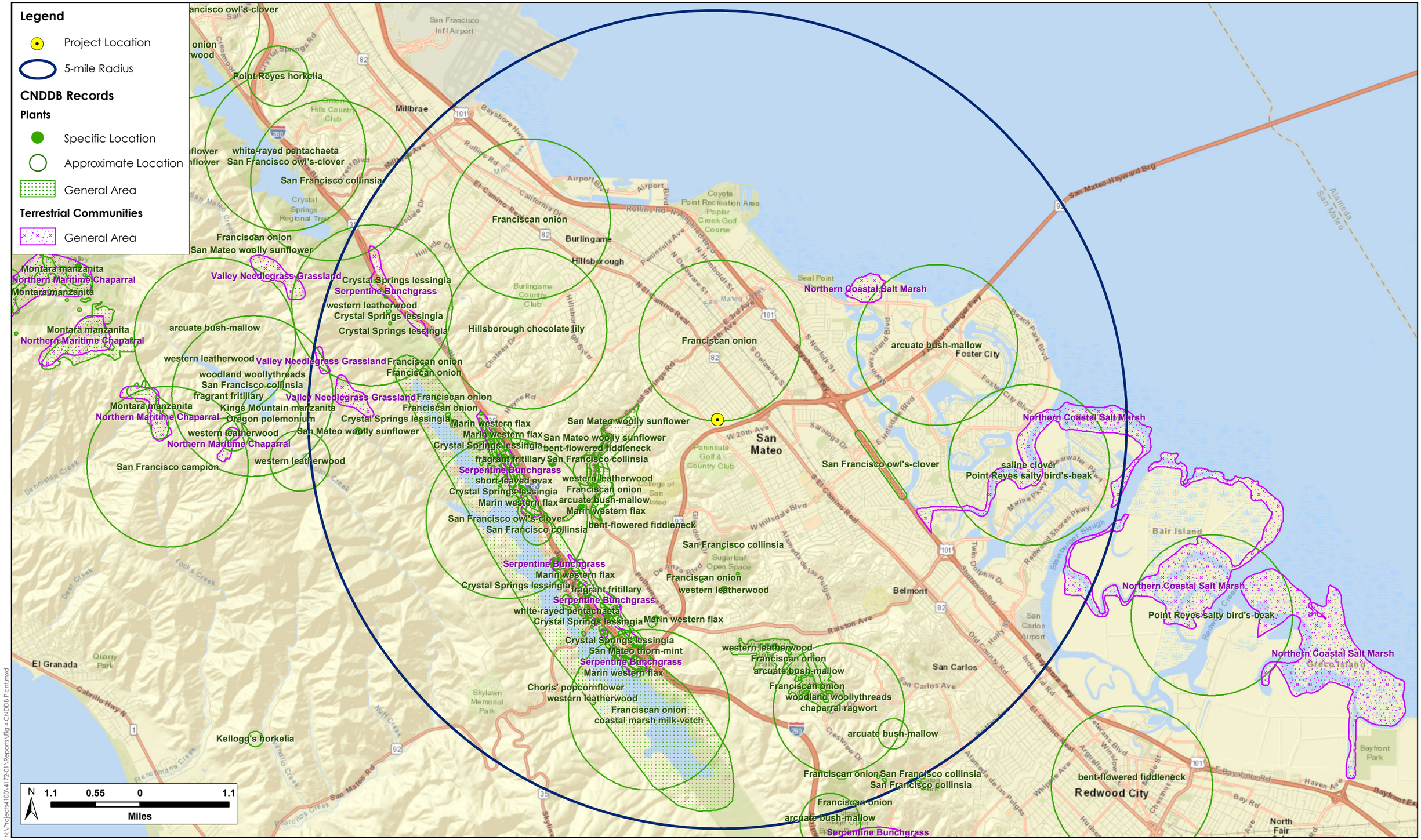

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Figure 4. CNDDB Plant Records

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Figure 5. CNDDB Animal Records

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serpentine soils; (3) the elevation range of the species is outside of the range on the project site; and/or (4) the species is considered extirpated from the project vicinity.

4.2 Special-Status Animal Species

A number of special-status animal species are known to occur in the project vicinity (CNDDB 2018; Figure 5). However, all of these species are determined to be absent from the project site because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat. Animal species considered for occurrence but rejected, as well as the reasons for their rejection, include the following (among others):

- The project site and vicinity lack 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 California red-legged frog (*Rana draytonii*), federally listed as threatened and a California species of concern, is known to occur in the project vicinity (CNDDB 2018). 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). The project site lacks aquatic habitat for this species. Moreover, critical habitat, which was most recently designated in March 2010 (USFWS 2010), is not present on the project site. For California red-legged frogs to be present on the site, potential breeding habitat must occur within the known dispersal distance for this species (2.0 mi), and there must be no barriers to dispersal between the breeding site and the project site.

  The nearest known, extant record of the California red-legged frog is from Crystal Springs Reservoir, which is located approximately 2.6 mi west of the project site and west of Interstate 280 (CNDDB 2018). Based on an analysis of aerial photographs, the nearest potentially suitable California red-legged frog breeding habitat occurs on a golf course approximately 0.3 mi to the southwest. However, this location, and all potential red-legged frog breeding habitat within dispersal distance of the project site, is separated from the site by extensive residential development and numerous streets and/or highways, impediments to overland dispersal of red-legged frogs to the project site. Thus, due to the lack of suitable breeding habitat for the red-legged frog on the project site, the distance from the project site to the nearest known red-legged frog occurrence, the low quality of the nearest potential breeding habitat and its separation from the site by residential development and roadways, California red-legged frogs are not expected to occur on the project site.

- 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 California tiger salamander. Thus, this species is not expected to occur on the project site.

- The San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), a federal and state listed endangered species, is known to occur in the project vicinity. The San Francisco garter snake is closely associated with the California red-legged frog; adult snakes feed primarily on adult frogs and occur in the same habitat. The nearest observation of the San Francisco garter snake to the project site is from 1987, when a single adult snake was observed near a pond in Sanchez Canyon, approximately 3 mi northwest of the project site (CNDDB 2018). Other observations of the San Francisco garter snake in the project vicinity come from aquatic habitats found within Crystal Springs Reservoir, 4 mi to the northwest and 3.5 mi to the southwest (CNDDB 2018). However, the project site is isolated from known San Francisco garter snake populations by impediments to dispersal such as highways, city streets, and residential developments; lacks suitable aquatic habitat and dense vegetative cover such as willows (*Salix* spp.), bulrushes (*Schoenoplectus* spp.), and cattails (*Typh*a spp.); and lacks breeding habitat for California red-legged frogs, its primary prey species. Thus, San Francisco garter snakes are not expected to occur on the project site.

- The western pond turtle (*Actinemys marmorata*), a California species of special concern, has been observed approximately 2.8 mi southwest of the project site along Crystal Springs Reservoir (CNDDB 2018). However, the project site lacks aquatic habitat for this species and, as described above for the California red-legged frog, is separated from the nearest suitable aquatic habitat by residential development and roadways, which serve as barriers to dispersal. Therefore, this species is not expected to occur on the project site.

- A single record of the burrowing owl (*Athene cunicularia*), a California species of special concern, is known from the project vicinity. One adult owl was observed during the winter months of 2000 and 2003 along the trail of the San Mateo Shoreline Park, located approximately 2.7 mi northeast of the project site (CNDDB 2018). However, no owls have been observed in this area during the breeding season (February 1 to August 31), and the owl observed was most likely a wintering individual. During the reconnaissance survey, no suitable burrowing owl habitat (i.e., open grassland with California ground squirrel burrows [*Otospermophilus beecheyi*]) was found on the project site. Furthermore, the nearest known extant population of breeding burrowing owls is found at the Shoreline at Mountain View Regional Park, over 15 mi southeast of the project site, separated by extensive residential and commercial development. Therefore, the burrowing owl is not expected to occur on the project site.

- The white-tailed kite (*Elanus leucurus*), a state fully-protected species, is known to breed in the project vicinity, using tall trees and shrubs for nesting and open grasslands, marshes, and ruderal habitats for foraging. Suitable nesting habitat (e.g., tall conifers, eucalyptus trees) for the white-tailed kite is present on and adjacent to the project site. However, no raptor nests were detected on the project site during a focused survey. In addition, no suitable foraging habitat for the species is found on the project site. Therefore, the white-tailed kite is not expected to occur on the project site.

- The project site and surrounding area lacks suitable habitat for the San Francisco dusky-footed woodrat, a California species of special concern, and no nests of this species were observed during a focused survey of the project site. Therefore, this species is determined to be absent.
- Historically, the pallid bat (*Antrozous pallidus*), a California species of special concern, was likely present in a number of locations throughout the project vicinity, but their populations have declined in recent decades. This species has been extirpated as a breeder from urban areas close to the Bay, as is the case in the project vicinity. No suitable roosting habitat is present on the project site or the surrounding area and no known maternity colonies are present on or adjacent to the project site. This species may forage over the project site on rare occasions, but it is not expected to reside or breed on the project site, to occur in large numbers, or otherwise to make substantial use of the project site.

4.3 Sensitive Natural Communities, Habitats, and Vegetation Alliances

Natural communities have been considered part of the Natural Heritage Conservation triad, along with plants and animals of conservation significance, since the state inception of the Natural Heritage Program in 1979. The CDFW determines the level of rarity and imperilment of vegetation types and tracks sensitive communities in its Rarefind database (CNDDB 2018). Global rankings (G) of natural communities reflect the overall condition (rarity and endangerment) of a habitat throughout its range, whereas state (S) rankings are a reflection of the condition of a habitat within California. Natural communities are defined using NatureServe's standard heritage program methodology as follows (CDFG 2007):

G1/S1: Less than 6 viable occurrences or less than 2,000 ac.

G2/S2: Between 6 and 20 occurrences or 2,000 to 10,000 ac.

G3/S3: Between 21 and 100 occurrences or 10,000 to 50,000 ac.

G4/S4: The community is apparently secure, but factors and threats exist to cause some concern.

G5/S4: The community is demonstrably secure to ineradicable due to being common throughout the world (for global rank) or the state of California (for state rank).

State rankings are further described by the following threat code extensions:

S1.1: Very threatened

S1.2: Threatened

S1.3: No current threats known

In addition to tracking sensitive natural communities, the CDFW also ranks vegetation alliances, defined by repeating patterns of plants across a landscape that reflect climate, soil, water, disturbance, and other environmental factors (Sawyer et al. 2009). If an alliance is marked G1-G3, all of the vegetation associations

within it will also be of high priority (CDFG 2007). The CDFW provides the Vegetation Classification and Mapping Program's (VegCAMP) currently accepted list of vegetation alliances and associations (CDFW 2018).

Impacts on 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). Furthermore, aquatic, wetland and riparian habitats are also protected under applicable federal, state, or local regulations, and are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS.

4.3.1 CDFW Sensitive Habitats

A query of sensitive habitats in Rarefind (CNDDB 2018) identified five sensitive habitats as occurring within the nine USGS quadrangles containing or surrounding the project site: serpentine bunchgrass grassland (Rank G2/S2.2), valley oak woodland (G3/S2.1), valley needlegrass grassland (G3/S3.1), northern maritime chaparral (G1/S1.2), and northern coastal salt marsh (Rank G3/S3.2). Serpentine bunchgrass occurs only on serpentine soils, which do not occur on the project site. Valley oak woodland is characterized by valley oak (*Quercus lobata*) trees which are not present on the project site. Valley needlegrass grassland is dominated by native perennial grasses, which are absent from the project site. Northern maritime chaparral is composed of several species of manzanitas, none of which occur on the project site. The last sensitive habitat type, northern coastal salt marsh, is described by Holland (1986) as occurring along sheltered inland margins of bays, often co-dominated by pickleweed (*Salicornia* spp.), cordgrass (*Spartina* spp.), and sometimes saltgrass (*Distichlis spicata*). None of these species was noted on the project site, thus this habitat type is also determined to be absent.

4.3.2 CDFW Sensitive Vegetation Alliances and Associations

CDFW sensitive alliances and associations are not present on the project site (CDFW 2018).

4.3.3 Sensitive Habitats (Waters of the U.S./State)

As described above, the reconnaissance survey of the project site did not identify any wetlands or other waters that would fall under the jurisdiction of the USACE (Waters of the U.S.), or under the jurisdiction of the RWQCB or CDFW (Waters of the State) on the project site.

Section 5. Impacts and Mitigation Measures

The State CEQA Guidelines provide direction for evaluating the impacts of projects on biological resources and determining which impacts will be significant. CEQA defines a "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." Under State CEQA Guidelines Section 15065, a project's impacts on biological resources are deemed significant if the project would:

- "substantially reduce the habitat of a fish or wildlife species"
- "cause a fish or wildlife population to drop below self-sustaining levels"
- "threaten to eliminate a plant or animal community"
- "reduce the number or restrict the range of a rare or endangered plant or animal"

In addition to the Section 15065 criteria that trigger mandatory findings of significance, Appendix G of State CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G 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 federally protected wetlands as defined by Section 404 of the Clean Water Act"

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"

The impact assessment below is structured based on the six significance criteria (A-F) listed above.

5.1 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 the exception of the pallid bat, which may forage over the area on rare occasions, the project site does not provide suitable foraging or breeding habitat for any special-status species. Further, due to the abundance of similar ruderal foraging habitat for pallid bats in the region, project impacts on pallid bat foraging habitat are not considered substantial. Thus, the proposed project would not result in a substantial adverse effect on any special-status species.

5.2 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Less than Significant)

5.2.1 Impacts on Riparian Habitat or Other Sensitive Natural Communities (No Impact)

No riparian habitats or other sensitive natural communities are present on or immediately adjacent to the project site, and thus none will be impacted by the project.

5.2.2 Impacts Caused by Introduction of Non-Native and Invasive Species (Less than Significant)

Invasive species can spread quickly and can be difficult to eradicate. Many non-native, invasive plant species produce seeds that germinate readily following disturbance. Further, disturbed areas are highly susceptible to colonization by non-native, invasive species that occur locally, or whose propagules are transported by personnel, vehicles, and other equipment.

Development undertaken because of the proposed project would result in a large portion of the site being subject to soil disturbance due to the construction of the new building and park facilities. Activities such as trampling, equipment staging, and vegetation removal are all factors that would also contribute to disturbance. However, the project would comply with the City of San Mateo's Municipal Code, Chapter 23.72.080, Section (a) (7), which states that the use of invasive plant species, such as those listed by the California Invasive Plant Council (Cal-IPC), is prohibited. Thus, project activities would not result in the introduction of invasive species onto the project site. In addition, areas developed as hardscape or maintained as landscaping following development would be expected to support significantly fewer weeds and weed seeds that could be transported off site to other areas. Therefore, the project would result in a less than significant impact due to the spread of non-native, invasive species.

5.3 **Impacts on Wetlands:** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (No Impact)

No wetlands or other waters of the U.S./state occur on, or immediately adjacent to, the project site. Thus, the project would result in no direct or indirect impacts on jurisdictional wetlands.

5.4 **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)

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).

All proposed project activities are located within an already developed footprint that is surrounded by existing development. Therefore, the project would not result in fragmentation of natural habitats. Further, the proposed project would include 56,789 ft^2 of vegetated open space. Thus, any common, urban adapted species that currently move through the project site would continue to be able to do so following project construction and 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.

Construction disturbance during the avian breeding season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests. Due to the absence of sensitive habitats from the project site, the habitats on the project site support only regionally common, urban-adapted breeding birds and support only a very small proportion of these species' regional populations. In addition, many birds are expected to continue to nest and forage on the project site after project construction is completed. These birds are habituated to disturbance related to the surrounding residential area and the adjacent Borel Middle School, east of the project site. The project incorporates trees, shrubs, and forbs into the landscape design, which will provide some food and structural resources for the common, urban-adapted birds of the area, as well as for migrants that may use the area during spring and fall migration. Therefore, project impacts on nesting and foraging birds that use the site, due to habitat impacts or disturbance of nesting birds, would not rise to the CEQA standard of having a substantial adverse effect, and these impacts would not constitute a significant impact on these species or their habitats under CEQA. However, all native bird species are protected from direct take by federal and state statutes. Therefore, we recommend that the following measures be implemented

to ensure that project activities comply with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code:

Measure 1. Avoidance. To the extent feasible, construction activities (or at least the commencement of such activities) should be scheduled to avoid the nesting season. If construction activities are scheduled to take place outside the nesting season, all impacts on nesting birds protected under the MBTA and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.

Measure 2. Preconstruction/Pre-disturbance Surveys. If it is not possible to schedule construction activities between September 1 and January 31 then preconstruction surveys for nesting birds should be conducted by a qualified ornithologist to ensure that no nests will be disturbed during project implementation. We recommend that these surveys be conducted no more than seven days prior to the initiation of construction activities. During this survey, the ornithologist will 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.

Measure 3. Buffers. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the ornithologist will determine the extent of a construction-free buffer zone to be established around the nest (typically 300 ft for raptors and 100 ft for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation.

Measure 4. Inhibition of Nesting. If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are scheduled to be removed by the project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation, and prevent the potential delay of the project due to the presence of active nests in these substrates.

5.5 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)

5.5.1 Impacts Related to Compliance with Municipal Code Chapter 13.52, Heritage Trees (Less than Significant)

Per the San Mateo Municipal Code Chapter 13.52, Heritage Trees, permits from the City's Director of Parks and Recreation are required for the removal of any trees that meet the definition of a heritage tree, defined as:

- Any bay (*Umbellularia californica*), buckeye (*Aesculus spp.*), oak (*Quercus* spp.), cedar (*Cedrus* spp.) or redwood (*Sequoia* spp.) tree that has a diameter of 10 inches or more measured at 48 inches above natural grade;

- Any tree or stand of trees designated by resolution of the City Council to be of special historical value or of significant community benefit;
- A stand of trees, the nature of which makes each dependent on the others for survival; and
- Any other tree with a trunk diameter of 16 inches or more, measured at 48 inches above natural grade.

The removal or pruning of trees protected by the City of San Mateo municipal code is considered potentially significant under CEQA. However, if any heritage trees are to be removed or pruned, the project would comply with the City's heritage tree ordinance, including obtaining a permit from the City, preparing a tree protection plan, and replacing any heritage trees removed as required by municipal code Chapter 13.52. Therefore, impacts related to conflict with local policies or ordinances protecting heritage trees would be less than significant.

5.6 Impact 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 site is not located within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any such documents.

5.7 Cumulative Impacts

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 San Mateo 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 by this project, could contribute to cumulative effects on special-status species. Other projects in the area include office/retail/commercial development, mixed use, and residential projects that could adversely affect these species.

The cumulative impact on biological resources resulting from the project in combination with other projects in the project area and larger 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; 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 City of San Mateo General Plan contains conservation measures that would benefit biological resources, as well as measures to avoid, minimize, and mitigate impacts on these resources. Further, the project

would implement a number of measures to reduce impacts on both common and special-status species, as described above. Thus, the project would not contribute to substantial cumulative effects on biological resources.

Section 6. References

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Assessment of Trees
at
Fire Station 25 (Proposed)
Northwest c/o Shafter Street & Borel Avenue (Undeveloped Lot)
San Mateo, California

Prepared for:

City of San Mateo Public Works Department
1949 Pacific Boulevard
San Mateo, CA 94403-1430

Site Visit:

Walter Levison, Consulting Arborist (WLCA)

5/1/2017

Report:

WLCA

5/2/2017

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1.0 Summary

Thirteen (13) protected-size trees proposed to be removed from the subject property were tagged as #1 through #13 and visually assessed by Walter Levison, Consulting Arborist (WLCA) on 5/1/2017. The following is a summary of existing tree conditions:

a. **Trees #1 through #9** are **Tasmanian blue gum eucalyptus** specimens planted in a small grove with a seating area within the grove. These trees are in poor to fair overall condition, and exhibit various issues such as twig and branch dieback through the canopies (assumed to be related to California's chronic drought conditions), canopy lopsidedness, trunk lean, splitout scars where branches and limbs broke out of the canopies, and in some cases narrow "bark inclusion" type fork attachments (see tree data below for more details).

   WLCA expects all nine of these trees to be removed due to conflicts with proposed new fire station construction related work.

   These trees are not valuable in terms of their appraised values and/or lumber salvage values.

b. **California buckeye #10** exhibits extensive dieback of the original central mainstem, but has maintained a large number of scaffold branches and other stems arising from the mother stem that are in good condition.

   The tree is in fair overall condition, and is expected to be removed due to conflicts between proposed new fire station work.

c. **Coast live oak #11** has a basal mainstem cross-section that extends slightly into the school property to the North. The tree arises as multiple codominant mainstems with very narrow attachment angles, extending southward in a completely lopsided manner.

   The tree is in good overall condition, with the unusual sprawling mainstem form somewhat downgrading the tree's numeric overall condition rating.

   This tree is proposed to be removed by the City due to expected site plan work conflicts.

d. **Coast live oak #12** is what is known as a "stump sprout tree" which is a multiple-mainstem sprout mass arising from a historical cut mother stump. The tree exhibits very good live twig and live foliar density. However, the overall condition rating was downgraded from good to fair, due to the structural issues visible in the lowermost few feet of the mainstems. Two mainstems split out from the stump sprout mass and where removed. The remaining mainstems extend east, west, and northward only. Exposure to increased sun from the south has caused sunscald damage to the lower trunk areas facing south, which then became infested by Sycamore bark moth larvae. The result is that the lower trunk areas are now compromised structurally and in terms of health, by the presence of necrotic (dead) tissue.

   These stump sprout oaks are very common along the peninsula, and one can only assume that most oaks were removed by ranchers, farmers, and others for firewood and other purposes in the 19th and 20th centuries.

   This tree will need to be removed due to its structural issues, and due to conflicts with proposed site plan work.

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e. **Coast live oak #13** is a street tree in good overall condition. The tree exhibits a lopsided canopy that extends southward over both the Borel Avenue sidewalk and the Borel ashalt roadway itself (see images below in this report). The tree is perched on a well-drained section of slope, and is a very good candidate for retention. No pruning has occurred on this tree other than some crown raising to maintain airspace above the sidewalk, and the live crown ratio of this tree is therefore very good.

   Given its position in the landscape and its overall condition rating, this tree would be an excellent native oak specimen to retain. However, it is expected to be removed due to site plan work conflicts.

2.0 Assignment & Background

The author Walter Levison Consulting Arborist (WLCA) was retained by City of San Mateo Public Works Staff to prepare a formal written arborist report with landscape unit value calculation for trees within the area proposed to be developed with a new fire station known as “Station 25”.

WLCA tagged the trees as #1 through #13 using racetrack shaped aluminum numbered tags affixed to a mainstem at eye level.

The trees are noted by number on an attached tree location map markup below in this report. The sheet used for this purpose was an aerial photo and site plan mockup provided by Staff.

Tree data are assembled below in the report body.

Trees mainstems were measured at 48 inches above grade (standard San Mateo measuring height) using a forester’s D-tape that converts actual trunk circumference into diameter inches and tenths of inches.

Tree heights were determined using a Nikon forestry pro 550 digital hypsometer.

Tree canopy spreads were estimated visually.

Tree protection and maintenance recommendations are not included in this study, due to the proposed site plan which will require removal of all thirteen trees from the landscape.

3.0 Tree Data

Tree #1

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48” Above Grade: 42.1”
Height: 100 feet
Spread: 35 feet
Health Rating: 75%
Structural Rating: 55%
Overall Condition Rating: 61% Fair

Canopy lopsided north. Twig dieback throughout. Two codominant mainstems fork at 18 feet with a wide fork attachment angle.

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Tree #2

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 30.0"
Height: 100 feet
Spread: 30 feet
Health Rating: 70%
Structural Rating: 60%
Overall Condition Rating: 65% Fair

Canopy lopsided west. Trunk leans slightly west.

Tree #3

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 37.9"
Height: 80 feet
Spread: 35 feet
Health Rating: 50%
Structural Rating: 45%
Overall Condition Rating: 47% Poor

Canopy lopsided west. Trunk leans west.

Twig and branch dieback throughout, up to three inches each.

Tree #4

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 26.9"
Height: 45 feet
Spread: 70 feet
Health Rating: 35%
Structural Rating: 40%
Overall Condition Rating: 40% Poor

Canopy lopsided south. Stems all lean south.

Minor twig dieback.

A scaffold limb has developed an unusual bark inclusion type fork between 6 and 17 feet above grade (structural defect).

Tree #5

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 54.4"
Height: 100 feet
Spread: 65 feet
Health Rating: 60%
Structural Rating: 65%
Overall Condition Rating: 63% Fair

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Minor twig dieback.

Canopy lopsided south. Trunk leans south.

Two codominant mainstems fork at 5.0 feet above grade with a normal wide attachment angle.

Tree #6

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 40.0"
Height: 95 feet
Spread: 30 feet
Health Rating: 50%
Structural Rating: 50%
Overall Condition Rating: 50% Fair

Canopy lopsided south.

Branches up to three inches diameter each are dying throughout the canopy, including the uppermost "apical" portion of the canopy.

Tree #7

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 45.2"
Height: 90 feet
Spread: 30 feet
Health Rating: 40%
Structural Rating: 30%
Overall Condition Rating: 35% Poor

Extensive limb splitout wounds evident throughout canopy.

Lopsided south. Trunk leans south.

Codominant mainstems fork with a normal wide attachment at 10 feet.

Tree #8

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 46.8"
Height: 95 feet
Spread: 35 feet
Health Rating: 25%
Structural Rating: 30%
Overall Condition Rating: 30% Poor

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Tree #9

Tasmanian Blue Gum Eucalyptus (*Eucalyptus globulus*)
Diameter at 48" Above Grade: 27.4"
Height: 85 feet
Spread: 25 feet
Health Rating: 60%
Structural Rating: 50%
Overall Condition Rating: 55% Fair

Vertical growth is impeded by presence of the tree #8 canopy.

Tree #10

California buckeye (*Aesculus california*)
Diameter at 48" Above Grade: 11.5/5/5/5/5" etc.
Height: 13 feet
Spread: 30 feet
Health Rating: 55%
Structural Rating: 55%
Overall Condition Rating: 55% Fair

The original largest diameter mainstem (vertical) has declined and died back (i.e. "retrenchment"), leaving a matrix of remnant scaffold limbs and a cluster of sprouts arising from the basal trunk area as the new canopy of this now lower-profile tree.

Tree #11

Coast Live Oak (*Quercus agrifolia*)
Diameter at 48" Above Grade: 12/10/8/6/6"
Height: 20 feet
Spread: 30 feet
Health Rating: 85%
Structural Rating: 65%
Overall Condition Rating: 73% Good

Codominant mainstems fork at grade with bark inclusion type narrow attachment angles.

The root system and part of the basal trunk are growing on school property to the north of the lot. This may mean that the tree is now partially owned by the school district.

The mainstems sprawl along grade to the south at an extreme angle (near-horizontal).

Tree #12

Coast Live Oak (*Quercus agrifolia*)
Diameter at 48" Above Grade: 15.4/14.6"
Height: 30 feet
Spread: 45 feet
Health Rating: 80%
Structural Rating: 45%
Overall Condition Rating: 55% Fair

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This tree is a phoenix “stump sprout” tree that arose from a historical cut stump.

The tree has multiple mainstems, two of which broke out from the south side, leaving three remaining to the north, east, and west. The added sun exposure as a result of the south side stems breaking out has caused sunscald damage on the south sides of the lower maintems surfaces. Sycamore bark moth larvae feeding is occurring throughout the sunscald damaged areas (see images below in this report). The result is significant tissue necrosis in some lower mainstem areas.

Tree #13

Coast Live Oak (*Quercus agrifolia*)
Diameter at 48” Above Grade: 13.4”
Height: 20 feet
Spread: 25 feet
Health Rating: 90%
Structural Rating: 85%
Overall Condition Rating: 89% Good

Street tree. Lopsided south over sidewalk and Borel Ave. Very little pruning has been performed on this tree, leaving the original dense canopy intact.

4.0 Observations & Discussion

Trees #1 through #9

Tasmanian blue gum eucalyptus (*E. globulus*) is a tree species with low desirability due to its excessive height, and high density limbs that have a relatively high likelihood of splitout. The site specimens of this species are in poor to fair condition, and exhibit twig and branch dieback, assumedly due to the extended California drought conditions that have been present for four or five years until this past winter 2016/17.

Some of the specimens at this site also exhibit bark inclusion type forks which are narrow-angle attachment points that have a higher than average likelihood of splitting out when compared to normal, wide, saddle-shaped forks.

Buckeye #10

This tree is in fair overall condition. The tree appears to have declined and then retrenched itself into a lower, stouter profile with basal sprouts and scaffold limbs maintaining moderate live twig density.

Trees #11 through #13

Coast live oak (*Quercus agrifolia*) is a native evergreen “red oak group” species that performs well in the Bay Area. The tree has in the last decade or more been affected by sudden oak death (SOD) which has killed off many of the older, larger specimens in Marin, San Mateo, and other Counties in California.

Tree #11 is an unusual sprawling specimen that is splayed along the ground, with stems extended only to the south. This tree may be partially owned by the school to the north due to its mainstem cross section extending slightly into the boundary fence area (ownership not verified).

Tree #12 is a stump sprout tree with various structural issues that make it a poor choice for retention (all of the site trees are proposed to be removed per WLCA’s discussion with Staff).

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Tree #13 is a street tree in good overall condition, and would be the most desirable specimen on the site to be retained, if proposed site plan work did not conflict with its extensive horizontal root system.

5.0 Landscape Unit (LU) Value Calculation

The following is WLCA's calculation of landscape unit value for each site tree per City of San Mateo official protocols. Note that for LU value calculation purposes, WLCA only used the single largest diameter mainstem of each multi-stem tree (per WLCA's prior discussion with the contract city arborist). These multi-stem trees are noted in yellow highlight:

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5/2/2017

Tree Evaluation Schedule

Northwest c/o Shafter Street & Borel Avenue
LU Values per City of San Mateo Protocol

Tree #	Species %	X Condition %	X Location %	Divided by 0.35	X Dia. Inches @48" above grade	X Buildable Area Factor (1.00 or 0.70)	X Heritage Factor (1.25 or 1.00)	LU Value
1	0.4	0.61	0.63		42.1	1	1.25	23.1
2	0.4	0.65	0.63		30	1	1.25	17.6
3	0.4	0.47	0.63		37.9	1	1.25	16.0
4	0.4	0.4	0.56		26.9	1	1.25	8.6
5	0.4	0.63	0.63		54.4	1	1.25	30.8
6	0.4	0.5	0.63		40	1	1.25	18.0
7	0.4	0.35	0.56		45.2	1	1.25	12.7
8	0.4	0.3	0.5		46.8	1	1.25	10.0
9	0.4	0.55	0.63		27.4	1	1.25	13.6
10	0.8	0.55	0.6		11.5	1	1.25	10.8
11	1	0.73	0.7		12	1	1.25	21.9
12	1	0.55	0.73		17.5	1	1.25	25.1
13	1	0.89	0.7		13.4	1	1.25	29.8
							Total LU's	**238.0**

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Notes:

1. For trees #10, 11, and #12 highlighted in yellow above, only the single largest mainstem of each tree was used for calculation of "diameter", per WLCA's communication with the San Mateo contract city arborist in the past. See the tree data in this report for actual multiple mainstem diameters for these four trees.

2. Definition of "heritage tree" per City of San Mateo for the purposes of this assignment was assumed to mean trees exhibiting a single stem of min. 10" diameter (natives) or min. 16" diameter (non-natives).

Trees with multiple stems totalling those threshold diameters were assumed to be non-heritage designates. Heritage trees are given a heritage factor of 1.25, while non-heritage trees are given a heritage factor of 1.0.

3. Species ratings are per the WCISA *Species Classification and Group Assignment* publication, version 2004. This 2004 edition has not been updated.

4. All trees in this study were assumed to be "inside the buildable area" and were therefore given buildable area factors of 1.0.

6.0 Tree Ordinance / City of San Mateo, California

Per the City tree ordinance, oak species, sequoia species, bays, and buckeyes are protected at the 10 inch diameter threshold, and all other species are protected at the 16 inch diameter threshold, when measured at 48 inches above natural grade.

Per these definitions, all thirteen (13) of the survey trees are protected as heritage trees.

7.0 Tree Protection and Maintenance Recommendations

(Tree protection and maintenance recommendations are not included in this report, at the request of City Staff who have informed WLCA that all thirteen study trees are proposed to be removed due to direct conflicts with the proposed new site plan layout for Fire Station 25 construction).

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8.0 Consultant's Qualifications

- Contract City Arborist to the City of Belmont Department of Planning and Community Development
  5/99-present

- Contract Town Arborist, Town of Los Gatos, California Planning and Community Development
  11/15-present

- Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

- ISA Qualified Tree Risk Assessor

- ISA Qualified Tree Risk Assessor Course, Palo Alto, CA. 2013

- PNW-ISA Certified Tree Risk Assessor Course graduate, 2009
  Vancouver, B.C., Canada

- ASCA Registered Consulting Arborist (RCA) #401

- Millbrae Community Preservation Commission (Tree Board)
  2001-2006

- ASCA Arboriculture Consulting Academy graduate, class of 2000

- ISA Certified Arborist (CA) #WC-3172

- Associate Consulting Arborist
  Barrie D. Coate and Associates
  4/99-8/99

- U.S. Peace Corps Soil and Water Conservation Extension Agent (Agroforestry, etc.)
  Chiangmai Province, Thailand 1991-1993

- B.A. Environmental Studies/Soil and Water Resources
  UC Santa Cruz, Santa Cruz, California 1990

  Chancellor's Award, 1990

  Wildlands Studies Joint U.S./China Field Ecology Study (12 Weeks). 1989
  Xujiaba Forest Reserve, Yunnan, China

  Rocky Mountain Wilderness Field Ecology Study (5 Weeks). 1986
  UC Santa Cruz Extension

(My full curriculum vitae is available upon request)

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9.0 Assumptions and Limiting Conditions

Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised and evaluated as through free and clean, under responsible ownership and competent management.

It is assumed that any property is not in violation of any applicable codes, ordinance, statutes, or other government regulations.

Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Unless required by law otherwise, the possession of this report or a copy thereof does not imply right of publication or use for any other purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

Unless required by law otherwise, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Sketches, drawings, and photographs in this report, being intended for visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by engineers, architects, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Walter Levison to the sufficiency or accuracy of said information.

Unless expressed otherwise:

- information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and
- the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Loss or alteration of any part of this report invalidates the entire report.

Arborist Disclosure Statement:

Arborists are tree specialists who use their education, knowledge, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Tree are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborist cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate the trees.

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10.0 Certification

I hereby certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signature of Consultant

11.0 Digital Images

Tag #	Image	Tag #	Image
1-9		10	
11		12	

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Tag #	Image	Tag #	Image
12		12	
13			

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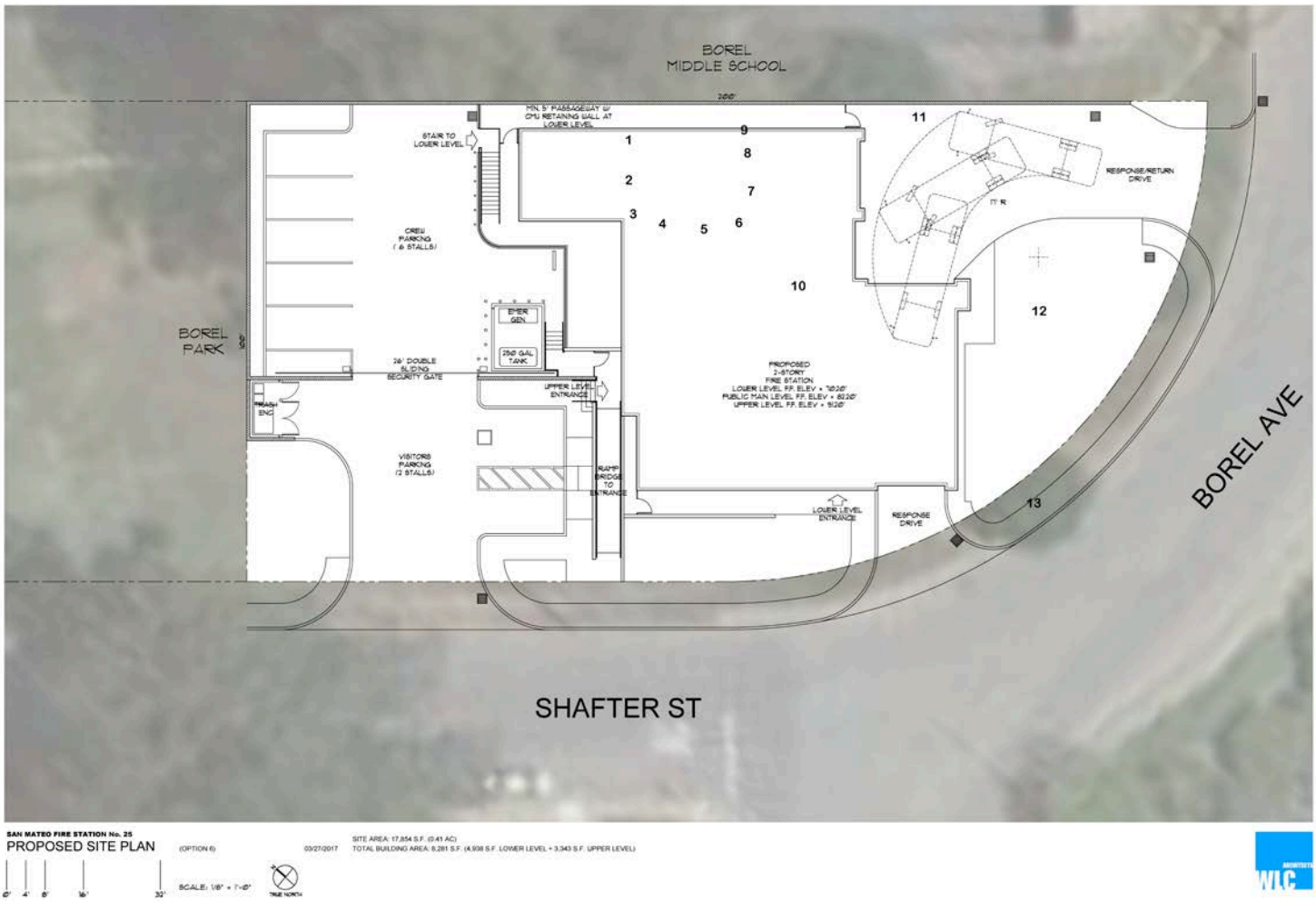
12.0 Tree Location Map Mark-Up (WLCA)



Trees are noted by tag numbers #1 through #13 on the above site plan mockup provided by City Staff to WLCA. WLCA inserted tree tag numbers directly over the assumed tree trunk plot locations. Tree plot locations are “rough approximate” only, and are not accurate.

“Up Map” is approximate true north.

Magnetic north points roughly toward the upper left hand corner of the image.

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