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SAN LUIS OBISPO

November 16, 2021

Michael Folk  
55 Brookdale, LLC  
P.O. Box 554  
Corte Madera, California 94925

Subject: Biological Resources Survey Results for 55 Brookdale Avenue, San Rafael, California

Dear Mr. Folk:

At your request, LSA conducted a biological resources reconnaissance survey of the property located at 55 Brookdale Avenue in San Rafael, Marin County. This report was prepared to address the potential presence of sensitive biological resources that may be impacted by the proposed project. Specifically, the purpose of the survey was to determine whether sensitive biological communities and/or wetlands, potential wildlife movement corridors, or special-status plant and/or animal species are present at the site. This report provides a discussion of potential impacts on biological resources from the proposed project and provides recommendations for avoidance and minimization measures to reduce impacts on sensitive resources.

## PROJECT LOCATION AND DESCRIPTION

The proposed project site is located at 55 Brookdale Avenue in the City of San Rafael, Marin County, California (Figure 1). The project consists of the construction of two new residential apartment buildings; three residential “garden houses”; an outdoor common use area; and parking structures, including five car lifts (Figure 2). Residential development surrounds the project to the north, west, and south. Railroad tracks and Highway 101 are located to the east.

## METHODS

LSA Senior Biologist Jennifer Roth conducted a reconnaissance-level survey for biological resources at the study site on October 22, 2021. Ms. Roth spent approximately 1 hour at the project site. During the survey, Ms. Roth recorded observations in a field notebook and used binoculars (10x40) to aid in the identification of wildlife and to search for raptor nests in the surrounding area.

Prior to conducting this fieldwork, Ms. Roth compiled a list of special-status plant and animal species that could occur in the project vicinity. The list was based on records in the California Natural Diversity Database (CNDDDB) within 5 miles of the project site (CDFW 2021), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California for the San Rafael USGS 7.5-minute quadrangle (CNPS 2021), and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database (USFWS 2021).

For the purposes of this assessment, special-status species were defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA).
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act (CESA).
- Plant species with a California Rare Plant Rank (CRPR) status of 1A, 1B, 2, and 3 as included in the CNPS Inventory of Rare and Endangered Vascular Plants of California.
- Wildlife species designated as Species of Special Concern by the California Department of Fish and Wildlife (CDFW).
- Species that meet the definition of rare, threatened, or endangered under Section 15380 of the California Environmental Quality Act (CEQA) guidelines.

## RESULTS

The project site is an approximately 0.25-acre parcel located on Brookdale Avenue in the City of San Rafael in Marin County. The parcel is surrounded by residential development to the north, west, and south, and by railroad tracks and Highway 101 to the east. Mountain Park Open Space occurs approximately 0.20 mile to the west.

### Topography and Soils

The site is approximately 120 feet in elevation. The majority of the site is relatively flat but slopes upward sharply at the western end. The soils are mapped as Xerorthents-Urban land complex, 0 to 9 percent slopes (USDA NRCS 2021). Xerorthents areas have typically been cut or filled and/or extensively graded. Fill areas are composed of varying amounts of soil material, gravel, and other solid materials (USDA SCS 1985). Urban land consists of areas covered by roads, driveways, parking lots, and other structures.

### Vegetation

Vegetation at the project site is dominated by large California bay (*Umbellularia californica*) trees. There are also coast live oak (*Quercus agrifolia*) and California buckeye (*Aesculus californica*) trees on the west side of the parcel. The understory is largely non-native, weedy vegetation, primarily Himalayan blackberry (*Rubus armeniacus*) and English ivy (*Hedera helix*).

### Wildlife

Wildlife use of the site is likely restricted to species that are well adapted to urbanized environments. The site is surrounded by residential development to the north, south, and west; railroad tracks, a sound wall, and Highway 101 run parallel to each other approximately 70 feet to the east of the project site. All these factors isolate the site from any natural habitats, greatly limiting its accessibility to wildlife. However, large trees on the project site do provide habitat for

nesting birds. Wildlife observed within or near the project site during LSA's survey consisted of a red-shouldered hawk (*Buteo lineatus*) and American crow (*Corvus brachyrhynchos*).

## POTENTIAL IMPACTS TO BIOLOGICAL RESOURCES

### Special-Status Species

The CNDDDB, CNPS, and USFWS database searches provided occurrence records for 39 special-status plants that are known to occur near the project site (Table A). However, all of these species are unlikely to occur on the project site due to lack of suitable habitat and/or the highly disturbed nature of the site.

In addition, database searches provided occurrence records for 22 special-status animal species that are known to occur in the vicinity of the project site (Table A). These species do not have the potential to occur on the project site due to lack of suitable habitat, distance from known occurrences, and/or barriers to wildlife movement (roads and development) between the site and known occurrences.

### Critical Habitat

There is no Critical Habitat mapped at the project site.

### Protected Trees

The project will include the removal of six to eight large native trees (California bay, coast live oak, California buckeye). Some of these trees are situated close enough to the right-of-way to possibly qualify as street trees protected under City of San Rafael ordinance.

### Sensitive Natural Communities

The CNDDDB identified two sensitive natural communities in the vicinity of the project site: coastal brackish marsh and northern coastal salt marsh. Neither of these natural communities occurs on or adjacent to the project site. No wetlands or riparian habitat are present on or adjacent to the site.

### Potentially Jurisdictional Waters

No potentially jurisdictional waters were observed on site.

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**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
<b>Plants</b>			
Baker's navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	--/--/1B	Mesic areas within cismontane woodland, lower montane coniferous forest, and valley and foothill grassland; meadows and seeps; vernal pools. Blooms: Apr-Jul Elevation: 16-5,709 feet	There is no suitable habitat for this species at the project site.
Bent-flowered fiddleneck <i>Amsinckia lunaris</i>	--/--/1B	Valley and foothill grassland, coastal bluff scrub, cismontane woodland. Blooms: Mar-Jun Elevation: 9-1,640 feet	Marginally suitable habitat on site, however due to the disturbed site conditions, this species is highly unlikely to occur.
Congested-headed hayfield tarplant <i>Hemizonia congesta</i> ssp. <i>congesta</i>	--/--/1B	Valley and foothill grassland (sometimes roadsides). Blooms: Apr-Nov Elevation: 66-1,837 feet	There is no suitable habitat for this species at the project site.
Dark-eyed gilia <i>Gilia millefoliata</i>	--/--/1B	Coastal dunes. Blooms: Apr-Jul	There is no suitable habitat for this species at the project site.
Diablo helianthella <i>Helianthella castanea</i>	--/--/1B	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland, usually within rocky azonal soils. Blooms: Apr-Jun Elevation: 197-984 feet	There is no suitable habitat for this species at the project site, and this species generally occurs at higher elevations.
Fragrant fritillary <i>Fritillaria liliacea</i>	--/--/1B	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine soils. Blooms: Feb-Apr Elevation: 1-1,345 feet	Marginally suitable habitat on site, however due to the disturbed site conditions, this species is highly unlikely to occur.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Hairless popcornflower <i>Plagiobothrys glaber</i>	--/--/1A	Coastal salt marshes, alkaline meadows, and seeps. Blooms: Mar-May	There is no suitable habitat for this species at the project site.
Koch's cord moss <i>Entosthodon kochii</i>	--/--/1B	Cismontane woodland (soil). Elevation: 590-3,280 ft	Marginally suitable habitat on site, however due to the disturbed site conditions, this species is highly unlikely to occur.
Marsh microseris <i>Microseris paludosa</i>	--/--/1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. Blooms: Apr-Jun Elevation: 16-1,165 feet	There is no suitable habitat for this species at the project site.
Marin County navarretia <i>Navarretia rosulata</i>	--/--/1B	Rocky areas in chaparral and Sargent cypress forest. A strict serpentine endemic. Blooms: May – Jul Elevation: 656-2,083 ft	There is no suitable habitat for this species at the project site.
Marin dwarf-flax <i>Hesperolinon congestum</i>	FT/ST/1B	Serpentine barrens and serpentine grassland and chaparral. Blooms: Apr-Jul	There is no suitable habitat for this species at the project site.
Marin knotweed <i>Polygonum marinense</i>	--/--/3	Coastal salt/brackish marshes and swamps. Blooms: (Apr) May-Aug (Oct) Elevation: 0-35 ft	There is no suitable habitat for this species at the project site.
Marin manzanita <i>Arctostaphylos virgata</i>	--/--/1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, North Coast coniferous forest on sandstone, or granitic substrates. Blooms: Jan-Mar	There is no suitable habitat for this species at the project site.
Marin checker lily <i>Fritillaria lanceolata</i> var. <i>tristulis</i>	--/--/1B	Coastal bluff scrub, coastal prairie, and coastal scrub. Blooms: Feb-May Elevation: 50-490 ft	There is no suitable habitat for this species at the project site.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Minute pocket moss <i>Fissidens pauperculus</i>	--/--/1B	Moss growing on damp soil in coniferous forests along the coast; in dry streambeds and stream banks.	There is no suitable habitat for this species at the project site.
Mount Burdell Jewelflower <i>Streptanthus anomalus</i>	--/--/1B	Openings in cismontane woodland. Associated with serpentinite. Blooms: May-Jun Elevation: 165-490 ft	There is no suitable habitat for this species at the project site, and this species generally occurs at higher elevations.
Mt. Tamalpais bristly jewelflower <i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i>	--/--/1B	Serpentine slopes. Blooms: May-Jul (Aug rarely)	There is no suitable habitat for this species at the project site.
Mt. Tamalpais manzanita <i>Arctostaphylos montana</i> ssp. <i>montana</i>	--/--/1B	Chaparral, valley and foothill grassland; serpentinite, rocky soils. Blooms: Feb-Apr	There is no suitable habitat for this species at the project site.
Mt. Tamalpais thistle <i>Cirsium hydrophilum</i> var. <i>vaseyi</i>	--/--/1B	Serpentine seeps and streams in chaparral and woodland. Blooms: May-Aug	There is no suitable habitat for this species at the project site.
Napa false indigo <i>Amorpha californica</i> var. <i>napensis</i>	--/--/1B	Openings in broadleafed upland forest, chaparral, cismontane woodland. Blooms: Apr-Jul Elevation: 394-6,562 feet	There is no suitable habitat for this species at the project site, and this species generally occurs at higher elevations.
North Coast Semaphore Grass <i>Pleuropogon hooverianus</i>	--/ST/1B	Open, mesic areas in broadleafed upland forest, meadows and seeps, North Coast coniferous forest. Blooms: Apr-Jun Elevation: 33-2,201 feet	There is no suitable habitat for this species at the project site.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Pitkin Marsh lily <i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	FE/SE/1B	Freshwater marshes with sandy soils. Only two known extant populations, both in Sonoma County. Blooms: Jun-Jul Elevation: 115-215 ft	There is no suitable habitat for this species at the project site, and the range of this species is very restricted.
Point Reyes checkerbloom <i>Sidalcea calycosa</i> ssp. <i>rhizomata</i>	--/--/1B	Freshwater marshes near the coast. Blooms: Apr-Sep	There is no suitable habitat for this species at the project site.
Point Reyes salty bird's-beak <i>Chloropyron maritimum</i> ssp. <i>palustre</i>	--/--/1B	Marshes and swamps (coastal salt), usually in coastal salt marsh with <i>Salicornia</i> , <i>Distichlis</i> , <i>Jaumea</i> and <i>Spartina</i> . Blooms: Jun-Oct Elevation: 0-33 ft	There is no suitable habitat for this species at the project site.
San Francisco Bay spineflower <i>Chorizanthe cuspidata</i> var. <i>cuspidate</i>	--/--/1B	Sandy soil on terraces and slopes in coastal bluff, coastal dunes, coastal scrub, and coastal prairie habitat. Blooms: Apr-Jul (Aug rarely).	There is no suitable habitat for this species at the project site.
Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	--/--/1B	Open areas within broadleaved upland forest, closed cone coniferous forest, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland, sometimes serpentinite. Blooms: Apr-May Elevation: 35-1,640 ft	Marginally suitable habitat on site, however due to the disturbed site conditions, this species is highly unlikely to occur.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT/SE/1B	Light, sandy soil or sandy clay, often with non-natives in coastal prairie and grasslands. Blooms: Jun-Oct	There is no suitable habitat for this species at the project site.
Small groundcone <i>Kopsiopsis hookeri</i>	--/--/2B	Open woods, shrubby places, generally on <i>Gaultheria shallon</i> . Blooms: Apr-Aug	There is no suitable habitat for this species at the project site.



**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Soft salty bird’s-beak <i>Chloropyron molle</i> ssp. <i>molle</i>		Coastal marshes and swamps. Blooms: Jul-Nov Elevation: 0-3 m	There is no suitable habitat for this species at the project site.
Tamalpais jewelflower <i>Streptanthus batrachopus</i>	--/--/1B	Closed-cone coniferous forest, chaparral, talus serpentine outcrops. Blooms: Apr-Jun	There is no suitable habitat for this species at the project site.
Tamalpais lessingia <i>Lessingia micradenia</i> var. <i>microdenia</i>	--/--/1B	Usually on serpentine, in serpentine grassland or chaparral, often on roadsides. Blooms: (Jun rarely) Jul-Oct	There is no suitable habitat for this species at the project site.
Tamalpais oak <i>Quercus parvula</i> var. <i>tamalpaisensis</i>	--/--/1B	Lower montane coniferous forest.	There is no suitable habitat for this species at the project site.
Thin-lobed horkelia <i>Horkelia tenuiloba</i>	--/--/1B	Mesic openings in broadleafed upland forest, chaparral, and valley and foothill grassland. Sandy soils. Blooms: May-Jul Elevation: 164-1,640 ft	There is no suitable habitat for this species at the project site.
Thurber’s reed grass <i>Calamagrostis crassiglumis</i>	--/--/2B	Freshwater marshes and swamps, mesic areas in coastal scrub. Blooms: May-Aug Elevation: 33-197 ft	There is no suitable habitat for this species at the project site.
Tiberon buckwheat <i>Eriogonum luteolum</i> var. <i>caninum</i>	--/--/1B	Serpentine soils; sandy to gravelly sites. Blooms: May-Sep	There is no suitable habitat for this species at the project site.
Two-fork clover <i>Trifolium amoenum</i>	FE/--/1B	Coastal bluff scrub, valley and foothill grassland. Blooms: Apr-Jun Elevation: 16-1,362 feet	There is no suitable habitat for this species at the project site.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Western leatherwood <i>Dirca occidentalis</i>	--/--/1B	Mesic areas within broadleaved upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, North Coast coniferous forest, riparian forest, and riparian woodland. Blooms: Jan-Mar (Apr) Elevation: 80-1,395 ft	Marginally suitable habitat on site, however due to the disturbed site conditions, this species is highly unlikely to occur.
White-rayed pentachaeta <i>Pentachaeta bellidiflora</i>	FE/CE/1B	Cismontane woodland, valley and foothill grassland on open, dry rocky slopes and grassy areas, often on serpentinite. Blooms: Mar-May	There is no suitable habitat for this species at the project site.
Woolly-headed lessingia <i>Lessingia hololeuca</i>	--/--/3	Often found in dry grassy areas such as fields and roadside ditches in broadleaved upland forest, coastal scrub, chaparral, lower montane coniferous forest, and valley and foothill grassland. Affinity for alkaline clay or serpentine soils Blooms: Jun-Oct Elevation: 49-1,000 ft	There is no suitable habitat for this species at the project site.
<b>Invertebrates</b>			
Monarch butterfly <i>Danaus plexippus</i>	FC/--/--	Adults migrate from Mexico to Canada, breeding in the United States and Canada during summer and overwintering in Mexico. One population of monarchs west of the Rocky Mountains overwinters on the California coast, typically in eucalyptus, pine, cypress, and sycamore trees. Adults feed on nectar from a variety of flowers. Monarch caterpillars rely on milkweeds as host plants.	This species is unlikely to occur in large numbers at the project site. San Rafael is not on the Xerces Society list of priority overwintering sites; all Marin County sites are along the immediate coast (Pelton et al. 2016). There were no milkweed plants observed on site.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
<b>Fish</b>			
Delta smelt <i>Hypomesus transpacificus</i>	FT/SE/--	Sacramento-San Joaquin Delta at salinities less than 2 ppm. Generally not found in smaller freshwater streams.	There is no suitable habitat for this species at the project site.
Tidewater goby	FE/SSC/--	Brackish shallow lagoons and lower stream reaches where water is fairly still but not stagnant.	There is no suitable habitat for this species at the project site.
Sacramento splittail	--/--/SSC	Estuarine environments with salinities between 10 and 18 ppt. Move upstream to spawn from late February and early July.	There is no suitable habitat for this species at the project site.
<b>Amphibians</b>			
California red-legged frog <i>Rana draytonii</i>	FT/--/SSC	Freshwater marshes, streams, ponds, and other semi-permanent water sources. Suitable breeding ponds and pools usually have a minimum depth of 20 inches, and must contain water during the entire development period for eggs and tadpoles (typically March through August).	There is no suitable habitat for this species at the project site and no CNDDB records within 5 miles of the project site.
Foothill yellow-legged frog <i>Rana boylei</i>	--/SC/SSC	Streams with rocky or cobbly substrate that flow at least to May.	There is no suitable habitat for this species at the project site or in the surrounding area.
California giant salamander <i>Dicamptodon ensatus</i>	--/SSC/--	Wet, coastal forests in or near clear, cold, permanent and semi-permanent streams and seepages.	There is no suitable habitat for this species at the project site. The nearest CNDDB records are along Lucas Valley Road, 3.08 and 4.99 miles from the project site.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
<b>Reptiles</b>			
Western pond turtle <i>Emys marmorata</i>	--/--/SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation.	There is no suitable habitat for this species at the project site.
Green sea turtle <i>Chelonia mydas</i>	FT/--/--	Bays or near protected shores, especially near seagrass beds. Nests on beaches. Rarely seen along the California Coast.	There is no suitable habitat for this species at the project site; it only occurs in oceanic waters and adjacent bays.
<b>Birds</b>			
California black rail <i>Laterallus jamaicensis coturniculus</i>	FT/CFP/--	Salt marshes bordering larger bays, also found in brackish and freshwater marshes.	There is no suitable habitat for this species at the project site.
California Ridgeway's rail <i>Rallus obsoletus obsoletus</i>	FE/SE/CFP	Saltwater and brackish marshes often crossed by tidal sloughs in San Francisco Bay. Closely associated with pickleweed.	There is no suitable habitat for this species at the project site.
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/--/--	Sandy ocean and estuarine beaches. Also nests on salt pond levees.	There is no suitable habitat for this species at the project site.
California least tern <i>Sternula antillarum browni</i>	FE/SE/CFP	Coastal estuaries, lagoons, tidal flats, salt flats.	There is no suitable habitat for this species at the project site.
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT/SE/--	Mature forests near coastlines for nesting. Bays, sounds, saltwater passageways for foraging and wintering.	There is no suitable habitat for this species at the project site.
Northern spotted owl <i>Strix occidentalis caurina</i>	FT/ST/--	Old-growth forests with tree canopies that are high and open enough for the owls to fly between and underneath the trees. Preferred areas have large trees with broken tops, deformed limbs, or large holes used as nesting sites.	There is no suitable habitat for this species at the project site; it occurs in large patches of moderate to densely forested habitats.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Burrowing owl <i>Athene cunicularia</i>	--/--/SSC	Open habitats (e.g., grasslands, agricultural areas) with mammal burrows or other features (e.g., culverts, pipes, and debris piles) suitable for nesting and roosting.	There is no suitable habitat for this species at the project site.
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	--/--/SSC	Brackish and freshwater marsh, riparian, or woodland swamp.	There is no suitable habitat for this species at the project site.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	--/--/SSC	Tidal salt marshes dominated by pickleweed; nests primarily in pickleweed and marsh gumplant.	There is no suitable habitat for this species at the project site.
White-tailed kite <i>Elanus leucurus</i>	--/--/FP	Grassland and savanna for foraging. Large trees for roosting and nesting.	There is no suitable habitat for this species at the project site; large trees located at the project site are not near open areas for foraging. Urban development surrounding the site also decreases the likelihood of occurrence.
<b>Mammals</b>			
Pallid bat <i>Antrozous pallidus</i>	--/--/SSC	A variety of open arid habitats (e.g., chaparral, open woodland, deserts); primary roost sites include bridges, old buildings, and in tree hollows and/or bark; sometimes roost in caves and rock crevices.	There is no suitable habitat for this species at the project site; there are no caves or abandoned structures and no openings for foraging.
Townsend's big-eared bat <i>Corynorhinus townsendii townsendii</i>	--/--/SSC	Typically roosts in open areas of abandoned buildings, caves, and mines. Forages along wooded habitat edges, often gleaning insects from trees or shrubs.	There is no suitable habitat for this species at the project site; there are no caves or abandoned structures and no openings for foraging.

**Table A: Special-Status Plant and Animal Species Potentially Occurring within the Project Vicinity**

Species	Status <sup>1</sup> (Federal/State/ Other)	Habitat	Occurrence or Potential for Occurrence at the Project Site
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/SE/CFP	Tidal salt marshes of San Francisco Bay and its tributaries. Requires tall, dense pickleweed for cover.	There is no suitable habitat for this species at the project site.

**<sup>1</sup>Status:**

FE = Federally listed as endangered

FT = Federally listed as threatened

SE = State listed as endangered

ST = State listed as threatened

SSC = California Species of Special Concern

CFP = California Fully Protected

SR = State Rare: official status under the California Endangered Species Act and/or the Native Plant Protection Act

1A = California Rare Plant Rank 1A: species considered extinct in California

1B = California Rare Plant Rank 1B: species considered rare or endangered in California and elsewhere

2B = California Rare Plant Rank 2B: rare, threatened, or endangered in California, but more common elsewhere

## CONCLUSIONS AND RECOMMENDATIONS

Based on background research and biological resources observed at the site, the proposed project has the potential to disturb nesting birds if conducted during the nesting season (February 1 to August 31). In addition, the project will result in the removal of large native trees that may be protected under the City of San Rafael right-of-way tree protection ordinance. LSA recommends the following additional studies and avoidance and minimization measures prior to project implementation:

1. A **pre-construction nesting bird survey** should be conducted if construction occurs during the bird nesting season (February 1-August 31). The survey should be conducted within 5 days prior to the start of work. The survey should include the trees and shrubs on and immediately adjacent to the project site. Large trees within 250 feet of the project site should be checked for the presence of nesting raptors. If the survey indicates the potential presence of nesting birds, a buffer should be placed around the nest within which no work will be allowed until the young have successfully fledged or the nest has otherwise become inactive. The size of the nest buffer will be determined by a qualified biologist and will be based to a large extent on the nesting species, its sensitivity to disturbance, and the context of the nest location. In general, buffer sizes of 250 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in an urban environment; however, buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.
2. A **tree survey** should be conducted to document species, diameter at breast height (dbh), and condition for all native trees on site.

Please feel free to contact me by phone at (510) 236-6810 or e-mail at [jennifer.roth@lsa.net](mailto:jennifer.roth@lsa.net) with any questions or concerns.

Sincerely,

**LSA Associates, Inc.**



Jennifer Roth  
Associate/Senior Wildlife Biologist

Attachments: Figures 1 and 2  
Site Photographs

## REFERENCES

- California Department of Fish and Wildlife (CDFW). 2021. California Natural Diversity Database. California Department of Fish and Wildlife, Wildlife Habitat Data Analysis Branch, Sacramento, California. [Accessed October 2021]
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**FIGURES**

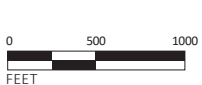
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FIGURE 1

LSA



 Project Location

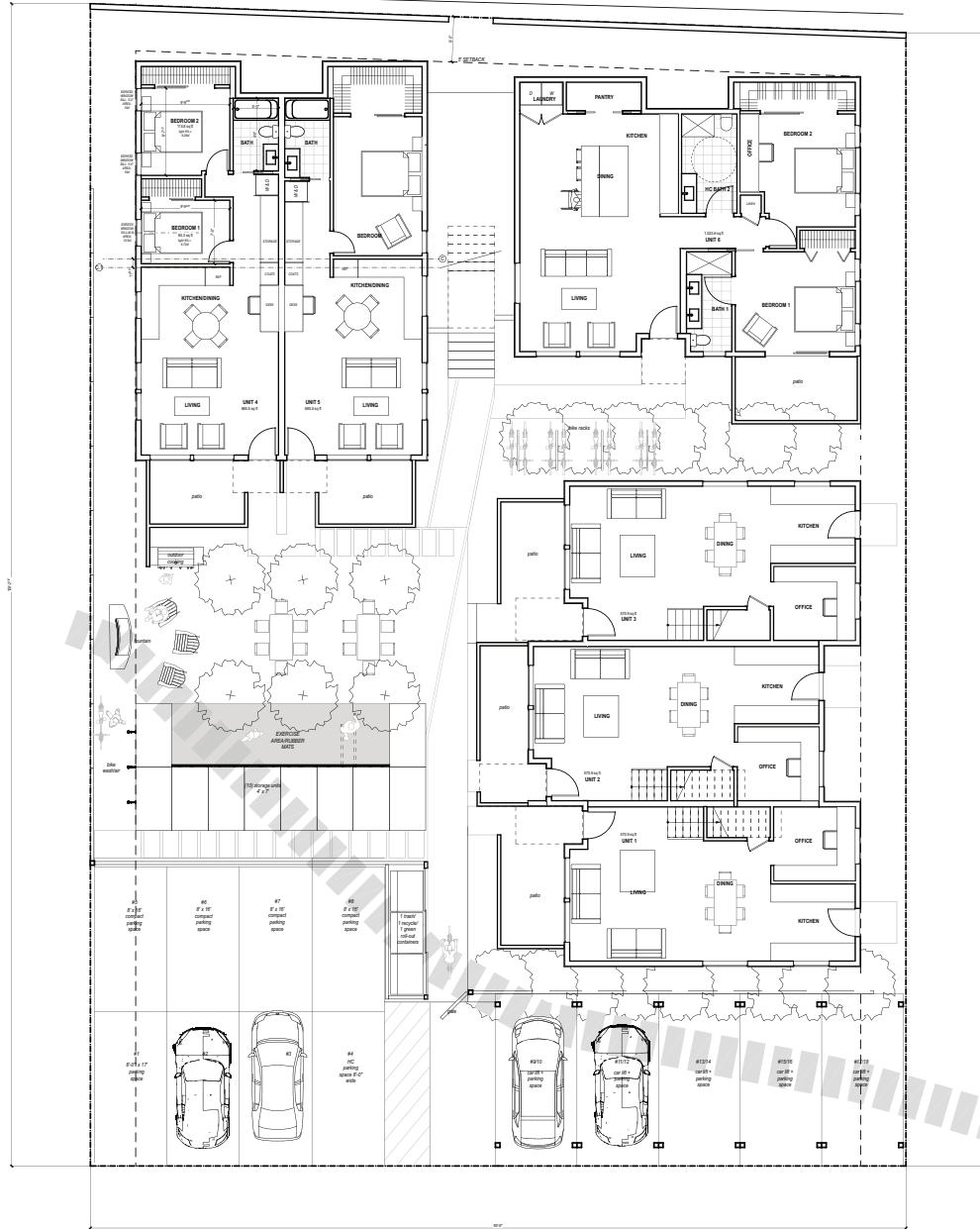
55 Brookdale Residential Project  
Location Map

SOURCES: Nearmap 5/22/2021; LSA, 2021

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LINCOLN AVENUE



BROOKDALE AVENUE

LSA

FIGURE 2



## SITE PHOTOGRAPHS

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Photo 1. Looking southwest from Brookdale Avenue.



Photo 2. Looking northeast from Lincoln Avenue.





Photo 3. Looking northwest from Brookdale Avenue.



Photo 4. Railroad tracks and sound wall east of Brookdale Avenue (across the street from the project site).