May 5, 2015

Charles Floyd
551 Alsace Lorraine Avenue
Half Moon Bay, CA 94019

RE: Updated Addendum to Biological Resources Assessment Report Dated 2008 for APN 082-130-070

Dear Mr. Floyd,

The purpose of this letter is to inform you of the results of the biological resource assessment update for an undeveloped parcel (Study Area; APN 082-130-070). The purpose of this assessment update was to determine whether existing onsite biological resources and potential special-status species have changed since the submittal of a biological resources assessment (WRA 2008) and riparian drip line mapping assessment (WRA 2011) for the Study Area and to provide any additional mitigation measures that may be needed as a result of changed conditions.

The previous biological resources assessment (WRA 2008) and proposed Project plans with the 2011 riparian drip line mapping assessment (WRA 2011) are provided in Attachment A. The list of observed species from the 2015 assessment is provided in Attachment B and photographs depicting the current Study Area conditions are provided in Attachment C.

Survey Methods

A site visit to the Study Area was made on April 6, 2015. Prior to the site visit, a review was conducted of background information including:

- San Mateo County Midcoast Local Coastal Program (LCP) biological resources policies
- San Mateo County Heritage Tree Ordinance
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2015)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2015)
- U.S. Fish and Wildlife Service (USFWS) 7.5' Quadrangle Species Lists for the La Honda quadrangle (USFWS 2015)
- A biological resources assessment (WRA 2008) and riparian canopy assessment (WRA 2011) of the Study Area (Attachment A).

During the site visit, the Study Area was examined for: (a) sensitive natural communities as defined by the CNDDB and LCP and, (b) for the presence, and potential to support, special status plant and wildlife species.

Survey Results

The 1.5-acre property (APN 082-130-070) is located on State Route 84 approximately five miles east of State Route 1 in western San Mateo County, and is within the midcoast local coastal plan area. The parcel is roughly bounded by San Gregorio Creek to the south and east, and existing residential properties to the west and north. The proposed project includes the construction of a house, and associated access road/ditch crossing, fire department turnaround area, septic system, and two water lines from the house to San Gregorio Creek. The Study Area is dominated by two common vegetation communities: non-native annual grassland and coast live oak woodland; riparian woodland is also present.

Vegetation Communities

As described in the 2008 Biological Resources Assessment (BRA), one vegetation community will be affected by the proposed Project and two additional vegetation communities are present adjacent to the Project footprint. Disturbed non-native annual grassland will be permanently and temporarily disturbed by the construction of a residence and the installation of a septic system. Coast live oak woodland and riparian woodlands are present adjacent to the proposed Project and may be impacted if trees are trimmed or removed.

Non-sensitive vegetation communities

Holland (1986) describes non-native grassland as a dense to sparse cover of non-native annual grasses with flowering culms 0.2-1 meter high and often associated with numerous species of showy-flowered annual forbs. This community often occurs on fine-textured, usually clay soils, that are moist, or saturated during the winter rainy season and very dry during the summer and fall. Within the Study Area, this community dominates the Study Area in open areas and under the oak woodland canopy.

Sensitive vegetation communities

Two sensitive vegetation communities were observed onsite in the 2008, 2011, and 2015 assessments: coast live oak woodland and riparian woodland. Although most coast live oak woodland vegetation associations are not considered sensitive natural communities by the LCP or the CDFW Natural Communities List (CDFW 2010), including the mixed coast live oak woodland alliance found within the Study Area, oak woodlands are given special consideration under the California Oak Woodland Conservation Act (State of California Resources Agency 2004).

The coast live oak woodland community is dominated by coast live oak (*Quercus agrifolia*), with California buckeye (*Aesculus californica*) and California bay laurel (*Umbellularia californica*) and madrone (*Arbutus menzesii*) in the canopy. The understory was composed of dogtail grass (*Cynosurus echinatus*), poison oak (*Toxicodendron diversilobum*), woodland strawberry (*Fragaria vesca*), California blackberry (*Rubus ursinus*), and non-native herbs and forbs including cutleaf geranium (*Geranium dissectum*), forget-me-not (*Myosotis latifolia*) and ripgut brome (*Bromus diandrus*).

The LCP Land Use Plan (LUP) defines riparian canopy as vegetation along a perennial or intermittent stream, composed of a minimum of 50 percent of the following species: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and boxelder. On June 24 and 29, 2011, WRA

collected data to map the riparian drip line along San Gregorio Creek in the Study Area. The location of the riparian drip line was measured at 30 locations from the top of bank of San Gregorio Creek. In addition, the tree species was documented at each point. Each point was then plotted on the Hartsell map (see Attachment A, 2011 riparian assessment). The mean distance from the top of bank and drip line was 49 feet; the distance ranged from 10 to 85 feet. The dominant tree cover along the drip line was alder (*Alnus* sp.) (40 percent) and boxelder (*Acer negundo*) (30 percent). The remaining 30 percent consisted of willow (*Salix* sp.), California bay (*Umbellularia californica*), and dogwood (*Cornus* sp.). The understory was dominated by non-natives, including poison hemlock (*Conium maculatum*), thistles (*Cirsium* sp.), and stinging nettle (*Urtica* sp.)

The 2015 assessment concurred with the previous riparian drip line assessment, and no encroachment of the riparian drip line was observed. Along the south and east property boundaries, dense riparian canopy dominated by alder, boxelder, and arroyo willow was observed. The understory was dominated by California blackberry, poison oak, poison hemlock, common rush (*Juncus patens*), sticky willy (*Galium aparine*), and stinging nettle (*Urtica dioica*) with scattered elderberry (*Sambucus nigra*). Although poison hemlock, California blackberry and common rush are facultative wetland indicators, this area was located in area which slopes gently toward the riparian corridor on the southern property line and was intermixed with upland species not commonly found in wetlands, with no other hydrologic sources observed. These species are disturbance-adapted and tend to occur on berms, roadsides, and other disturbed upland locations with moist soils (Baldwin et al 2012; Calflora 2015; personal observation). These species frequently occur in the coastal zone and coast range due to fog drip and reduced evaporation during the dry season from coastal cloud cover. Accordingly, this vegetation is more adequately protected by the riparian canopy definition and required buffer.

Wetland and Waters features

One ditch was observed during the 2008 and 2015 biological resource assessments, contiguous with the northern property line. At the time of the 2015 site assessment, this feature contained standing water. The ditch feature ranges from two to four feet wide and incised to approximately three feet deep, contains large amounts of fallen trees and branches, and is largely unvegetated in the bottom and sides. The ditch is surrounded by poison oak, coast live oak, and a single isolated arroyo willow. The access bridge and driveway improvements are the only proposed work in and near the ditch. The ditch is man-made in upland habitat and therefore, not considered a sensitive community. No wetlands were observed onsite.

Special-Status Species

Special-Status Plants

Based upon a review of the resources and databases discussed previously, all special-status plant species documented in the vicinity of the Study Area were assessed. No special-status plant species were observed in the Study Area. Many species requiring certain habitat types not present in the Study Area, such as serpentine endemics and plants requiring coastal, scrub, or coniferous habitats, were determined to have no potential to occur. In addition to the 13 species evaluated in the 2008 BRA, eight special-status plant species which have since become special-status were also evaluated. Of the 21 special-status plant species evaluated, all were determined to have no potential to occur based on the high disturbance levels in and around the Study Area and/or a lack of suitable habitat components in the Study Area. While the site visit

did not constitute a protocol-level rare plant survey, the 2015 site visit coincided with the blooming period for three species identified within the Study Area including San Francisco collinsia (*Collinsia mutlicolor*), woodland woolythreads (*Monolopia gracilens*), and San Francisco popcornflower (*Plagiobothrys diffuses*); none were observed.

San Mateo County Heritage Tree Ordinance

Pursuant to the County of San Mateo Heritage Tree Ordinance (Ordinance No. 427), madrone, coast live oak, and California bay laurel trees may be subject to regulation under the tree ordinance pursuant to the ordinance. Permits may be required by the County for the trimming or removal of trees which qualify for heritage status under the Ordinance. This update did not include an evaluation or update of an existing tree survey.

Special-Status Wildlife Species

Four wildlife species were identified in the 2008 BRA as either present or having a moderate potential to occur: San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), Cooper's hawk (*Accipiter cooperi*), olive-sided flycatcher (*Contopus cooperi*), and yellow warbler (*Setophaga [Dendroica] petechia*). Although no additional wildlife species have been added to the list of special-status species potentially in the Study Area and vicinity, three wildlife species identified in the previous report have changed in status levels. Townsend's big-eared bat (*Corynorhinus townsendii*) is now a State candidate species for listing as threatened (CDFW 2014), Cooper's hawk is no longer considered special-status by CDFW, and critical habitat for California red-legged frog (CRLF; *Rana [aurora] draytonii*) has been designated and now incorporates the Study Area (USFWS 2010).

San Francisco dusky-footed woodrat, Townsend's big-eared bat, and California red-legged frog are discussed further below. As determined in the 2008 BRA, olive-sided flycatcher and yellow warbler are unlikely to nest within or in close proximity to the Study Area, and are not anticipated to be impacted by the proposed Project. Per the 2008 BRA, a pre-construction nesting bird survey is still recommended if Project activities are initiated during the breeding season (February 15 – August 31) to avoid impacts to special-status birds and bird species protected under the Migratory Bird Treaty Act including Cooper's hawk.

San Francisco dusky-footed woodrat was observed within the Study Area outside of the Project footprint in the 2008 BRA. No woodrat houses were observed within the Study Area during the site visit on April 6, 2015. Although no San Francisco dusky-footed woodrats are currently present within the Study Area, there is a high potential for this species to re-establish within the Study Area. Therefore, the pre-grading survey within the Study Area and ditch crossing is still relevant and recommended to avoid impacts to San Francisco dusky-footed woodrat.

The status of Townsend's big eared bat has been upgraded within California and is currently a State candidate for listing as threatened under the California Endangered Species Act. The Study Area conditions remain similar to those described in the 2008 BRA, and Townsend's big-eared bat is unlikely to be present within the Study Area and is not present within the Project footprint based on tree conditions at the time of the April 6, 2015 site visit. No impacts are anticipated from the proposed Project; therefore, no additional measures are recommended for this species.

Since the 2008 BRA report, critical habitat has been designated for California red-legged frog and the Study Area is within critical habitat unit SNM-2 (USFWS 2010). Primary Constituent

Elements for CRLF are aquatic breeding, aquatic non-breeding, upland and dispersal habitats. As described in the 2008 BRA, the Project footprint and a majority of the Study Area do not contain surface water. Water and flow within the roadside ditch is largely determined strictly from surface run-off and it does not maintain water for a suitable length of time or contain suitable breeding characteristics to be considered breeding habitat. In addition, it is not contiguous with any known breeding habitats; therefore, it does not constitute a dispersal corridor or aquatic non-breeding habitat because it lacks water for much of the year. San Gregorio Creek is present adjacent to the Study Area; however, it does not contain breeding habitat and only provides a dispersal and movement corridor for this species. Upland habitat is typically within 300 feet of breeding habitat and provides refuge for CRLF during the dry season; the Study Area is not considered upland habitat based on distance from breeding habitat (greater than 700 feet) and lack of refugia. The Study Area is also not considered dispersal habitat based upon the open and dry habitat within the Project footprint. The proposed Project does not contain habitat for CRLF, CRLF are unlikely to be present, and will avoid impacts to riparian habitat; therefore, no further measures are recommended.

Summary

Based upon a review of previous biological reports for the proposed Project and a site visit conducted on April 6, 2015, no additional measures are recommended at this time. Conditions remain similar to those described in the 2008 BRA and although the status of some plant and wildlife species has changed, no additional special-status species have the potential to be present within the Study Area. In addition, the riparian drip line has not changed and the proposed Project footprint remains outside of setbacks outlined in the LCP. No wetlands or waters are present within the Study Area. The pre-construction surveys for San Francisco dusky-footed woodrat and nesting birds recommended in the 2008 BRA remain relevant and implementation of these measures will avoid impacts to sensitive resources and species. No additional measures are recommended.

Please feel free to contact me with any questions you may have.

Sincerely,

Patricia Valcarcel
Biologist

Enclosures: Attachment A- Previous Reports: WRA 2008 and WRA 2011
Attachment B- Species Observed During the 2015 Site Assessment
Attachment C- Representative Photographs

References

California Department of Fish and Wildlife (CDFW). 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September.

California Department of Fish and Wildlife (CDFW). 2015. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.

Holland, RF. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game, Sacramento, CA.

State of California Resources Agency. 2004. Oak Woodlands Conservation Act. Online at: http://www.leginfo.ca.gov/pub/03-04/bill/sen/sb_1301 1350/sb_1334_bill_20040924_chaptered.html

United States Fish and Wildlife Service (USFWS). 2010. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-legged Frog; Final Rule. Federal Register, Vol. 75, No. 51. 12815-12959.

United States Fish and Wildlife Service (USFWS). 2015. La Honda Quadrangle Species List, Sacramento Fish and Wildlife Service.

WRA, Inc. 2008. Biological Impact Form for Compliance with Local Coastal Program Policy 7.5. Prepared for Charles Floyd.

WRA, Inc. 2011. Riparian Drip Line Mapping. June 30, 2011.

Attachment A

Biological Impact Form (WRA 2008)
and
Riparian Drip Line Mapping with Hartsell Project Plan Map (WRA 2011)

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Biological Impact Form
(for compliance with Local Coastal Program Policy 7.5)

1. Project Location

The 1.5-acre property (APN 082-130-070) is located on State Route 84 approximately five miles east of State Route 1 in western San Mateo County. The parcel is roughly bounded by San Gregorio Creek to the south and east, and existing residential properties to the west and north.

2. Assessors Parcel Number: APN 082-130-070

3. Owner/Applicant

Charles Floyd
551 Alsace Lorraine Ave.
Half Moon Bay, California 94019

4. Principal Investigator

Jeff Dreier
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5. Report Summary

In accordance with San Mateo County guidelines, WRA has completed a biological resource assessment of the San Gregorio Property located in western San Mateo County. This Biological Impact Report provides a discussion of existing biological conditions on the site, and includes an analysis of potential project-related impacts and measures to mitigate potential significant impacts.

The proposed project includes the construction of a house, and associated access road/ditch crossing, fire department turnaround area, septic system, and two water lines from the house to San Gregorio Creek. The Project Area is dominated by two common plant communities: non-native annual grassland and coast live oak woodland. Riparian and wetland communities will not be impacted by the proposed project.

WRA conducted site visits to determine (1) plant communities present within the Project Area, (2) if existing conditions provided suitable habitat for any special status plant or wildlife species, and (3) if sensitive habitats are present. Based upon a literature review, thirteen special status plant species have been documented or may occur in the vicinity of the Project Area. However, the Project Area has the potential to support none of these species due to generally unsuitable or atypical habitat conditions. Twenty-eight special status species of wildlife have been recorded or

may occur in the vicinity of the Project Area. Two special status wildlife species were observed in or adjacent to the Project Area during the site assessment: San Francisco dusky-footed woodrat (California Department of Fish and Game Species of Special Concern) and olive-sided flycatcher (U.S. Fish and Wildlife Service Bird Species of Conservation Concern). Two other California Department of Fish and Game Species of Special Concern, the Cooper's hawk and yellow warbler, have a moderate to high potential to occur in the Project Area. Federally listed species that are documented to occur, or may occur within the vicinity of the Project Area, but are unlikely to occur within the Project Area include California red-legged frog and San Francisco garter snake.

Two non-sensitive plant communities will be affected by the proposed project. Disturbed non-native annual grassland will be permanently and temporarily disturbed by the construction of a residence and the installation of a septic system. Because non-native annual grassland is an abundant habitat type in the region, and the small area within the Project Area (0.21 acre) has been regularly maintained, the impact to non-native annual grassland is considered less than significant.

A portion of the footprint of the residence may be located within the dripline of the canopy, and the removal of one or two oak trees may be necessary. However, because the residence is expected to be small (0.13 acre), and significant areas within the dripline will remain undisturbed, building within the dripline is considered a less than significant impact. Removal of one or two oak trees is not considered a significant impact.

Based on this assessment, only two wildlife species may be impacted by the proposed project: San Francisco dusky-footed woodrat and Cooper's hawk. Pre-construction surveys will determine the status of these species in the Project Area. If a woodrat nest is present and cannot be avoided, a qualified biologist will dismantle the nest by hand and relocate the nest materials to an avoided area along the ditch. If an active Cooper's hawk nest is present, an exclusion zone of a distance to be determined by the biologist will be established around the nest. No grading or construction work can be conducted within the exclusion zone until all young have become independent of the nest (generally mid-June).

6. Project and Property Description

The 1.5-acre property (APN 082-130-070) is located on State Route 84 approximately five miles east of State Route 1 in western San Mateo County. The parcel is roughly bounded by San Gregorio Creek to the south and east, and existing residential properties to the west and north.

The proposed project includes the construction of a house, and associated access road/ditch crossing, fire department turnaround area, septic system, and two water lines from the house to San Gregorio Creek. The approximate 0.23-acre site (Project Area) is set back 100 feet from the top of bank of San Gregorio Creek, and 50 feet from the property line. The proposed project is further set back 20 feet from the western property line.

Routine maintenance of the property has resulted in a park-like setting with little or no understory and a small, open, isolated field. The apparently man-made ditch

along the north boundary appears to be ephemeral and does not support riparian vegetation.

7. Methodology

In September 2000, May 2002 and February 2008, the Project Area and nearby areas were traversed on foot to determine (1) plant communities present within the Project Area, (2) if existing conditions provided suitable habitat for any special status plant or wildlife species, and (3) if sensitive habitats are present. All plant and wildlife species encountered were recorded, and are summarized in Appendix A.

7.1 Biological Communities

Prior to the site visit, aerial photographs, topographic maps, and previous reports prepared by WRA were examined to determine if any unique soil types that could support sensitive plant communities and/or aquatic features were present in the Project Area. Biological communities present in the Project Area were classified based on existing plant community descriptions described in the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations.

7.1.1 Non-sensitive Biological Communities

Non-sensitive biological communities are those communities that are not afforded special protection under CEQA, and other state, federal, and local laws, regulations and ordinances. These communities may, however, provide suitable habitat for some special status plant or wildlife species and are identified or described in Section 8.2 below.

7.1.2 Sensitive Biological Communities

Sensitive biological communities are defined as those communities that are given special protection under CEQA and other applicable federal, state, and local laws, regulations and ordinances. Sensitive biological communities include wetlands, waters, and riparian habitats.

7.2 Special Status Species

7.2.1 Literature Review

Potential occurrence of special status species in the Project Area was evaluated by first determining which special status species occur in the vicinity of the Project Area through a literature and database search. Database searches for known occurrences of special status species focused on area within five miles of the Project Area. The following sources were reviewed to determine which special status plant and wildlife species have been documented to occur in the vicinity of the Project Area:

- California Natural Diversity Database records (CNDDB) (CDFG 2008)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication "Amphibians and Reptile Species of Special Concern in California" (Jennings 1994)
- A Field Guide to Western Reptiles and Amphibians (Stebbins, R.C. 2003)
- University of California at Davis Information Center for the Environment Distribution Maps for Fishes in California (2008)
- Biological Impact Report, San Gregorio Creek Site APN 082-130-070, San Mateo County (WRA 2002)
- Biological Impact Report, Optimist Camp Bridge Abutment Erosion Control Measures, San Gregorio Creek, San Mateo County (WRA 2000)

7.2.2 Site Assessment

A site visit was made to the Project Area to search for suitable habitats for species identified in the literature review as occurring in the vicinity. The potential for each special status species to occur in the Project Area was then evaluated according to the following criteria:

1) No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

2) Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

3) Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

4) High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

5) Present. Species is observed on the site or has been recorded (i.e. CNDDB, other reports) on the site recently.

The site assessment is intended to identify the presence or absence of suitable habitat for each special status species known to occur in the vicinity in order to determine its potential to occur in the Project Area. The site visit does not constitute a protocol-level survey and is not intended to determine the actual presence or absence of a species; however, if a special status species is observed during the site visit, its presence will be recorded and discussed. Appendix B presents the evaluation of potential for occurrence of each special status plant and wildlife species known to occur in the vicinity of the Project Area with their habitat requirements, potential for occurrence, and rationale for the classification based on criteria listed above. Recommendations for further surveys, if

necessary, are made in Section 11 below for species with a moderate or high potential to occur in the Project Area.

8. Results

8.1 Botanical Resources

8.1.1 Plant Communities

The Project Area is dominated by two common plant communities: non-native annual grassland and coast live oak woodland.

Non-native annual grassland typically occurs in open areas of valleys and foothills throughout California, usually on fine textured clay or loam soils that are somewhat poorly drained (Holland 1986). Non-native grassland is typically dominated by non-native annual grasses and forbs, along with scattered native wildflowers. This is the predominant plant community within the Project Area, but frequent maintenance of the property results in a mixture of ruderal plant species instead of the typical grasses. This area is dominated by poison hemlock (*Conium maculatum*), mustard (*Brassica* sp.), blackberry (*Rubus* sp.), and thistle (*Cirsium* sp.). Most of the typical grassland wildlife species, particularly birds, would not be found on the site due to the small area of grassland and the surrounding woodland habitats. Typical wildlife species found in very disturbed non-native grassland such as that found in the Project Area include Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtis californicus*). Other large wildlife species are likely to simply use the opening to facilitate movement along nearby San Gregorio Creek.

Coast live oak woodland is dominated by coast live oak (Quercus agrifolia) (Holland 1986). Other trees, such as California bay (*Umbellularia californica*) and California buckeye (*Aesculus californica*) may also occur in this community. The shrub layer is typically poorly developed, but may include elderberry (*Sambucus* sp.) and currants (*Ribes* sp.). Within the Project Area, this community has little or no understory as a result of regular property maintenance. Few wildlife species are expected to occur in the open understory; however, the woodland canopy provides suitable habitat for a variety of birds.

8.1.2 Special Status Plants

Based upon a review of the resources and databases given in Section 7.2.1, thirteen special status plant species have been documented or may occur in the vicinity of the Project Area. However, the Project Area has the potential to support none of these species due to generally unsuitable or atypical habitat conditions. Appendix B summarizes the potential for occurrence for each special status plant species occurring in the vicinity of the Project Area.

8.2 Zoological Resources

Twenty-eight special status species of wildlife have been recorded or may occur in the vicinity of the Project Area. Appendix B summarizes the potential for each of these species to occur in the Project Area. Two special status wildlife species were observed in the Project Area during the site assessment. Two other special status wildlife species

have a moderate to high potential to occur in the Project Area. Special status wildlife species that were observed, or have a moderate or high potential to occur in the Project Area are discussed below.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), CDFG Species of Special Concern. The San Francisco dusky-footed woodrat inhabits coastal sage-scrub, pinyon-juniper, dense chaparral, oak and riparian woodlands, and mixed conifer forests where a well-developed understory is present. The dusky-footed woodrat feeds on woody plants, especially live oak, maple and alder, but will also consume fungi, grasses, flowers and acorns. Foraging occurs on the ground and in bushes and trees. This species constructs characteristic stick nests in areas with moderate cover and a well-developed understory containing woody debris. Breeding takes place from December to September, with litter size averaging 2-3 young. Individuals are mostly nocturnal, and are active year round (CDFG 2005).

The San Francisco dusky-footed woodrat is a common species in western San Mateo County. It is likely to be abundant along San Gregorio Creek and its tributaries. In 2002, a stick nest was observed along the ditch located at the north boundary of the property. With the exception of the access road crossing, the proposed project avoids this ditch. No stick nests were observed in the proposed crossing area. The remainder of the Project Area does not have a well-developed understory.

Cooper's Hawk (*Accipiter cooperi*), CDFG Species of Special Concern. Cooper's hawks are well distributed and occur in varied habitats including; deciduous, mixed, and evergreen forests and riparian woodlands. This species is tolerant of human disturbance and habitat fragmentation and has been found to increasingly breed in suburban and urban areas (Curtis et al. 2006). This species nests in extensive forests, woodlots of 4–8 ha, and occasionally in isolated trees in more open areas. Nests are typically in more mature trees which have relatively more canopy cover than what is locally available (Curtis et al. 2006).

The coast live oak and California bay trees within and adjacent to the Project Area provide suitable nesting habitat for this hawk.

Olive-sided flycatcher (*Contopus cooperi)*, USFWS Bird of Conservation Concern. Olive-sided flycatchers typically occur within the coniferous forest biome, where it is most often associated with forest openings, forest edges near natural openings (e.g., meadows, canyons, rivers) or human-made openings (e.g., harvest units), or open to semi-open forest stands (Altman, 2000).

An olive-sided flycatcher was detected downstream from the site during a September 2000 assessment of a nearby parcel, suggesting that this species may nest in the vicinity of the project site; however typical tall coniferous trees often used for nesting are not located in the Project Area.

Yellow Warbler (*Dendroica petechia*), CDFG Species of Special Concern. Yellow warblers prefer dense riparian vegetation for breeding. Yellow warbler populations have declined due to brood parasitism by brown-headed cowbirds (*Molothrus ater*) and habitat destruction. Their diet is primarily insects supplemented with berries.

Willow thickets located along San Gregorio Creek provide suitable nesting habitat for yellow warblers. Because these willows are located at least 50 feet from the proposed project, it is unlikely that this species will be affected by the project.

8.2.1 Listed Species of Regional Concern

Federally listed species that are documented to occur, or may occur within the vicinity of the Project Area, but are unlikely to occur within the Project Area include California red-legged frog and San Francisco garter snake These species are discussed below.

California Red-legged Frog (*Rana aurora draytonii*), Federal Threatened, CDFG Species of Special Concern. California red-legged frog (CRLF) habitat is characterized by dense, shrubby riparian vegetation associated with deep, still or slow moving water (Jennings and Hayes, 1994). Estivation and dispersal habitat may consist of riparian vegetation, presence of small mammal burrows particularly squirrel burrows, and continuous connective stretches of grassland, wetland or oak woodland habitat. CRLF may move through upland areas between breeding and non-breeding aquatic habitats. Most of these movements are along drainage corridors; however, they may make straight line movements between more isolated aquatic features (Fellers and Kleeman 2007).

Although CRLF have been documented to occur in San Gregorio Creek both upstream and downstream of the project parcel (CDFG 2008), it is not likely to occur within the Project Area. The Project Area does not contain surface water, which is required by CRLF for either breeding or dry season survival. Also, the absence of a well-developed understory suggests that CRLF would be unlikely to use the Project Area for refuge during high flow events in the nearby stream. Finally, the Project Area does not represent a movement corridor between breeding and non-breeding aquatic habitats. Based on these considerations, CRLF are not likely to be affected by the proposed project.

San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*), Federal Threatened, State Threatened. Historically, San Francisco garter snakes occurred in scattered wetland areas on the San Francisco Peninsula from approximately the San Francisco County line south along the eastern and western bases of the Santa Cruz Mountains, at least to the Upper Crystal Springs Reservoir, and along the coast south to Año Nuevo Point, San Mateo County, and Waddell Creek, Santa Cruz County (Barry 1994). The preferred habitat of the San Francisco garter snake is a densely vegetated pond near an open hillside where they can sun themselves, feed, and find cover in rodent burrows; however, considerably less ideal habitats can be successfully occupied. Temporary ponds and other seasonal freshwater bodies are also used. Emergent and bankside vegetation such as cattails (*Typha* spp.), bulrushes (*Scirpus* spp.) and spike rushes (*Juncus* spp.and *Eleocharis* spp.) apparently are preferred and used for cover. The area between stream and pond habitats and grasslands or bank sides is used for basking, while nearby dense vegetation or water often provide escape cover. Snakes also use floating algal or rush mats, if available.

In the San Gregorio Creek watershed, the San Francisco garter snake is generally associated with pond habitat; however, individuals could use San Gregorio Creek as a movement corridor and occupy backwater pools. This snake is unlikely to occur in the

Project Area because typical aquatic habitat is absent, and property maintenance has reduced upland cover.

9. Direct and Indirect Impacts to Biological Habitats

Two non-sensitive plant communities will be affected by the proposed project. Disturbed non-native annual grassland will be permanently and temporarily disturbed by the construction of a residence and the installation of a septic system. Because non-native annual grassland is an abundant habitat type in the region, and the small area within the Project Area (0.21 acre) has been regularly maintained, the impact to non-native annual grassland is considered less than significant.

A portion of the footprint of the residence may be located within the dripline of the canopy. However, because the residence is expected to be small (0.13 acre), and significant areas within the dripline will remain undisturbed, building within the dripline is considered a less than significant impact.

One or two oak trees in the house footprint may require removal. The removal of a small number of oaks is considered a less than significant impact.

The 20-foot-wide culvert crossing of the drainage ditch and associated driveway (totaling approximately 0.02 acre) will result in the conversion of existing grassland and maintained understory to a less permeable surface. Because of the ongoing maintenance and small area of conversion, construction of the culvert/driveway is considered a less than significant impact.

The two water lines (approximately 160 and 100 feet long) will be installed between the proposed house and San Gregorio Creek. These lines will be buried in a narrow trench, and will not impact riparian vegetation along San Gregorio Creek.

It should be noted that the riparian vegetation associated with San Gregorio Creek is not located within the Project Area's building or grading footprint, and will be avoided.

10. Impacts to Special Status Species

Based on this assessment, only two wildlife species may be impacted by the proposed project: San Francisco dusky-footed woodrat and Cooper's hawk.

10.1 Impact to San Francisco Dusky-footed Woodrat

The stick nest of the San Francisco dusky-footed woodrat has been observed along the drainage ditch along the northern boundary of the property. Construction of a crossing may destroy the nests of this species. This would be considered a significant impact.

10.2 Impact to Nesting Cooper's Hawk

The coast live oak woodland provides suitable nesting habitat for the Cooper's hawk. Proposed construction could disturb nesting hawks, causing them to abandon an active nest, eggs, and young. This would be considered a significant impact.

11. Mitigation Measures

11.1 San Francisco Dusky-footed Woodrat

A qualified biologist will conduct a pre-grading survey of the proposed crossing area to determine if a woodrat nest has been constructed since the last site visit. If no woodrat nests are observed in the proposed crossing location, no further action is necessary. If a woodrat nest is present and cannot be avoided by the proposed crossing, the biologist will dismantle the nest by hand and relocate the nest materials to an avoided area along the ditch. Implementation of this mitigation measure will reduce impacts to the San Francisco dusky-footed woodrat to a less than significant level.

11.2 Cooper's Hawk

A qualified biologist will conduct a pre-construction breeding bird survey to determine if the Cooper's hawk is nesting in trees adjacent to the proposed project site. If no active nests are observed, no further action is necessary. If an active Cooper's hawk nest is present, an exclusion zone of a distance to be determined by the biologist will be established around the nest. No grading or construction work can be conducted within the exclusion zone until all young have become independent of the nest (generally mid-June). Implementation of this mitigation measure will reduce potential impacts to nesting Cooper's hawks to a less than significant level.

11. **CERTIFICATION**: I hereby certify that the statements furnished above and in attached exhibits present the data and information required for this biological evaluation to the best of my ability, and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

DATE: March 25, 2008 **SIGNED**:_____
Jeff Dreier, WRA

12. References

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APPENDIX A. Wildlife species observed on or immediately adjacent to the project site during the biological assessment conducted in May 2002 and February 2008, and during an assessment of adjacent property in September 2000.

Common Name	**Species**	**Seasonal Status**	**Comments**
MAMMALS			
dusky-footed woodrat	*Neotoma fuscipes*	resident	Stick nests present along north boundary tributary
BIRDS			
red-shouldered hawk	*Buteo lineatus*	resident	Adult calling frequently in area of bridge; suitable nest trees present
Allen's hummingbird	*Selasphorus sasin*	summer	Common in region
northern flicker	*Colaptes auratus*	resident	Calls heard from riparian woodland
olive-sided flycatcher	*Contopus cooperi*	summer	Calls heard downstream from bridge
western wood pewee	*Contopus sordidulus*	summer	Calls heard upstream from site
Pacific-slope flycatcher	*Empidonax difficilis*	summer	Calls heard in riparian habitat
Hutton's vireo	*Vireo huttoni*	resident	Calls heard in oaks near site
Steller's jay	*Cyanocitta stelleri*	resident	Several individuals in vicinity
tree swallow	*Tachycineta bicolor*	summer	Several observed soaring over area
violet-green swallow	*Tachycineta thalassina*	summer	Several observed flying above canopy
chestnut-backed chickadee	*Poecile rufescens*	resident	Observed in riparian vegetation
bushtit	*Psaltriparus minimus*	resident	Pair observed along north side of property
Wilson's warbler	*Wilsonia pusilla*	summer	Male observed in riparian woodland
California towhee	*Pipilo crissalis*	resident	Common in region; observed along access road
song sparrow	*Melospiza melodia*	resident	Associated with dense riparian vegetation
dark-eyed junco	*Junco hyemalis*	resident	Observed foraging along north edge of study area
black-headed grosbeak	*Pheucticus melanocephalus*	summer	Territorial male singing in riparian woodland

Common Name	**Species**	**Seasonal Status**	**Comments**
purple finch	*Carpodacus purpureus*	resident	Several territorial males in the vicinity
lesser goldfinch	*Carduelis psaltria*	resident	Small flock foraging in weedy grassland
REPTILES			
western fence lizard	*Sceloporus occidentalis*	resident	Common among woody debris on site

APPENDIX B. Special status species that are known to occur or may occur in San Mateo County in habitats similar to those observed within the Project Area. List compiled from a review of the CDFG Natural Diversity Data Base (2008) and other CDFG lists and publications (Jennings and Hayes 1994; Zeiner et al. 1990).

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
PLANTS				
Agrostis blasdalei, Blasdale's bent grass	1B	Coastal dunes, coastal bluff scrub, coastal prairie. Found on sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation at elevations of 5-150m.	**Unlikely**. This species' typical habitats do not occur in Project Area. Sandy and gravelly soils are not present.	No further actions necessary
Arctostaphylos montaraensis, Montara manzanita	1B	Chaparral, coastal scrub. Found on slopes and ridges at elevations of 150-500m. Endemic to San Mateo County.	**Not Present**. This species' typical habitats do not occur in Project Area. No manzanita shrubs observed in Project Area.	No further actions necessary
Arctostaphylos andersonii, Santa Cruz manzanita	1B	Broadleaved upland forest, chaparral, North Coast coniferous forest. Found on open sites and redwood forest at elevations of 180-800m. Known only from Santa Cruz Mountains.	**Not Present**. This species' typical habitats do not occur in Project Area. No manzanita shrubs observed in Project Area.	No further actions necessary
Chorizanthe cuspidata var. *cuspidata*, San Francisco Bay spineflower	1B	Coastal Bluff scrub, coastal dunes, coastal prairie, coastal scrub. Found on terraces and slopes in sandy soil at elevations of 5-550m.	**Unlikely**. This species' typical habitats, including coastal sandy substrates, do not occur in Project Area.	No further actions necessary

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Dirca occidentalis, western leatherwood	1B	Broadleafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, North Coast coniferous forest, riparian forest, riparian woodland. Found on brushy slopes, mesic sites mostly in mixed evergreen and foothill woodland communities at elevations of 30-550m.	**Not Present**. Project Area is not dominated by plant communities typical of this plant. No leatherwood shrubs observed in Project Area.	No further actions necessary
Eriophyllum latilbum, San Mateo woolly sunflower	FE, SE, 1B	Cismontane woodland. Found on and off of serpentine, often on roadcuts at elevations of 45-150m. Endemic to San Mateo County. Elevation;	**Unlikely**. This species' typical serpentine soil habitats do not occur in Project Area.	No further actions necessary
Erysimum ammophilum, coast wallflower	1B	Maritime chaparral, coastal dunes, coastal scrub Found in sandy openings at elevations of 0-130m.	**Unlikely**. Sandy openings in coastal habitats are not present in the Project Area.	No further actions necessary
Grindelia hirsutula var. *maritima*, San Francisco gumplant	1B	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Found on sandy or serpentine slopes and sea bluffs at elevations of 15-400m.	**Unlikely**. This species' typical sandy or serpentine habitats do not occur in Project Area.	No further actions necessary
Horkelia cuneata ssp. *sericea*, Kellogg's horkelia	1B	Closed-cone, coniferous forest, coastal scrub, chaparral. Found in openings on old dunes, coastal sand hills at elevations of 10-200m.	**Unlikely**. This species' typical habitats, including old dunes and sand hills do not occur in Project Area.	No further actions necessary
Limnanthes douglasii ssp. *sulphurea*, Point Reyes meadowfoam	1B	Freshwater marsh, vernal pools, coastal prairie and meadows, typically in dark clay soil at elevations of 10-120m.	**Unlikely**. This species' typical seasonal wetland habitats do not occur in Project Area.	No further actions necessary

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Potentilla hickmanii, Hickman's cinquefoil	FE, SE, 1B	Coastal bluff scrub, closed-cone coniferous forest, meadows and seeps, marshes and swamps. Found in freshwater marshes, seeps, and small streams in forested areas along the coast at elevations of 5-125m.	**Unlikely**. This species' typical wetland habitats do not occur in Project Area.	No further actions necessary
Silene verecunda ssp. *verecunda*, San Francisco campion	1B	Coastal scrub, valley and foothill grassland, coastal bluff scrub, chaparral, coastal prairie. Found on open slopes and exposed outcrops of mudstone or shale; one site on serpentine at elevations of 30-645m.	**Unlikely**. Rock outcrops do not occur in Project Area.	No further actions necessary
Stebbinsoseris decipiens, Santa Cruz microseris	1B	Broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub. Found on coastal bluffs and slopes in open areas in loose or disturbed soil with low growing vegetation at elevations of 10-500m.	**Unlikely**. This species' typical forest and scrub habitats do not occur in Project Area.	No further actions necessary
MAMMALS				
Pallid bat *Antrozous pallidus*	CSC	Day roosts in outcrops, mines, caves, hollow trees, buildings, and bridges; night roosts under bridges, in caves, and mines.	**Unlikely**. Trees within the Project Area have not developed suitable hollows for roosting.	No further actions necessary.
Townsend's big-eared bat *Corynorhinus townsendii*	CSC	Caverns are preferred for day roosts, but night roosts can include bridges and other open settings.	**Unlikely**. Cavern-like roost habitat is not present in the Project Area.	No further actions necessary.
Fringed myotis *Myotis thysanodes*	WBW G-H	Day roosts in caverns, trees, and buildings. Majority of roosts documented in California have been in buildings or mines.	**Unlikely**. Trees within the Project Area have not developed suitable hollows for roosting.	No further actions necessary.

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Long-legged myotis *Myotis volans*	WBW G-H	Hollow trees, crevices, caverns, and buildings provide day roost habitat; night roosts are usually caverns.	**Unlikely**. Trees within the Project Area have not developed suitable hollows for roosting.	No further actions necessary.
Western mastiff bat *Eumops perotis*	CSC	Usually roosts in cliffs, cracks, and buildings.	**Unlikely.** Cliff faces and building roost sites are not found within the Project Area.	No further actions necessary.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	CSC	Frequents deciduous, coniferous, and riparian woodlands and adjacent scrub habitats.	**Present**. Stick nests were observed along the north boundary tributary.	Conduct survey in area of access crossing of drainage ditch. If present, qualified biologist will dismantle nest and relocate materials to undisturbed site.
BIRDS				
Cooper's hawk *Accipiter cooperi*	CSC	Uses many habitats in winter and during migration; nests in deciduous and coniferous woodlands. Usually not found without dense tree stands, or patchy woodland habitat.	**Moderate Potential**. Trees on and near site provide suitable breeding habitat.	Pre-ground disturbance nesting surveys during the breeding season (March through July).
Sharp-shinned hawk *Accipiter striatus*	CSC	Uses many habitats in winter and during migration; breeds in oak, conifer, and riparian forests.	**Unlikely**. Woodland habitats near site provide suitable wintering habitat; however, this species tends to nest in more forested habitats.	No further actions necessary.
Golden eagle *Aquila chrysaetos*	CSC, CFP	Uses many habitats for foraging; breeds in cliffs or in remote large trees and structures.	**Unlikely**. Human activity in the vicinity of the Project Area likely precludes nesting attempts.	No further actions necessary.
Northern harrier *Circus cyaneus*	CSC	Found in open grasslands, prairies, and marshes. Tend to nest near water.	**Unlikely**. Typical open habitats not present in the Project Area.	No further actions necessary.

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
White-tailed kite *Elanus leucurus*	CFP	Year-long resident of coastal and valley lowlands; rarely found away from agricultural areas. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians.	**Unlikely**. Edge habitats for nesting and open areas for foraging are not present in the Project Area.	No further actions necessary.
Prairie falcon *Falco mexicanus*	CSC	Found in arid and semi-arid plains, this is a falcon of open country which nests on rock cliffs in river gorges and occasionally in timbered mountains. Nests are often scraped on ledges although old stick nests of ravens or others raptors will be used.	**Not Present**. Typically occurs in more open, tree-less habitats.	No further actions necessary.
Peregrine falcon *Falco peregrinus*	SE	Winters throughout lower elevations in California. Requires protected cliffs and ledges for cover. Feeds on a variety of birds, and some mammals, insects, and fish.	**Not Present**. Typically occurs in more open, tree-less habitats.	No further actions necessary.
Long-eared owl *Asio otus*	CSC	Prefer riparian groves, planted woodlots, and belts of live oaks paralleling stream courses.	**Unlikely**. Regular human disturbance associated with nearby residences likely preclude nesting attempts.	No further actions necessary.
Vaux's swift *Chaetura vauxi*	CSC	Forages over most terrains and habitats, often high in the air. Most important habitat requirement appears to be large hollow trees for nest sites.	**Unlikely**. May forage over site, but large nest trees are not present.	No further actions necessary.
Rufous hummingbird *Selasphorus rufus*	BCC	Uses riparian areas, open woodlands, chaparral, mountain meadows, and other habitats rich in nectar-producing flowers.	**Unlikely**. Does not breed in San Mateo County; would only occur during northward migration in spring.	No further actions necessary.

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Olive-sided flycatcher *Contopus cooperi*	BCC	Mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir and lodgepole pine. Requires large, tall trees, usually conifers for nesting and roosting.	**Present.** Calls heard downstream from site indicate that this species may breed near the Project Area.	No further actions necessary. The Project Area does not contain typical breeding habitat (large tall conifers). Although breeding may occur nearby, the proposed project will not impact the species.
Purple martin *Progne subis*	CSC	Frequents old-growth, multi-layered, open forest and woodland with snags in the breeding season.	**Unlikely**. Large snags for nest sites are not present on the site; may forage in the vicinity of the bridge.	No further actions necessary.
California yellow warbler *Dendroica petechia brewsteri*	CSC	Breeds in riparian woodlands, particularly those dominated by willows and cottonwoods.	**Moderate Potential**. Suitable breeding habitat occurs in willow scrub near Project Area.	No further actions necessary. The Project Area does not contain typical breeding habitat (willow thickets). Although breeding may occur nearby, the proposed project will not impact the species.
Yellow-breasted chat *Icteria virens*	CSC	Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland.	**Unlikely**. Denser thickets of riparian vegetation near the Project Area may provide habitat during migration, but suitable habitat within the proposed Project Area is not present..	No further actions necessary.
AMPHIBIANS AND REPTILES				

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
California red-legged frog *Rana aurora draytonii*	FT, CSC	Ponds, pools, or in slow-moving perennial to ephemeral streams, where water remains long enough for breeding and development of young. Emergent or shoreline riparian vegetation closely associated with deep, still, or slow-moving water is the preferred but not essential habitat.	**Unlikely**. The Project Area does not contain breeding and/or non-breeding aquatic habitat.	No further actions necessary.
Foothill yellow-legged frog *Rana boylii*	CSC	Generally associated with rocky streams with open riparian canopies.	**Not Present**. Open gravel bars and a substrate of gravel and cobbles are not present in the Project Area.	No further actions necessary.
Western pond turtle *Clemmys marmorata*	CSC	Preferred habitat is low-flow regions of rivers, channels, and backwater areas, and ponds. Deep, still water with abundant emergent woody debris, overhanging vegetation and rocky outcrops is optimal for basking and thermoregulation.	**Unlikely**. Aquatic habitat is not found within the Project Area.	No further actions necessary.
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE, SE	Ponds, lakes, reservoirs, streams, and drainage ditches, that are bordered at least partially by dense emergent or riparian vegetation, and nearby grasslands and brush.	**Unlikely**. Project Area does not contain suitable aquatic and margin foraging habitat.	No further actions necessary.
FISH				

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Coho salmon-Central California ESU *Oncorhynchus kisutch*	FT, SE	Adults enter coastal streams to spawn in clean gravels. Juvenile rearing habitat is typically cool, clear streams with abundant woody debris or overhanging vegetation.	**Not Present**. Aquatic habitat is not present in the Project Area. Adults may migrate in San Gregorio Creek upstream past the site in winter/early spring. Smolts would move downstream during the same time.	No further actions necessary.
Steelhead-Central California Coast ESU *Oncorhynchus mykiss*	FT	Adults spawn in cool streams with a substrate of clean gravel and cobbles. Juveniles remain in the stream for one or more years before migrating to the sea.	**Not Present.** Aquatic habitat is not present in the Project Area. Adults migrate upstream past the site in winter/early spring. Smolts would move downstream during the same time.	No further actions necessary.
INVERTEBRATES				
Myrtle's silverspot *Speyeria zerene myrtleae*	FE	Habitats include conifer woodland, sagebrush, meadows, and coastal dunes. Host plants are several species of *Viola*.	**Unlikely**. Reported to be extinct in San Mateo County (Scott 1986).	No further actions necessary.
Smith's blue *Euphilotes enoptes smithi*	FE	Typical habitat is coastal scrub; host plants are *Eriogonum latifolium* and *E. parvifolium*.	**Unlikely.** Suitable scrub habitat and associated host plant not present on site.	No further actions necessary.

Species	Status	Typical Habitat	Potential for Occurrence in the Project Area	Recommendations for Further Action
Key to Status:				
FE	Federal Endangered			
FT	Federal Threatened			
SE	State Endangered			
ST	State Threatened			
CSC	CDFG Species of Special Concern			
CFP	CSDF Fully Protected Species			
BCC	USFWS Birds of Conservation Concern			
WBWG-H	Western bat Working Group High Priority Species			
1B	CNPS List of rare or endangered plants in California and elsewhere			

Appendix C. The project footprint is limited to maintained open ground dominated by non-native weedy vegetation. Only one or two oaks may need to be removed in the footprint of the residence.

wra
ENVIRONMENTAL CONSULTANTS

ENVIRONMENTAL CONSULTANTS

June 30, 2011

Charles Floyd
551 Alsace Lorraine Ave.
Half Moon Bay, California 94019

RE: Riparian Drip Line Mapping

Dear Mr. Floyd,

On June 24 and 29, 2011, WRA collected data to map the riparian drip line along San Gregorio Creek on the Floyd Residence Property (APN 082-130-060/070). The location of the riparian drip line was measured at 30 locations from the top of bank of San Gregorio Creek. In addition, the tree species was documented at each point. Each point was then plotted on the Hartsell map (attached). Due to the locally dense cover of oaks on and adjacent to the site, the drip line could not be identified on aerial photographs.

The mean distance from the top of bank and drip line was 49 feet; the distance ranged from 10 to 85 feet. The dominant tree cover along the drip line was alder (*Alnus* sp.) (40 percent) and boxelder (*Acer negundo*) (30 percent). The remaining 30 percent consisted of willow (*Salix* sp.), California bay (*Umbellularia californica*), and dogwood (*Cornus* sp.). The understory was dominated by non-natives, including poison hemlock (*Conium maculatum*), thistles (*Cirsium* sp.), and stinging nettle (*Urtica* sp.)

Based on the mapping, the distance between the drip line and closest point of the proposed residence exceeds 50 feet. The nearest proposed well site is approximately 30 feet from the drip line. These distances are in compliance with San Mateo County Local Coastal Program riparian corridor policies.

Please let me know if you have any questions.

Sincerely,

Jeff Dreier
Associate Principal Wildlife Ecologist

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868 tel (415) 454-0129 fax info@wra-ca.com www.wra-ca.com

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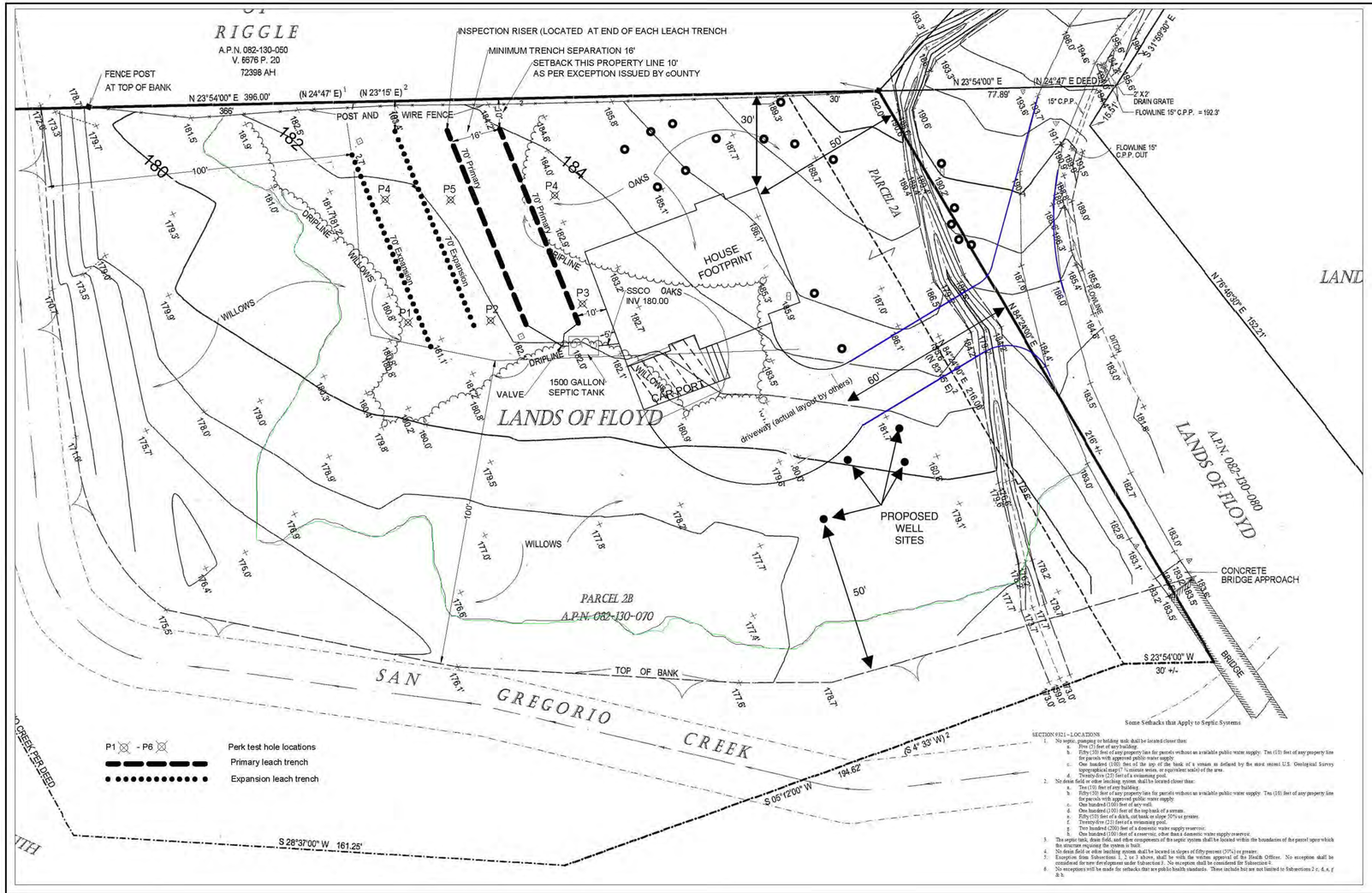

Some Setbacks that Apply to Septic Systems

SECTION 9121 – LOCATIONS

1. No septic, pumping or holding tank shall be located closer than:
   a. Five (5) feet of any building.
   b. Fifty (50) feet of any property line for parcels without an available public water supply. Ten (10) feet of any property line for parcels with approved public water supply.
   c. One hundred (100) feet of the top of the bank of a stream as defined by the most recent U.S. Geological Survey topographical map (7 ½ minute series, or equivalent scale) of the area.
   d. Twenty-five (25) feet of a swimming pool.
2. No drain field or other leaching system shall be located closer than:
   a. Ten (10) feet of any building.
   b. Fifty (50) feet of any property line for parcels without an available public water supply. Ten (10) feet of any property line for parcels with approved public water supply.
   c. One hundred (100) feet of any well.
   d. One hundred (100) feet of the top bank of a stream.
   e. Fifty (50) feet of a ditch, cut bank or slope 50% or greater.
   f. Twenty-five (25) feet of a swimming pool.
   g. Two hundred (200) feet of a domestic water supply reservoir.
   h. One hundred (100) feet of a reservoir, other than a domestic water supply reservoir.
3. The septic tank, drain field, and other components of the septic system shall be located within the boundaries of the parcel upon which the structure requiring the system is built.
4. No drain field or other leaching system shall be located in slopes of fifty percent (50%) or greater.
5. Exception from Subsections 1, 2, or 3 above, shall be with the written approval of the Health Officer. No exception shall be considered for new development under Subsection 5. No exception shall be considered for Subsection 6.
6. No exceptions will be made for setbacks that are public health standards. Those include but are not limited to Subsections 2.c, d, e, f & h.

SAN MATEO COUNTY
ENVIRONMENTAL HEALTH SERVICES DIVISION

MEASUREMENTS

36 HOUR INTERVALS	READINGS	HOLE #1	HOLE #2	HOLE #3	HOLE #4	HOLE #5	HOLE #6
8:00	FINISH	1/4	15 3/16	14 3/16	1/4	14 7/16	13 3/16
1	START	7 13/16	8 3/16	7	6	8	6
	DIFF.	6 3/16	7	7 3/16	6	6 7/16	7 3/16
	FINISH	13 3/4	13 7/16	15 3/16	13 7/16	13 7/16	12 3/16
2	START	4 5/16	5 7/16	7 1/16	5 7/16	8 1/16	7 1/16
	DIFF.	9 7/16	8	8 1/16	8	5 3/8	5 3/16
	FINISH	12 5/16	13 3/16	14	14	13 3/16	12 3/16
3	START	4 7/16	5 3/16	6 7/16	5 3/16	7 3/16	5 7/16
	DIFF.	7 15/16	8	7 9/16	8 13/16	6	6 3/4
	FINISH	12 7/16	13 3/16	13 3/4	14 3/16	12 7/16	12
4	START	4 7/16	5	4 7/16	5 3/16	9 1/16	7 1/16
	DIFF.	8	8 3/16	9 5/16	9	3 3/8	4 15/16
	FINISH	12	13 3/16	13 3/4	14	12 3/16	12 1/16
5	START	3 7/16	4	4 1/16	4 7/16	9	7 1/16
	DIFF.	8 9/16	9 3/16	9 11/16	9 9/16	3 3/16	4 15/16
	FINISH	11 7/16	13 3/16	13 3/4	14	12 3/16	12 1/16
6	START	2 15/16	4	4 1/16	4 7/16	9	7 1/16
	DIFF.	8 1/2	9 3/16	9 11/16	9 9/16	3 3/16	4 15/16
	FINISH	11 7/16	13 3/16	13 3/4	14	12 3/16	12 1/16
7	START	2 15/16	4	4 1/16	4 7/16	9	7 1/16
	DIFF.	8 1/2	9 3/16	9 11/16	9 9/16	3 3/16	4 15/16
	FINISH	11 7/16	13 3/16	13 3/4	14	12 3/16	12 1/16
8	START	2 15/16	3 15/16	4 1/16	4 7/16	9	7 1/16
	DIFF.	8 1/2	9 3/16	9 11/16	9 9/16	3 3/16	4 15/16

11A" rate per Bill.

SITE INFORMATION

Site Address: LA HONDA RD, SC APN: 082-130-070
Size Of Parcel: 2 ACRES +/- Subdivision Number:
Soil Log: SANDY LOAM Water Source: PUBLIC
Depth To Ground Water: NO WATER AT 11' DRY
Wet Weather Testing Required? ☐ YES ☒ NO
Tested By: Con Law Tester #: 01
Observed in Field By: Date: 10/26/2007
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Mar 02 11 08:29a HELP U SELL FLOYD REALTY (650) 501-1021 p.1

SAN MATEO COUNTY
HEALTH SYSTEM

May 7, 2010 APN 082-130-070

Charles Floyd
551 Alsace Lorraine
Half Moon Bay, CA 94019

Dear Mr. Floyd:

SUBJECT: EXCEPTION TO SAN MATEO COUNTY ORDINANCE CODE, LA HONDA ROAD PARCEL 082-130-070, SAN GREGORIO, CALIFORNIA

Environmental Health has received your request for an exception to San Mateo County Ordinance Code. The requested exception would allow installation of septic drainfield leach trenches approximately 10 feet from the property line common to APN 082-130-050, rather than the 50 feet required in County Ordinance Code for septic systems. Under Section 9311 of the Septic Ordinance, an exception may be granted by Environmental Health under the following conditions:

- The exception will not harm the public health, safety and welfare of the people of San Mateo County;
- Due to special conditions or exceptional circumstances of the property, its location or surroundings, a literal enforcement of the Chapter would result in unnecessary hardship;
- The hardship was not caused with the intent to avoid the requirements of this Chapter.

The Environmental Health Land Use Committee met to evaluate your request. Based on the information provided, the committee recommends the issuance of the requested exception.

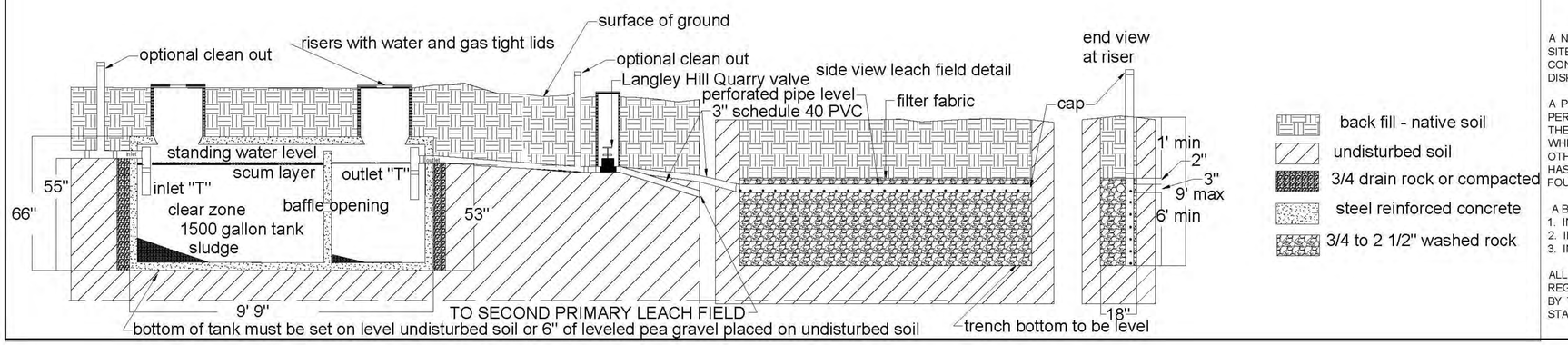
I am pleased to inform you that your **exception has been approved** given the following conditions.

- Granting this exception in no way is approval of the schematic location of the septic leach lines drawn on the figure received December 7, 2009 with the request for exception.
- A 100 foot setback from **top bank of creek** must be maintained. It appears the setback shown on the figure submitted with the request for exception is from edge of creek; not top bank of creek.

All other codes, regulations and policies are to remain in force. If you have any questions, please call Greg Smith at (650) 372-6279.

Sincerely,

Dean D. Peterson, PE, REHS
Director Environmental Health
COMMUNITY HEALTH • ENVIRONMENTAL HEALTH
Board of Supervisors: Mark Church • Rose Jacobs Gibson • Richard S. Gordon • Carole Groom • Adrienne Tissier
Health System Chief: Joe S. Naso
2000 Alameda de las Pulgas, Suite 100 • San Mateo, CA 94403 • PHONE 650.372.6200 • CA RELAY 711 • FAX 650.627.8244
www.smhealth.org



PROJECT DISCUSSION AND SCOPE OF WORK

A NEW SINGLE FAMILY RESIDENCE IS PROPOSED FOR CONSTRUCTION ON THIS SITE. THIS PLAN SHOWS HOW AND WHERE THE SEPTIC SYSTEM WILL BE CONSTRUCTED THAT WILL SERVE AS THE METHOD OF SEWER TREATMENT AND DISPOSAL.

A PERCOLATION TEST WAS PERFORMED ON THIS SITE THAT PRODUCED AN "A" PERK RATE. AT THIS RATE FOUR 70' LONG LEACH TRENCHES ARE REQUIRED FOR THE LEACH FIELD TO SERVE THE PROPOSED THREE BEDROOM HOME - TWO OF WHICH MUST BE INSTALLED AND ARE KNOWN AS PRIMARY LEACH TRENCHES. THE OTHER TWO TRENCHES WILL BE INSTALLED IF EVER NEEDED. THE SEPTIC TANK HAS A CAPACITY OF 1500 GALLONS AND IS LARGE ENOUGH TO SERVE UP TO A FOUR BEDROOM HOME.

A BRIEF SUMMARY OF THE SCOPE OF WORK FOLLOWS:
1. INSTALL SEPTIC TANK AND VALVE AS SHOWN.
2. INSTALL TIGHT LINE PIPE AS SHOWN.
3. INSTALL PRIMARY LEAH FIELD TRENCHES AS SHOWN.

ALL WORK AND MATERIALS MUST MEET OR EXCEED COUNTY OF SAN MATEO REGULATIONS AND POLICIES, AND MUST BE PERFORMED UNDER PERMITS ISSUED BY THE COUNTY. ALL WORK MUST BE INSPECTED AND APPROVED BY COUNTY STAFF BEFORE IT IS COVERED.

S.R. Hartsell, REHS
P.O. Box 342
Pacifica, CA 94044
srhartsell @hotmail.com (650) 888-2419

Septic System Plan

Floyd Residence
APN 082-130-060/070

February 25, 2011

scale as noted

by srh

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septic

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Attachment B

List of Observed Species

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Attachment B. Plant and wildlife species observed in the Study Area during the April 6, 2015 site visit.

Scientific Name	Common Name
Plants	
Acer negundo	Ash-Leaf Maple
Aesculus californica	California buckeye
Alnus sp.	alder
Arbutus menziesii	Pacific madrone
Artemesia californica	mugwort
Baccharis pilularis	coyote brush
Bromus diandrus	ripgut brome
Bromus hordeaceus	Soft Brome
Carex barbarae	Santa Barbara Sedge
Conium maculatum	Poison-Hemlock
Delairea odorata	cape ivy
Festuca arundinacea	tall fescue
Fragaria vesca	Woodland Strawberry
Fumaria sp.	fumitory
Galium aparine	Sticky-Willy
Geranium dissectum	cut-leaf geranium
Iris douglasiana	Douglas iris
Juncus patens	Spreading Rush
Lonicera japonica	Japanese Honeysuckle
Myosotis latifolia CULTIVAR/WAIF (JM2)	Woodland Forget-Me-Not
Phalaris aquatica	Harding Grass
Quercus agrifolia	coast live oak
Ribes sp.	Gooseberry
Rubus ursinus	Pacific Dewberry
Salix lasiolepis	Arroyo Willow
Sanicula crassicaulis	Pacific sanicle
Scrophularia sp.	bee plant
Silybum marianum	milkthistle
Symphoricarpos albus	common snowberry
Toxicodendron diversilobum	poison oak
Umbellularia californica	California-Laurel
Woodwardia fimbriata	Giant Chain Fern

Scientific Name	Common Name
Birds	
Baeolophus inornatus	oak titmouse
Sayornis nigricans	black phoebe
Poecile rufescens	chestnut-backed chickadee
Aphelocoma californica	western scrub jay
Corvus brachyrhynchos	American crow
Callipepla californica	California quail
Psaltriparus minimus	bushtit
Chamaea fasciata	wrentit (heard off-property)
Oreothlypis celata	orange-crowned warbler (heard off-property)
Melospiza melodia	song sparrow
Sitta carolinensis	white-breasted nuthatch
Calypte anna	Anna's hummingbird
Picoides villosus	hairy woodpecker
Contopus cooperi	olive-sided flycatcher (heard off-property)
Mammals	
Thomomys bottae	Botta's pocket gopher
Odocoileus hemionus	mule deer
Sciurus griseus	Western gray squirrel

Attachment C

Representative Photographs

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Above: Study Area view from north property line, facing south.

Below: Ditch running along north property line in Study Area, facing east.

Photographs taken April 6, 2015.

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Above: Non-native grassland within Study Area where Project footprint is proposed.

Below: Riparian canopy along eastern property line.

Photographs taken April 6, 2015.

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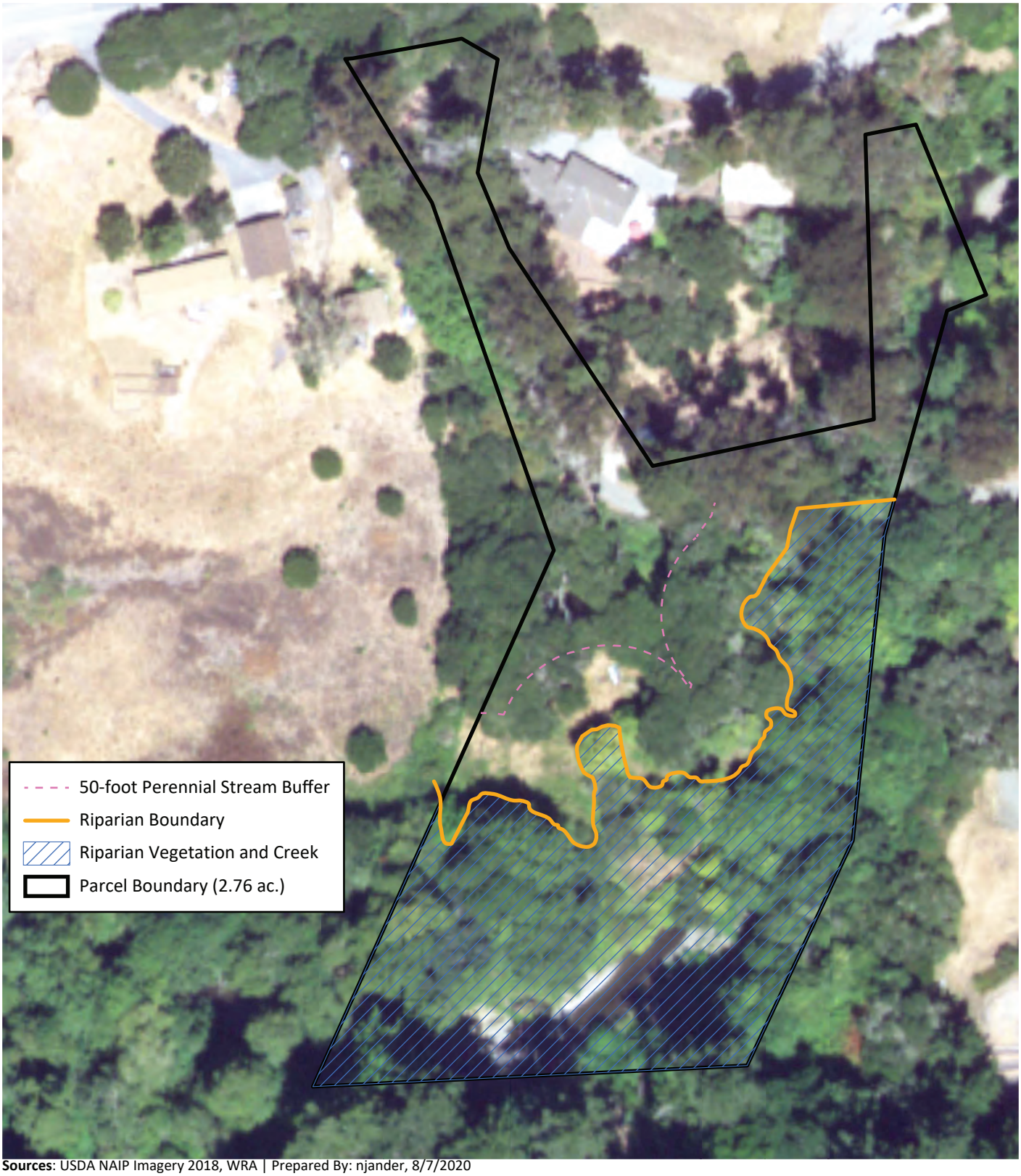
Attachment B

Limits of Riparian Vegetation in 2020 and Associated

Setback Map



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Sources: USDA NAIP Imagery 2018, WRA | Prepared By: njander, 8/7/2020

Attachment B. Riparian Dripline and Associated Setback for APN 082-130-250

Floyd APN 082-130-250
San Gregorio, San Mateo County

0 50 100 Feet

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