

Exhibit D

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FRED BALLERINI
BIOLOGICAL AND HORTICULTURAL SERVICES

November 11, 2023

To: Zoe Zepp, Planner
 Hya Honorato, Planner
 Michael Braasch, Code Compliance Inspector
 County of Monterey
 Housing and Community Development Planning Department
 1441 Schilling Place, South 2nd Floor
 Salinas, CA 93901-4527

RE: Biological Resource Review
PLN230231
APN 418-121-021-000
39340 Coast Road Big Sur, CA

Dear Zoe Zepp, Hya Honorato and Michael Braasch,

Per the request of Trish Larsen (project applicant), please find the attached 8-page biological resource summary for the subject parcel related to an Administrative Citation and Notice of Intent to Record a Notice of Violation (Ref. Case No: 23CE00225, May 9, 2023).

The project was initially cited for the following violation actions:

1. Unpermitted development/grading.
2. Unpermitted/unapproved removal of protected Redwood tree(s).

The following corrective actions were required to clear violations:

1. Immediately cease all unpermitted/unapproved vegetation and tree removal and grading.
2. Apply for and obtain the required Restoration Permit from the County of Monterey Housing and Community Development Planning Department to restore the affected area back to pre-violation state OR apply for and obtain a Coastal Development permit to legalize completed work.

It has been relayed to me via the applicant that the initial violation pertaining to the unpermitted development/grading has been rescinded. This memo will analyze the subject biological resources as they relate to the unpermitted/unapproved removal of protected Redwood trees (violation action #2).

Please phone or email if you have any questions or comments.

Sincerely,

Fred Ballerini
 Consulting Biologist

Project Findings

On October 2, 2023, I visited the subject parcel with Trish Larsen (applicant) to review the biological resources in relation to the required corrective actions detailed in the County Administrative Citation (May 9, 2023). Additionally, I have provided consulting services to neighboring parcels along Bixby Creek and am familiar with the biological resources of the Bixby Creek and Coast Road corridor.

The undeveloped residential parcel (APN 418-121-021-000) lies within the lower Bixby Creek drainage corridor where the general vegetation of the area is a dominant Central Coast Arroyo Willow Riparian natural plant community found throughout the lower Bixby Creek Canyon. Riparian habitat is identified in the Big Sur Land Use Plan as Environmentally Sensitive Habitat Area and is also identified as a natural community "rare and worthy of consideration" by the California Department of Fish and Wildlife rare plants and animals database (California Natural Diversity Database - CNDDDB). This plant community generally grows where watertable levels remain high enough throughout the year to provide moisture in the root zone for these phreatophytic plant types.

Vegetation associated with this natural community is characteristic of the coastal Santa Lucia Range river corridors with the river bank lined with white alder (*Alnus rhombifolia*) and arroyo willow trees (*Salix lasiolepis*) growing beneath coast redwoods and riparian hardwoods. Understory along the river bank includes native giant chain ferns (*Woodwardia fimbriata*), redwood sorrel (*Oxalis oregana*), common horsetail (*Equisetum arvense*), thimbleberry (*Rubus parviflorus*) and stinging nettle (*Urtica dioica*). Moving away from the river banks, the vegetation along the Bixby Canyon corridor is dominant with arroyo willow and coffeeberry (*Frangula californica*) with a thick bramble of mixed understory species such as cream bush (*Holodiscus discolor*), California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), California hedgenettle (*Stachys bullata*), western sword fern (*Polystichum munitum*) and diverse herbaceous species found throughout canyon floor growing in microhabitat species compositions directly correlated to varying sun and shade exposure. The dry canyon slopes outside the parcel transition to coastal scrub alliances to the north and mixed redwood and oak woodland to the south.



Subject parcel plot map and aerial.

Historical use of the canyon stretches back thousands of years with the Ohlone (or Costanoan) tribelets found north of Point Sur that utilized and occupied the canyon. Big Sur pioneers began arriving in the late 1800's and several developments in the canyon, including the Rainbow Lodge and the original Big Sur Post Office found along the west side of the Bixby Creek on Coast Road near where the Old Coast Road crosses Bixby Creek, predated the opening of Highway 1 in 1937. Within

the subject parcel, the historical chronology of site development is unknown though portions of the parcel including the area of the subject tree removal violation appear to have experienced ongoing human induced disturbance as the area in general appears ruderal and void of significant native vegetation.

The subject area lies along the west side of Coast Road between the road margin and a wind sculpted stand of coast redwoods (*Sequoia sempervirens*) where the elevation begins to rise westward from the canyon floor. Redwood Forest natural community is considered rare by the California Department of Fish and Wildlife and environmentally sensitive habitat (ESHA) under the provisions of the Big Sur Coast LUP (Ref. Policy 3.3.3.A.8). Current conditions appear to show the cleared terrace area recently stabilized with straw mulching and possibly reseeded. A hose was noted in the area (shown in the image below) appearing to supply irrigation to the site.



Area of inspection and cottonwood stump (right side of image).
October 2, 2023

Mixed non-native ruderal herbaceous and native vegetation were observed throughout the area. Non native species included a dominant cover of exotic annual grasses that includes wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordaceus*), foxtail brome (*Bromus madritensis*), and others. Additional herbaceous exotic plant species including sticky eupatorium (*Ageratina adenophora*), sweet alyssum (*Lobularia maritima*), poison hemlock (*Conium maculatum*), wild radish (*Raphanus sativus*), cape ivy (*Delairea odorata*), nasturtium (*Tropaeolum majus*) and burr clover (*Medicago polymorpha*) were noted germinating in the site. These species, and others that may appear when favorable environmental conditions develop for plant germination, are recognized as invasive species by the California Invasive Plant Council (Cal-IPC).

These species, particularly cape ivy, have the ability to cause various degrees of disruptive ecological impacts to native coastal plant communities as the species are locally persistent and problematic in outlining sensitive native habitats that are unique to the Big Sur coastal region. Implementing invasive species eradication controls will be consistent with several LUP policies regarding environmentally

sensitive habitats (Ref. LUP Policies 3.3.2.1 + 3.3.2.7). The Big Sur LUP Policy 3.3.3.10 encourages Big Sur residents to undertake restoration of natural environments by removal of exotic, invasive plants and Policy 3.3.2.7 stipulates that land uses adjacent to environmentally sensitive habitats be compatible with the long-term maintenance of the resource.

Native herbaceous and shrub species were also noted in the early stages of establishment with California hedgenettle (*Stachys bullata*), Douglas' nightshade (*Solanum douglasii*), poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*) and others.

Three flush-cut redwood stumps were noted in the area with one 9" and one 4" diameter stumps resprouting from basal tissues. The third redwood stump (9" diameter) was observed without any basal resprouting suckers.



4" Coast Redwood stump resprouting.



9" Coast Redwood stump resprouting.



9" Coast Redwood stump without basal sprouting.

The project applicant disclosed that the three coast redwood trees located on the outer, eastern boundary of the windswept coast redwood grove, were damaged during large limb failures related to the 47" DBH landmark black cottonwood. The three redwood trees had fallen (pictured below) or had severely damaged mainstems broken off from a naturally occurring black cottonwood limb failure and the coast redwoods were subsequently cut to the stumps by the applicant.



Photo supplied by the applicant showing partial black cottonwood limb failure and downed 9" coast redwood tree with an understory dominant with highly invasive cape ivy.
March 2023

The subject black cottonwood tree (*Populus trichocarpa*), misidentified as Fremont's cottonwood (*Populus fremontii*) in the arborist report, was reportedly experiencing limb failure as the applicant indicated it was standing dead. The tree was recently cut (May 7, 2023) to its current state after several large limbs fell onto the open area and on Coast Road near the redwood grove. Black

cottonwoods are the largest American poplar and largest hardwood tree in western North America. They are a pioneer species with shallow root systems that grows in alluvium soils and generally found in riparian habitats, but have a low drought tolerance. They often regenerate from vegetative sprouts and readily sprout prolifically from stumps (cut or otherwise) or from buried fragments of branches when tissues are live and viable. Root suckers are abundant and generally considered a maintenance problem in urban sites. Field observations of the cottonwood stump during the October 2, 2023 site visit and during stump photo inspections requested of the applicant from November 4, 2023 indicate that no evidence of vegetative stump sprouting or emergence of root suckers has occurred which would fall in line with the applicants assessment that the tree was dead prior to being cut in May 2023 (if the tree had been alive prior to cutting, the cottonwood would currently be regenerating from vegetative sprouts). Additionally, mycelium fruiting bodies were noted near the tree base which could be an indication of decomposition of dead root materials from the cottonwood.



No vegetative resprouting on cottonwoods during recent trunk inspections.
October 2, 2023.



No vegetative resprouting on the cottonwood stump during recent trunk inspections.
October 2, 2023.

Site observations and conversations with the applicant appear to indicate the subject black cottonwood was standing dead, experienced several natural limb failures that impacted the three (9", 9" and 4" DBH) coast redwood trees and was hazardous to the Coast Road community. Natural acts resulting in tree failure would not typically warrant a code violation or trigger a replanting mitigation if the subject natural act (dead limb failure) caused damage or failure of a protected tree (coast redwood). Emergency tree removal actions implemented by the applicant to remove a hazardous dead tree would however require notification to County of Monterey Director of Planning within 10 working days thereafter (Ref. 16.60.040.G., included below). In this case, the Monterey County Code Compliance Inspector visited the site two days after the subject cottonwood was cut to its current state.

Monterey County Code 16.60 - Preservation of Oak and Other Protected Trees

16.60.040.G. Emergencies. In the case of emergency caused by hazardous or dangerous condition of a tree and requiring immediate action for the safety of life or property, such necessary action may be taken to remove the tree or otherwise reduce or eliminate the hazard without complying with the other provisions of this Section, except that the person responsible for cutting or removal of the tree(s) shall report such action to the Director of Planning within ten (10) working days thereafter.

Recommendations:

1. Remove supplemental irrigation to the seeded area as the added moisture is benefitting aggressive non-native and invasive species that can easily outcompete and overwhelm native habitat populations.
2. Mow the herbaceous plant material in the cleared area to prevent exotic and invasive species from developing seed that could further spread to neighboring natural communities. Mowing should take place prior to bird nesting season (February 15 - September 30) Protect or fence resprouting coast redwood trees prior to mowing.
3. Continue exotic species abatement through the growing season to prevent pioneering and encroachment of invasive species (with emphasis on eradicating cape ivy).
4. Maintain fire clearance mandates as required by state and local policies.
5. The parcel lies within the Critical Habitat Range of federally listed threatened California red-legged frog (*Rana draytonii*) and federally endangered foothill yellow legged frog (*Rana boylei*). Additionally, coast range newt (*Taricha torosa*) is a California Department of Fish and Wildlife listed Species of Special Concern and likely occurs on the parcel. Any ground disturbance actions could potentially impact the upland habitat areas of these species. If any actions are proposed that may cause soil

disturbance (grading, stump grinding), then the subject actions would require a biological monitoring survey and subsequent protection or avoidance protocols prior to disturbance. No visual amphibian sightings were noted during the site visit but they are presumed to be present on site due to the suitable habitat conditions along the creek corridor.

6. It is recommended to leave the cottonwood stump in place as a habitat refuge. Tree stumps provide shelter and food sources for a variety of diverse wildlife species including insects, birds, mammals, bats, amphibians, and reptiles. However if the stump is proposed to be cut down, it is recommended to remove the stump as soon as feasible before wildlife species begin to take up residence and conduct the removal during non-nesting season for birds (September 30 - February 1).

- END -