# Exhibit B

This page intentionally left blank.

**THOMPSON**
**WILDLAND MANAGEMENT**
Environmental Management & Conservation Services
*International Society of Arboriculture* Certified Arborist # WE-7468A
*Department of Pesticide Regulation* Qualified Applicator Lic. #QL50949 B
Environmental & Arborist Assessments, Protection, Restoration, Monitoring & Reporting
Wildland Fire Property Protection, Fuel Reduction & Vegetation Management
Invasive Weed Control, and Habitat Restoration & Management
Soil Erosion & Sedimentation Control
Resource Ecologist

January 14, 2024

Glass Residence
124 Fern Canyon Road
Carmel, CA. 93923
APN: 241-131-024-000

Subject: 124 Fern Canyon Road Pre-construction Biological Assessment

Per *Monterey County Housing & Community Development Department-Planning Services* permit requirements, a biological assessment was recently conducted for the property located at 124 Fern Canyon Road (APN: 241-131-024) in the Carmel Highlands in preparation for a proposed home developed project. This undeveloped, but previously disturbed lot is situated in a fairly densely wooded residential community in this coastal zone area to the east of Highway 1. The property assessment involved performing a ground level visual inspection of the subject parcel to record and document ecological resources, vegetation types and habitat characteristics, determine the presence or absence of biological resources that have protection status under federal and state laws (e.g., *Federal Endangered Species Act* [FESA], *California Endangered Species Act* [CESA] and the *California Environmental Quality Act* [CEQA]), and provide resource protection and mitigation recommendations that may be necessary in preparation for the proposed property development project. It should be noted that during the assessment protected special status species and sensitive habitat was not observed.

This biological evaluation was conducted by performing a thorough walk through and assessment of the subject property and reviewing property development plans and maps (refer to the corresponding project site plans for property features and characteristics [e.g., construction footprint and tree locations, but no sensitive or protected resources to identify], as well as specific details regarding proposed property development). Where possible the characteristics and conditions described in this report are depicted in the photographs located at the end of the report (refer to *Figures 1-7*).

## I. SITE CHARACTERISTICS & DESCRIPTION

The property located at 124 Fern Canyon Road is approximately 0.6 acres in size and is in a wildland-urban interface (WUI) residential community in the Carmel Highlands that is dominated by upper-canopy Monterey pine trees (refer to attached photos, *Figures 1-7*). In nearby areas there is sizable natural open space primarily consisting of mixed woodlands (i.e., mostly pines and oaks) and coastal scrub type understory vegetation. Proposed property development includes a single family home, garage, ADU, septic system and maintained landscape. This moderately sloped woodland parcel is surrounded by developed residential lots to the south and east and Fern Canyon Road to the west and north.

This forest and woodland environment is significantly influenced by seasonally temperate coastal environmental conditions. Native tree species occurring in this area of the Carmel Highlands primarily consist of upper-canopy Monterey pines (*Pinus radiata*) and mid- to lower-canopy coast live oaks (*Quercus agrifolia*), with mid- to upper-canopy Monterey cypress (*Hesperocyparis macrocarpa*) trees also present, but occurring to a lesser extent.

As previously mentioned, on this particular lot and the surrounding parcels, Monterey pine is the most dominant and prevalent tree specie, but several smaller and compact growing coast live oaks are also occurring on the property (refer to *Figures 1-7*). The Monterey pines (a coniferous cone and needle bearing evergreen) occurring on this parcel and the surrounding areas have a crown class ranging from suppressed to dominant, with a co-dominant canopy class being the most common. The coast live oaks on the lot have an intermediate crown class. Pine and oak tree density and canopy cover on this lot is moderate to high with a few small woodland clearings occurring on the property. Understory flora on this previously mowed lot is composed of a variety of native and exotic plant species.

Natural recruitment and regeneration of native specie trees (i.e., Monterey pine and coast live oak seedlings and saplings) is occurring on the subject lot; however, additional planting will be necessary to further assist in sustaining the health and character of this mixed woodland vegetation community and to satisfy *Monterey County Housing & Community Development Department-Planning Services* tree removal permit conditions (refer to the arborist report that was prepared for this project).

Soils on this moderately sloped and previously disturbed west and north facing parcel appear to be stable and sufficient for supporting property development activities, as well as healthy native flora and woodland habitat. Per the project plans, it does not appear that soil disturbance and construction activities will be occurring in areas with steep grade or high erosion potential.

Special status flora and fauna and sensitive habitat that have protection status are not known to occur on the subject parcel and were not observed during the site assessment, which includes Yadon's piperia (*Piperia yadonii*), California tiger salamander (*Ambystoma californiense*) and California red-legged frog (*Rana draytonii*), among others, which are protected species that have

the potential of occurring in this area. During the property assessment, which was conducted to ascertain the presence or absence of federal or state listed species, it was determined that protected species, sensitive habitat, and/or actively nesting birds that have the potential of occurring on the property were not observed or present at the time of the assessment and are not expected to be inhabiting the parcel during property development activities.

Impacts to habitat and existing vegetation associated with grading and construction activities will primarily be the removal of 13 trees (i.e., 8 Monterey pines and 5 coast live oaks) that are greater than 6 inch diameter, which will require a County tree removal permit (refer to the corresponding arborist report), as well as the removal of a few young and immature trees that are less than 6 inch diameter. Additionally, it will be necessary to remove common understory vegetation primarily consisting of native shrubs (e.g., toyon [*Heteromeles arbutifolia*] and coyote brush [*Baccharis pilularis*]), exotic shrubs (e.g., acacia [*Acacia longifolia*] and French broom [*Genista monspessulana*]) and several species of a variety of common non-native grasses (e.g., quaking rattlesnake grass [*Briza spp*], ripgut brome [*Bromus diandrus*] and panic veldt grass [*Ehrharta erecta*]), native perennial grasses (e.g., creeping wildrye [*Elymus triticoides*] and California brome [*Bromus carinatus*]), and native and exotic forbs and herbaceous perennials (e.g., yerba buena [*Clinopodium douglasii*], wood mint [*Stachys bullata*] and common plantain [*Plantago major*]). It should be noted that non-native invasive plant species are well established on the property and in the nearby woodland habitat areas.

## II. BIOLOGICAL RESOURCES & OBSERVATIONS

The Carmel Highlands and surrounding areas support a diversity of biological and cultural resources, including special status species, sensitive habitat and protected conservation values. However, as previously noted, per the biotic assessment of this previously disturbed parcel there is no indication or evidence that the proposed project site presently supports protected special status species and/or sensitive habitat. Consequently, sensitive and protected biological resources are not expected to be impacted and affected by proposed property development activities, the exception being the removal of several native Monterey pine and coast live oak trees that will require a County tree removal permit (refer to arborist report that was prepared for the project).

As previously stated, native tree species that are most common and dominant on the subject property and this area of the Carmel Highlands are mature and senescing upper-canopy Monterey pines and mid- to lower-canopy coast live oaks, with mid- to upper-canopy Monterey cypress trees occurring to a lesser extent. Natural recruitment and regeneration of pine trees is presently at sufficient levels to sustain the health and character of woodland habitat; however, it will be necessary to plant several of the above mentioned native tree species in order to comply with County tree removal permit conditions (refer to corresponding arborist report).

Lower growing understory vegetation inhabiting this previously mowed and disturbed lot consist of a variety of native and non-native introduced species, which includes native and non-native

grasses, herbaceous perennials and annual forbs, and native and exotic shrubs and scrub type vegetation (refer to attached photos, *Figures 1-7*). Native plant species occurring on the parcel include the following: Poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), coyote brush (*Baccharis pilularis*), California coffeeberry (*Frangula californica*), sticky monkey flower (*Mimulus aurantiacus*), Pacific blackberry (*Rubus ursinus*), California huckleberry (*Vaccinium ovatum*), silk tassel (*Garrya elliptica*), Eastwood's manzanita (*Arctostaphylos glandulosa*; one small shrub), Douglas iris (*Iris douglasiana*), California honeysuckle (*Lonicera hispidula*), hedge nettle/wood mint (*Stachys bullata*), common yarrow (*Achillea millefolium*), soap plant (*Chlorogalum pomeridianum*), Pacific sanicle (*Sanicula crassicaulis*), western sword fern (*Polystichum munitum*), yerba buena (*Clinopodium douglasii*) and a few species of native perennial grasses and grass like species, such as creeping wildrye (*Leymus triticoides*), blue wildrye (*Elymus glaucus*), California brome (*Bromus carinatus*), sedges (*Carex spp*) and rushes (*Juncus spp*).

Non-native invasive broadleaf plant species observed on the subject parcel include French broom (*Genista monspessulana*), acacia (*Acacia longifolia*) and Italian thistle (*Carduus pycnocephalus*), as well as several exotic grass species, such as ripgut brome (*Bromus diandrus*), quaking rattlesnake grass (*Briza spp*), panic veldt grass (*Ehrharta erecta*), wild oat grass (*Avena fatua*), and jubata/pampas grass (*Cortaderia jubata*), among others (refer to *Figure 7*). To the extent possible, control, manage and reduce habitat degrading non-native invasive broadleaf weeds and exotic annual grasses to improve habitat and reduce wildland fire hazards. Additionally, several introduced, but less invasive "naturalized" plant species (i.e., mostly herbaceous perennials and annual forbs, such as common plantain [*Plantago major*] and dandelion [*Taraxacum officinale*], amongst others) that are not as harmful and problematic to habitat were also observed on the lot and in the surrounding areas. It should be noted that non-native invasive plant species are well established on the property and in the surrounding woodland environment.

As noted earlier, there are no known occurrences of protected special status species, sensitive habitat or other protected resources occurring on the subject parcel, and none were observed during the site assessment. Consequently, there is no evidence that protected species and/or sensitive habitat will be adversely affected or impacted by proposed property development activities. The only native species observed on the property that require some protection and/or mitigation action (i.e., tree protection measures and replacement plantings) by the *Monterey County Housing & Community Development Department-Planning Services* are Monterey pine and coast live oak trees (refer to the *Tree Impact Assessment*/*Forest Management Plan* that was prepared for this project, as well as the following recommendations section).

It should be noted there is one small Eastwood's manzanita (*Arctostaphylos glandulosa*) shrub located within the proposed construction footprint (refer to *Figure 6*). This insignificant individual shrub does not constitute an established and viable population so removal of this one plant should not be a concern and mitigation should not be required. However, relocation of this native manzanita shrub prior to property development activities commencing to another suitable area of the property that will not be affected by construction operations is an option to consider.

Protected special status plant and animal species that according to the CNDDB (*California Natural Diversity Database*) have the potential of occurring on the subject parcel include Yadon's piperia (*Piperia yadonii*; a native orchid and perennial herb), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), monarch butterfly (*Danaus plexippus*) and Smith's blue butterfly (*Euphilotes enoptes smithi*), but none of these or other protected species or habitat (exception being Monterey pine trees) are occurring on the property. Protected central maritime chaparral habitat is not occurring on or adjacent to the subject property, and proposed pine and oak tree removal will be mitigated by the planting of several pine and oak trees (refer to the arborist report).

In regards to ESHA, according to Monterey County condition, *20.147.040 Environmentally Sensitive Habitat Areas (ESHA), Section D., Subsection 4. Riparian Corridor Habitat, and 20.147.020.E ESHA* (the following description provided by *Monterey County Planning Department*), "*Environmentally Sensitive Habitat Area* means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development. In the Carmel Highlands region, examples of habitat areas that have historically been determined to meet the definition of ESHA include the rare Monterey cypress and Gowen cypress forest communities, portions of native Monterey pine forest, central maritime chaparral, coastal sand dunes, streams and riparian corridors, wetlands, and sites in which sensitive plants and animals associated with these and other habitats are located." Per the assessment, it has been determined that ESHA resources will not be significantly impacted or affected by proposed property development activities.

Less than a quarter mile from this property there are relatively large and undeveloped open space areas of the Carmel Highlands primarily consisting of mixed pine and oak woodlands, coastal scrub and central maritime chaparral habitat. Some of these natural open space areas support riparian habitat and other sensitive resources, as well as protected flora and fauna, but none were observed on the subject parcel.

Per the assessment of this undeveloped but previously disturbed parcel, it has been determined that proposed property development activities (i.e., the construction of a single family home, garage, ADU, paved driveway, septic system and maintained landscape area) will not adversely impact or affect federally and/or state protected special status species, sensitive habitat and/or *Environmentally Sensitive Habitat Areas* (ESHA). There are no known occurrences of special status species (e.g., Yadon's piperia, Monarch butterfly, Smith's blue butterfly and/or California red-legged frog), sensitive habitat or other protected resources occurring within or directly adjacent to the property and proposed project site, and none were observed during the site assessment. Additionally, actively nesting birds were not observed on or adjacent to the subject property during the site assessment; however, a nesting bird assessment should be conducted if tree removal operations occur during the nesting season, which in Monterey County may begin as early as February and continue through August.

## III. RECOMMENDATIONS

In the interest of protecting and minimizing impacts to habitat and biological resources, as well as protecting and preserving the ecological values, diversity and character of this woodland parcel, the following resource protection and preservation measures and best management practices (BMP's) should be implemented:

1) Prior to construction activities beginning, install resource protection measures (e.g., high visibility exclusionary fencing and erosion of & sedimentation control measures) to clearly identify and delineate the construction zone and to prevent unnecessary construction site expansion and disturbance to surrounding woodland habitat. Resource protection BMP's include appropriate erosion and sedimentation control measures (e.g., silt fence along the downslope perimeter of the site and a all-weather construction site entrance are a few examples), tree protection measures, and high visibility exclusionary fencing that clearly identifies the construction zone and building footprint. Resource protection measures shall be monitored and properly maintained for the duration of the project to ensure they are functioning properly.
2) Install exclusionary fencing along the outer perimeter of the construction site or property line, and around trees that will be retained and protected. This high visibility exclusionary fencing will assist in protecting resources from construction related impacts and encroachment. Resource protection measures shall be monitored and properly maintained for the duration of the project.
3) Install silt fence along the downslope perimeter of the construction site. Properly installed and maintained silt fence that is trenched in, stable and secure will assist in preventing and minimizing wet season sediment runoff.
4) Control, manage and remove non-native invasive weeds, such as French broom, acacia, thistle and jubata/pampas grass, among others, that are degrading to habitat, which will assist in improving habitat and native plant diversity, as well as reducing combustible fuel loads and wildland fire hazards.
5) In the landscape plan consideration should be given to utilizing plants that are native and appropriate to mixed pine and oak woodland habitat. Plants selected for landscaping operations should be drought tolerant, fairly fire resistant and lower combustibility, non-invasive to wildland areas, and well adapted to this woodland environment.
6) As previously stated, nesting birds were not observed during the site assessment, which was anticipated since the nesting season in Monterey County may begin as early as February and continue through August. If project operations begin during this nesting period a nesting bird assessment should be conducted within two weeks of construction activities commencing or prior to any significant tree work.
7) Per the arborist report (i.e., *Forest Management Plan*), thirteen 6 inch DBH or larger native specie trees (i.e., 8 Monterey pines and 5 coast live oaks) are proposed for removal in preparation for property development activities. As a result, it will be necessary to plant 18 replacement trees (i.e., 11 one to fifteen-gallon native coast live oaks and 7 one to fifteen-gallon Monterey pine and/or Monterey cypress seedlings or saplings) on the subject parcel

that will need to survive a one-year monitoring period to satisfy Monterey County tree removal permit conditions.

## IV. CONCLUSION

In conclusion, during a recent assessment of the property located at 124 Fern Canyon Road in the Carmel Highlands special status species and sensitive resources that are protected under federal and state laws (e.g., FESA, CESA and CEQA) were not observed within or in close proximity to the proposed home construction site. Consequently, impacts to protected special status species, sensitive habitat and/or ESHA from proposed property development activities is not anticipated and is unlikely to occur.

The proper implementation and maintenance of resource protection best management practices and mitigation measures provided in this report (refer to *Section III, Recommendations*) will assist in protecting and preserving biological resources and sustaining the health and character of mixed woodland habitat, as well as satisfy *Monterey County Housing & Community Development Department-Planning Services* permit conditions.

Best regards,

*Rob Thompson*
Resource Ecologist
ISA Certified Arborist # WE-7468A

*January 14, 2024*
Date

Thompson Wildland Management (TWM)
57 Via Del Rey
Monterey, CA. 93940
Office (831) 372-3796; Cell (831) 277-1419
Email: thompsonwrm@gmail.com ; Website: www.wildlandmanagement.com

THIS REPORT HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF CLIENT. THOMPSON WILDLAND MANAGEMENT (TWM) ACCEPTS NO RESPONSIBILITY FOR ITS USE BY OTHER PERSONS.

CLIENT ACKNOWLEDGES THAT THIS REPORT, AND ANY OPINIONS, ADVICE OR RECOMMENDATIONS EXPRESSED OR GIVEN IN IT, ARE BASED ON THE INFORMATION SUPPLIED BY CLIENT AND ON THE DATA, INSPECTIONS, MEASUREMENTS AND ANALYSIS CARRIED OUT OR OBTAINED BY TWM.

ALTHOUGH OPINIONS MAY BE OFFERED REGARDING THE RESULTS OF THE SUBJECT MATTER, TWM CANNOT GUARANTEE ANY PARTICULAR RESULT. CLIENT ACKNOWLEDGES THAT TWM HAS MADE NO PROMISE ABOUT THE OUTCOME AND THAT ANY OPINION OFFERED IN THE FUTURE WILL NOT CONSTITUTE A GUARANTEE.

Figure 1. Currently undeveloped lot has been previously disturbed and is located in mixed pine and oak woodland habitat.

Figure 2. View of proposed homesite looking southeast. Several pine and oak trees and native (e.g., toyon, silk tassel) and exotic understory shrubs (e.g., acacia and French broom) will need to be removed in preparation of home construction activities.

Figure 3. Upper eastern portion of lot has been previously disturbed and impacted and has low native plant composition and cover.

Figure 4. View of homesite looking northwest.  Toyon is the most common native understory shrub occurring on the lot.

Figure 5. Pines and lower growing oaks and other native understory vegetation is common on the lot.

Figure 6. One small and insignificant native Eastwood's manzanita shrub is located within the building footprint, but is not a viable population and removal is not a concern.

Figure 7. Native toyon is in foreground right of center and larger non-native invasive acacia bush seen in center of photo within the proposed building footprint.