FOOTHILL ASSOCIATES

ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

October 28, 2016

Dave Morton
Massie & Company
1801 Tribute Road
Sacramento, CA 95815

RE: Arborist Survey for 3264 Taylor Road, Town of Loomis, Placer County, California

Dear Mr. Morton:

The purpose of this letter is to document the existing trees within proposed project, 3264 Taylor Road (Project Site), evaluate impacts within the canopy of protected trees, and provide recommendations for tree preservation and mitigation based on the engineering plan data provided by Morton & Pitalo, Inc.

The project site is located at 3264 Taylor Road in the Town of Loomis, California. The proposed project will include construction of a light commercial building, parking lot, and utility improvements, including an off-site sewer line.

The planned project area fronts on Taylor Road and is zoned General Commercial along with adjacent properties (Town of Loomis 2003). Single-family homes were observed on adjacent lots to the east and west, and industrial land use was observed on properties to the north. Less than a quarter mile away on the opposite side of the street is Del Oro High School.

REGULATORY THRESHOLD

The Town of Loomis (Town) regulates impacts to native oak trees under the *Loomis Municipal Code, Chapter 13.54 – Tree Conservation* (Tree Conservation Ordinance, revised 2014). This policy applies to tree management in both new development projects and established residential areas. According to the policy, a protected tree is defined as any interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), or oracle oak (*Quercus* x *morehus*), with a trunk that is a minimum of six inches in diameter at breast height (DBH [diameter of a tree trunk as measured at 54 inches above the ground at the base of a tree]), blue oaks (*Quercus douglasii*) with a four inch DBH or larger trunk, any native oak tree with multiple trunks that have an aggregate DBH of at least ten inches, or any Heritage Tree (any tree identified as "Heritage Tree" status by council resolution). Protected trees also include any trees preserved or replanted pursuant to *Section 13.54.090*, except for exempt trees and those classified as invasive species by the California Invasive Pest Council (Cal-IPC), such as olive trees (*Olea europaea*), and non-native trees listed as not to be planted on Town-owned property in the Master Tree List.

The Tree Conservation Ordinance requires a Tree Permit for the removal of any protected tree or work within the critical root zone (CRZ), which is defined as the diameter of the longest limb plus one foot. Mitigation is required for removal of protected trees. Mitigation may include planting replacement trees of the same species either on the property or at a location within the Town of Loomis approved by the Town Manager or payment of in-lieu fees for each inch of trunk diameter removed. Mitigation is not required for removal of dead, dying, or hazardous trees or those requiring major corrective care.

METHODOLOGY

International Society of Arboriculture (ISA) Certified Arborist, Paul Weller (WE-7862A) conducted an arborist survey on October 21, 2016. All trees greater than 4 inches DBH on or overhanging the project site or sewer easement, were surveyed. Trees accessible to the arborist and onsite were tagged with aluminum tree tags inscribed with a unique number. A tree identification number was established for each tree and matches the number of the tree tag. Trees on adjacent properties were assigned a tree identification number, but were not physically tagged.

Data recorded during the survey included the following: location, tree ID number, species, number of trunks, DBH of each trunk, canopy of dripline diameter, height, health, vigor, and structure rating, and remarks.

For trees on slopes, DBH was measured from the ground surface on the high side of the tree using a steel diameter tape.

Canopy dripline diameters were visually estimated. The measurement from the trunk to the end of the longest lateral limb was measured and doubled to determine the diameter of the canopy.

Tree height values were visually estimated.

Tree health, vigor, and structure were rated as Good, Fair, or Poor. **Table 1** provides a general definition of these ratings. Where conditions were between ratings of Good and Fair or Fair and Poor, intermediate ratings of Fair-Good and Fair-Poor were given. This five-point scale correlates to the tree condition ratings outlined in the Tree Conservation Ordinance.

Table 1 — Tree Rating Guidelines

Rating	Tree Health
Good	The tree exhibits characteristics of superior health for the species. The canopy of the tree is even, alive to the tips of branches, and foliage is distributed evenly across the extents of branches and canopy. The root crown, trunk, limbs, and branches are free of decay, defects, cracks, and not oozing sap. Bark is evenly and completely covering the trunk. Wounds have closed or are closing. Sprout growth, insects, and stress are not observed. Foliage or buds are of a density and hue exemplary of the species with no spotting, deformities, or nutrient deficiency observed in the foliage.

Fair	The tree exhibits characteristics of average health for the species. The canopy of the tree is even to uneven, alive to the tips of most branches, and foliage is distributed evenly to unevenly across the extents of branches and canopy. The root crown, trunk, limbs, and branches are nearly free of decay, defects, cracks, and not oozing sap. Bark is evenly and completely covering the trunk with very little (less than 10%) missing. Wounds are closing. Little sprout growth, insects, and stress observed. Foliage or buds are of a density and hue typical of the species with minor to no spotting, deformities, or nutrient deficiency observed. If disease or malady is observed it is more of a temporary nature or cosmetic condition and has not greatly contributed to a decline in the vigor or structure of the tree.
Poor	The tree exhibits characteristics of inferior health for the species. The canopy of the tree is uneven, with both dead and alive branch tips, and foliage is distributed unevenly or patchy. The trunk, limbs, and branches exhibit signs of decay, defects, cracks, and/or are oozing sap. Bark is unevenly and/or not completely covering the trunk. Wounds are not closing. Sprout growth, insects, fungus, and/or stress are observed. Foliage or buds are not dense or discolored, or may exhibit spotting, deformities, or nutrient deficiency. The tree exhibits a disease or malady that cannot be reversed or has led to deterioration of vigor or structure of the tree.
	Tree Vigor
Good	The tree exhibits characteristics of superior vigor for the species and age of the tree. Length of internodes and prior year's growth is above average for the species (excluding water sprouts or sprout growth). Growth is aggressive to steady. Wounds to trunk or limbs have closed or are quickly closing. Bud, leaf, or flower production is abundant and dense.
Fair	The tree exhibits characteristics of average vigor for the species and age of the tree. Length of internodes and prior year's growth is typical for the species (excluding water sprouts or sprout growth). Growth is steady and unremarkable. Wounds to trunk or limbs are closing or slowly closing. Bud, leaf, or flower production is typical for the species or otherwise unremarkable.
Poor	The tree exhibits characteristics of inferior vigor for the species and age of the tree. Length of internodes and prior year's growth is below average for the species (excluding water sprouts or sprout growth). Growth is slow to nonexistent. Wounds to trunk or limbs are not closing. Bud, leaf, or flower production is below average for the species.
	Tree Structure and Form
Good	The tree exhibits characteristics for low potential of structural failure and is a superior tree in terms of structure. The tree has space to achieve the ultimate form of the species. The tree has a central leader and has a form typical of the species. The trunk is free of defects or wounds, is growing vertically, and bark is not included. Limbs and branches are connected to the trunk at well-formed attachments and are not over-burdened. Branches and limbs are live, complete, intact, and do not exhibit signs of decay, cavities, or irregularities. The tree has no observed history of pruning to limbs or roots. The tree is located on stable ground and roots are not exposed above the ground surface. The tree canopy is complete and balanced.
Fair	The tree exhibits characteristics for moderate potential of structural failure and is an average tree in terms of structure. The tree has most of the space necessary to achieve the ultimate form of the species. The tree has a central leader or with selective pruning could achieve one and generally has the form typical of the species. The trunk could have minor defects, wounds present are small and closing, is growing vertically, and bark is not included on main stems. Limbs and branches are connected to the trunk at well-formed attachments and few to none may be mildly overburdened. Branches and limbs are live, complete, intact, and do not exhibit signs of decay, cavities, or irregularities. Only minor branches are broken and dieback present is minimal. Past areas of pruning to limbs or roots are healing and do not show decay. Active advancing decay is not observed. The tree is located on relatively stable ground without active erosion or sloughing. Few roots are exposed above the ground surface. The tree canopy is nearly complete and mostly balanced.

Poor	The tree exhibits characteristics for high potential of structural failure and is an inferior tree in terms of structure. The tree lacks space necessary to achieve ultimate form of the species. The tree lacks a central leader, is codominant, and/or lacks the form typical of the species. The trunk could have defects, wounds present are small to large and/or not closing, is arched or leaning, and bark is included on main stems. Limbs and branches are connected to the trunk at poorly-formed attachments, some are overburdened with the majority of the weight concentrated on the outer 1/3, and/or the tree is observed with multiple limb attachment. Branches and limbs are partly live, incomplete or broken, and exhibit signs of decay, cavities, or irregularities. Fungus or conks observed in major structural members. Dieback present is greater than 1/3 of tree volume. Historic pruning cuts are not healing and show signs of decay. Advancing decay and/or insect activity is observed. The tree is located on unstable ground or with active erosion or sloughing. Roots are exposed above the ground surface and/or are heaving adjacent infrastructure. The tree canopy is incomplete and unbalanced, and/or weight is unequally distributed.

SURVEY RESULTS

A total of 58 trees were surveyed, of these 32 are protected by the Town Tree Conservation Ordinance. The location of each tree is shown in **Figure 1**. Data particular to each tree is presented in **Attachment A**. Photographs of the protected trees are presented in **Attachment B**.

Tree Inventory

Trees native to Placer County, non-native (trees not native to California) ornamental trees, past agricultural trees, and invasive trees (as listed by California Invasive Plant Council [IPC]) or locally weedy trees are present in the survey area. Trees present and native to Placer County include one northern California black walnut (*Juglans hindsii*), three blue oaks, 12 valley oaks, and 24 interior live oaks. Non-native ornamental trees present include 13 willowleafed peppermint gums (*Eucalyptus nicholli*). An old agricultural tree, an olive (*Olea europea*) was present. Invasive trees present include the olive, two cherry plums (*Prunus cerasifera*), and a Peruvian pepper (*Schinus molle*) (California Invasive Plant Council 2006). Locally weedy trees present included a pecan (*Carya illinoensis*).

Tree Condition

Some trees surveyed were observed to suffer from drought stress, crowding, and past poor tree care (topping) practices. California has experienced a prolonged period of drought (greater than five years) which could be contributing to stress on the trees. Some trees were observed growing under the canopy of adjacent trees and were not able to establish leaders or achieve a form indicative of the species. Several trees were observed to have been cut in the past three to seven years at locations along the trunk within two to six feet of the ground (topping cuts). The remaining portions of the trunk have resprouted with many smaller branches emanating from the live wood. These new branches could be weakly attached and the large wounds created from the initial cuts have been unable to heal over and are a vector for decay and disease. Only one of these trees (#25) was topped above the 54-inch height threshold for DBH measurements, so this tree is the only topped one included in the survey data.

Two of the trees surveyed were dead, and were documented to record this status at the time of survey. Of all live trees (56), health was rated good for 11 percent, as Fair-Good and Fair for 64 percent, with the remaining (25%) rated as Fair-Poor and Poor. Vigor was rated as Good for 16 percent, Fair-Good and Fair for 55 percent, with the remaining (29%) rated as Fair-Poor and Poor. Structure of the trees surveyed was rated as 7 percent Good, 55 percent Fair-Good and Fair, and 38 percent as Fair-Poor and Poor.

With changes in the environment, proper care, and allocation of resources, trees with a Fair or Fair-Poor health or vigor rating could improve over time. Changes in the environment could be either naturally occurring or human influenced.

Trees with Fair-Poor or Poor structure rating typically decline over time. Measures to reduce risk should be explored for trees with these ratings. If the tree is growing in an area with targets where public safety is compromised, removal of the trees should be explored. Targets are people or areas with regular human use such as walkways, parking areas, roofs, and other active use areas that could be subject to damage by a falling tree or limb. Most of the arborist survey area contains targets.

Tree Impacts

The tree impact analysis assumes planned driveway and building pad areas will be used for construction staging, ingress, and egress so as to reduce the potential impacts from construction activities and equipment on soil structure, tree roots, branches, and trunks. This impact analysis assumes Best Management Practices (BMPs) will be in place prior to commencement of construction and throughout the active construction period.

Based on the draft Grading Plan dated October 2016 prepared by Morton & Pitalo, Inc., 23 trees would be removed by project implementation and 33 others would be temporarily affected. Of the 23 trees that would be removed, 15 are protected and would require mitigation under the Tree Conservation Ordinance. The total DBH of the 15 trees requiring mitigation is 241 inches. Of the 33 trees that would be temporarily affected, 17 are regulated.

MITIGATION RECOMMENDATIONS AND REQUIREMENTS

Recommendations to Reduce Impacts

Minor modifications to the grading plan or alternative approaches to infrastructure implementation could help preserve some trees, avoid impacts, and reduce mitigation requirements. Candidates for preservation include trees #2, #3, #15, #16, #23, #35, #50, #52, #53, #55, #56, #57, and #58. Eleven of the 13 (not #50 or #53) trees are regulated. Shifting the grading footprints around the canopies of these trees to reduce the disturbed area within the canopy to less than 20 percent of the canopy area, use of pneumatic excavation, or installation of underground utilities using horizontal boring are examples of how to avoid impacts on these trees.

The 33 trees planned for preservation may be impacted by development of the project within their critical root zone (CRZ). These trees may be affected by the planned project due to

grading, trenching, compaction of the ground under their canopy, and pruning of their branches to allow construction equipment to access the site. Effects on these trees can be minimized by avoiding disturbance within the CRZ, including eliminating grading and installing utilities using boring or lateral drill techniques rather than traditional open trenches, and implementing other tree preservation recommendations provided in this report. If grading and other ground disturbance in the CRZ cannot be avoided, these trees may decline following construction of the project, depending on the loss of canopy or extent of the disturbance to their root system. Special attention should be paid to avoiding impacts to tree #24, which is a large oak on a neighboring property. A retaining wall and use of permeable paving should be used to ensure disturbance to the CRZ are limited to 20 percent of the canopy area or less. Similarly, trees #36 through #49 are on private property and function as a large evergreen screen and windbreak for a neighboring house. Horizontal boring should be used for utility installation under these trees to minimize root disturbance and avoid destabilizing these trees. Exploration of moving the planned utility improvement away from the CRZ is another alternative.

Mitigation Requirements

Mitigation for impacts to protected oak trees is required in accordance with the *Loomis Municipal Code, Chapter 13.54.090*. Mitigation may take the form of on- or off-site planting or payment of in-lieu fees. Mitigation planting must be of the same species removed. The in-lieu fee and number of mitigation trees required depends on the size of the tree removed and the size of the tree being planted, as shown in Table 5-3 of the Tree Conservation Ordinance. Smaller trees (T4, T6, or T8 tree pots) may be used in place of #5/ 5-gallon plantings with the approval of the Town Manager, but no more than 50 percent of the planted trees may be less than #5/ 5-gallon size. A combination of planting and in-lieu fees may be used to fulfill the mitigation requirements. Mitigation trees must be monitored by an ISA-Certified Arborist for five years after planting. The permittee is responsible for replacing any mitigation trees that die within the initial five-year monitoring period.

Table 2 summarizes the potential tree impacts and mitigation options. If new grading plans are developed, a final evaluation of expected tree impacts should be completed.

Table 2 — Tree Impact and Mitigation Summary

Tree ID	Ordinance Protected?	Common Name	Cum. DBH (Inches)	Impact	Potential Mitigation Required		
					Tree ID	Ordinance Protected?	Common Name
1	Yes	valley oak	14	Removal	56	28	$1,400
2	Yes	valley oak	21	Removal	84	42	$2,100
3	Yes	valley oak	9	Removal	27	9	$810
16	Yes	valley oak	18	Removal	72	36	$1,800
21	Yes	valley oak	9	Removal	27	9	$810
23	Yes	valley oak	17	Removal	68	34	$1,700

Tree ID	Ordinance Protected?	Common Name	Cum. DBH (Inches)	Impact	Potential Mitigation Required		
					Tree ID	Ordinance Protected?	Common Name
25	Yes	interior live oak	24	Removal	96	48	$2,160
26	Yes	blue oak	26	Removal	208	104	$3,120
27	Yes	blue oak	15	Removal	90	45	$1,650
35	Yes	interior live oak	10	Removal	40	20	$900
52	Yes	valley oak	6	Removal	18	6	$540
55	Yes	interior live oak	14	Removal	56	28	$1,260
56	Yes	interior live oak	12	Removal	48	24	$1,080
57	Yes	valley oak	26	Removal	130	78	$2,860
58	Yes	interior live oak	20	Removal	80	40	$1,800
				Totals:	**1,100**	**551**	**$23,990**

The exact amount of mitigation required will depend on the final design of the project. If the design can be changed so impacts to all protected trees are avoided or minimized, then no mitigation will be required. If the project is implemented as currently designed and the trees identified for removal are removed or significantly impacted (changes to more than 20% of the CRZ), then the total mitigation required will be planting of 1,100 5-gallon trees, planting of 551 15-gallon trees, or payment of lieu fees totaling $23,990.

While some mitigation tree planting may be completed onsite, there is not sufficient space to accommodate all required mitigation trees. Therefore, it is anticipated that the majority of the required mitigation will be through payment of in-lieu fees.

If tree planting is chosen as the project mitigation strategy, a mitigation and monitoring plan should be prepared. The plan should include maintenance, watering, and monitoring schedules, success criteria, and reporting requirements. Typically, the trees will be regularly irrigated during the first two years until established and then weaned off irrigation over the course of the next two to three years. No permanent irrigation or landscaping should be placed within the dripline of any replacement tree or existing protected oak tree. Newly planted trees should be protected with browse protection cages and gopher cages and surrounded by a layer of bark mulch to reduce weed growth.

Tree Protection Recommendations

In addition to the construction measures previously discussed, the following recommendations should be integrated into the project plans to minimize impacts to protected trees:

- Prior to any grading, movement of heavy equipment, or other construction activities, Tree Protection Fencing, shall be installed consisting of a minimum 4-foot tall high-visibility fence

(orange plastic snow fence or similar), shall be placed around the perimeter of the tree protection zone (dripline radius +1 foot) for all trees to be preserved. The CRZ is the minimum distance for placing protective fencing, but tree protection fencing should be placed as far outside of the CRZ as possible. Fencing shall be removed following construction, but prior to installation of landscaping material;

- Whenever possible, fence multiple trees together in a single CRZ;
- Signs shall be posted on all sides of the fences surrounding each tree, stating that each tree is to be preserved;
- No parking, portable toilets, dumping or storage of any construction materials, including oil, gas, or other chemicals, or other infringement by workers or domesticated animals is allowed in the CRZ;
- Do not place or store any equipment or construction materials or allow flow of any oil, fuel, concrete mix or other deleterious substance into or over within the critical root zone (CRZ) of any protected tree;
- All trees located within 25 feet of structures shall be protected from stucco and/or paint during construction;
- Grading shall be designed to avoid ponding and ensure proper drainage within driplines of all trees;
- Minimize disturbance to the native ground surface (grass, leaf, litter, or mulch) under preserved trees to the greatest extent feasible. All brush, earth, and debris shall be removed in a manner that prevents injury to the tree;
- Avoid trenching, grading, paving, or otherwise damaging or disturbing any exposed roots within the critical root zone (CRZ) of a protected tree;
- If underground utilities and/or irrigation trenching encroach within the CRZ, they shall be bored or drilled under the root system of a protected tree. If this is impossible, trenching shall be completed by hand tools, air spades, or other acceptable measures under the supervision of an ISA-Certified Arborist. Boring machinery, boring pits, and spoils shall be set outside of the CRZ fencing;
- All work shall conform to the most current American National Standards Institute (ANSI) tree care standards;
- Do not severe major roots (1-inch or greater) unless permitted by an ISA-Certified Arborist. Cut all roots, regardless of size, cleanly at the edge of ground disturbance with pruning instruments and keep moist until covered with soil;
- Pruning of living limbs or roots shall be done under the supervision of an ISA-Certified Arborist. All pruning should be done by hand, air knife, or water jet, in accordance with ISA standards using tree maintenance best practices. Climbing spikes should not be used on living trees. Limbs should be removed with clean cuts just outside the crown collar;

- Native woody plant material (trees and shrubs to be removed) may be chipped or mulched on the Project Site and placed in a 4 to 6-inch deep layer around existing trees to remain. Do not place mulch in contact with the trunk of preserved trees;
- Any and all exposed roots shall be covered with protective material (e.g. damp burlap) during construction to prevent drying out;
- No supplementary irrigation shall occur within six feet of the dripline of any protected native oak;
- No signs, ropes, cables, or any other item shall be attached to a protected tree; and
- No burning or use of equipment with an open flame may occur near or within the protected perimeter. Appropriate fire prevention techniques shall be employed around all trees to be preserved. This includes cutting tall grass, removing flammable debris within the TPZ, and prohibiting the use of tools that may cause sparks, such as metal blade trimmers or mowers.

Please do not hesitate to call me at (916) 435-1202 or e-mail me at pweller@foothill.com if you have any questions about this report.

Sincerely,

Paul Weller
ISA-Certified Arborist #WE-7862A

Enclosures (3)

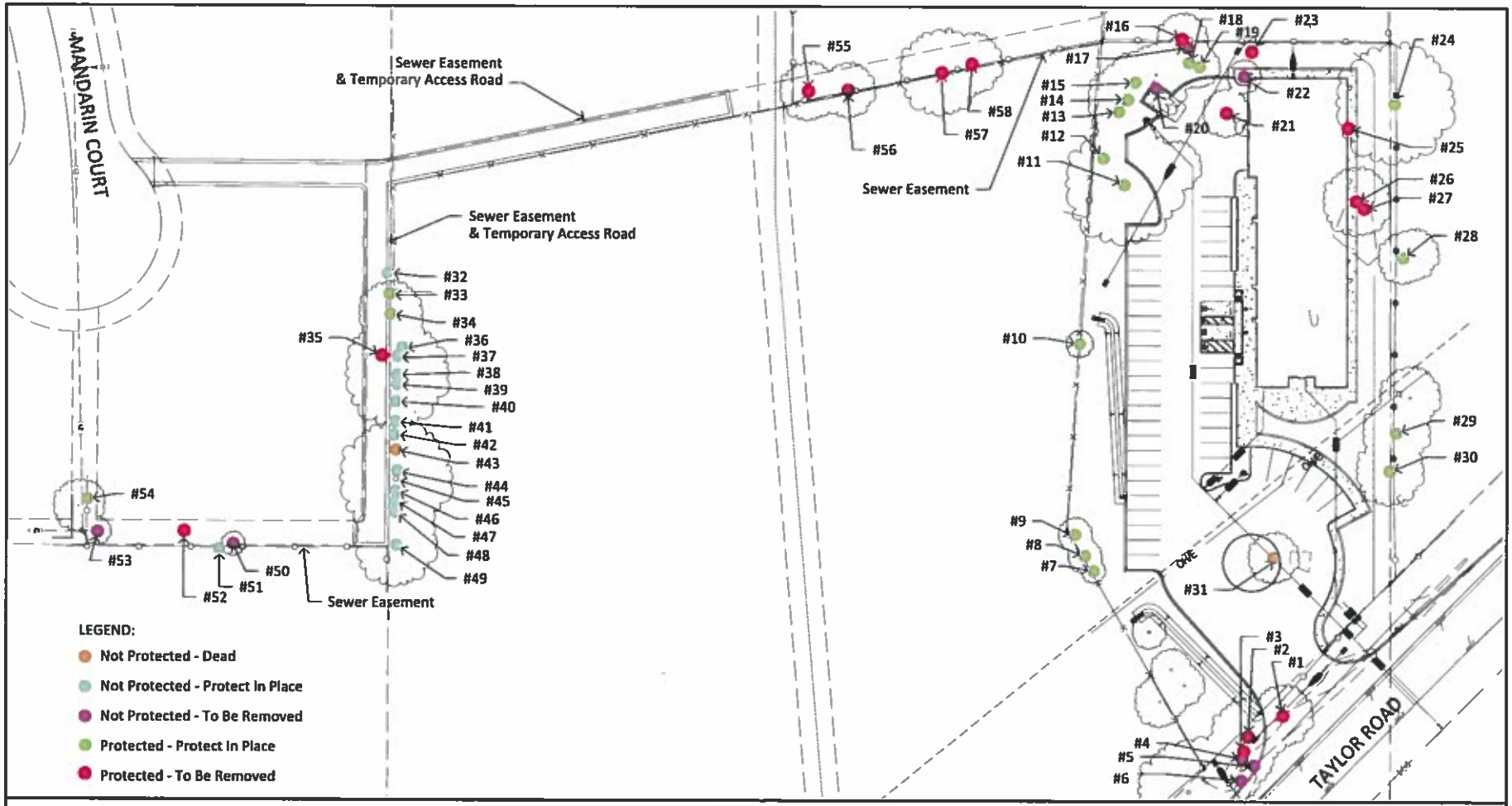
REFERENCES

California Invasive Plant Council. 2006. *California Invasive Plant Inventory*. February. Available: http://www.cal-ipc.org/ip/inventory/pdf/Inventory2006.pdf. Accessed October 24, 2016.

Town of Loomis. 2003. *Zoning Map*. January. Available: http://loomis.ca.gov/wp-content/uploads/2015/10/Loomis-Zoning-Map_2003.pdf. Accessed October 24, 2016.

Attachment A

Tree Data



3264 Taylor Road Arborist Survey

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SCALE IN FEET 0 30 60

FIGURE 1

3264 Taylor Road

Tree ID	Ordinance Protected?	Scientific Name	Common Name	Cum. DBH	DBH1	DBH2	DBH3	DBH4	DBH5	DBH6	Drip DIA.	Height	Health	Vigor	Structure	Comments	Impacts	Mitigation Required?
1	Yes	*Quercus lobata*	valley oak	14	14						30	34	Fair	Fair-Good	Fair-Poor	On bank slope of ditch, asymmetrical crown, codominant, leans towards road at 20°	Removal	Yes
2	Yes	*Quercus lobata*	valley oak	21	21						44	40	Fair	Fair-Poor	Fair	On steep bank, codominant, slight arch to east, sparse foliage	Removal	Yes
3	Yes	*Quercus lobata*	valley oak	9	9						40	18	Fair	Fair	Fair-Poor	Codominant, crowded, shaded, asymmetrical crown, bottom of ditch	Removal	Yes
4	No	*Quercus wislizeni*	interior live oak	5	5						28	12	Poor	Poor	Fair-Poor	Crowded, shaded, asymetrical crown, sparse foliage, contorted trunk, bottom of ditch	Removal	No
5	No	*Quercus wislizeni*	interior live oak	5	5						34	20	Fair-Poor	Poor	Poor	Leans to west at 45°, crowded, shaded, asymmetrical crown, growing out of road bank	Removal	No
6	No	*Quercus wislizeni*	interior live oak	5	5						20	15	Poor	Poor	Fair-Poor	Arches towards road, crowded, shaded, asymmetrical crown, growing out of road bank	Removal	No
7	Yes	*Quercus lobata*	valley oak	6	6						14	14	Poor	Poor	Fair-Poor	Mostly defoliated, 2 feet from fence, appears nearly dead or drought stressed	Temporary	No
8	Yes	*Quercus lobata*	valley oak	26	10	9	7				18	26	Poor	Poor	Fair-Poor	Multiple limb attachment, mostly defoliated, 2 feet from fence, appears nearly dead or drought stressed, seams in trunks, included bark	Temporary	No
9	Yes	*Quercus lobata*	valley oak	19	11	8					24	30	Poor	Poor	Fair-Poor	Mostly defoliated, 2 feet from fence, appears nearly dead or drought stressed, codominant, included bark	Temporary	No
10	Yes	*Quercus wislizeni*	interior live oak	6	6						18	18	Fair	Fair-Good	Fair	Leaf spotting (herbicide or drought stress?), 1 foot from fence	Temporary	No
11	Yes	*Quercus wislizeni*	interior live oak	35	35						56	45	Fair-Good	Fair-Good	Fair	Trunk has slight bend that corrects, some historic pruning cuts, boulder	Temporary	No

																embedded in root crown, some dieback under canopy, overall a beautiful tree		
12	Yes	*Quercus wislizeni*	interior live oak	6	6						20	19	Fair-Good	Fair-Good	Fair	Crowded, leans 20° to north, 1 foot from fence	Temporary	No
13	Yes	*Quercus wislizeni*	interior live oak	20	9	8	3				34	36	Fair	Fair	Fair-Poor	Basal decay, codominant, included bark	Temporary	No
14	Yes	*Quercus wislizeni*	interior live oak	38	8	7	6	6	6	5	40	28	Fair	Fair	Fair-Poor	Basal decay, trunk wounds, most trunks lean at 45°	Temporary	No
15	Yes	*Quercus douglasii*	blue oak	16	16						44	40	Fair	Fair-Poor	Fair	Boulder embedded in root crown, sparse foliage, dieback	Temporary	No
16	Yes	*Quercus lobata*	valley oak	18	18						16	30	Fair-Good	Fair-Good	Fair-Good	Did not tag, 1 foot north of fence, >5° lean to north	Removal	Yes
17	No	*Quercus wislizeni*	interior live oak	9	3	3	3				14	15	Fair	Fair	Fair	Crowded, sparse, 1 foot south of fence	Removal	No
18	Yes	*Quercus wislizeni*	interior live oak	14	14						32	36	Fair-Good	Fair-Good	Fair	Codominant, included bark	Temporary	No
19	Yes	*Quercus wislizeni*	interior live oak	18	5	5	4	4			26	20	Fair-Good	Fair-Good	Fair	Compound codominant	Temporary	No
20	No	*Prunus cerasifera*	cherry plum	16	6	5	5				28	22	Fair-Poor	Fair	Fair	Oozing sap from lower trunk, on top of bank in rip rap	Removal	No
21	Yes	*Quercus lobata*	valley oak	9	9						32	30	Good	Good	Fair	On bank, leans 20° away from old sycamore, asymmetrical crown	Removal	Yes
22	No	*Carya illinoensis*	pecan	6	6						24	32	Fair-Good	Good	Good	On bank	Removal	No
23	Yes	*Quercus lobata*	valley oak	17	17						36	40	Good	Good	Good	4 feet from fence	Removal	Yes
24	Yes	*Quercus wislizeni*	interior live oak	50	45	5					58	48	Fair	Fair	Fair	Main trunk on neighbor's property, fence girdling trunk, half of canopy overhangs property	Temporary	No
25	Yes	*Quercus wislizeni*	interior live oak	24	9	8	7				18	10	Good	Good	Fair-Poor	Previously cut and topped, growth is all resprout, boulder embedded in root crown	Removal	Yes

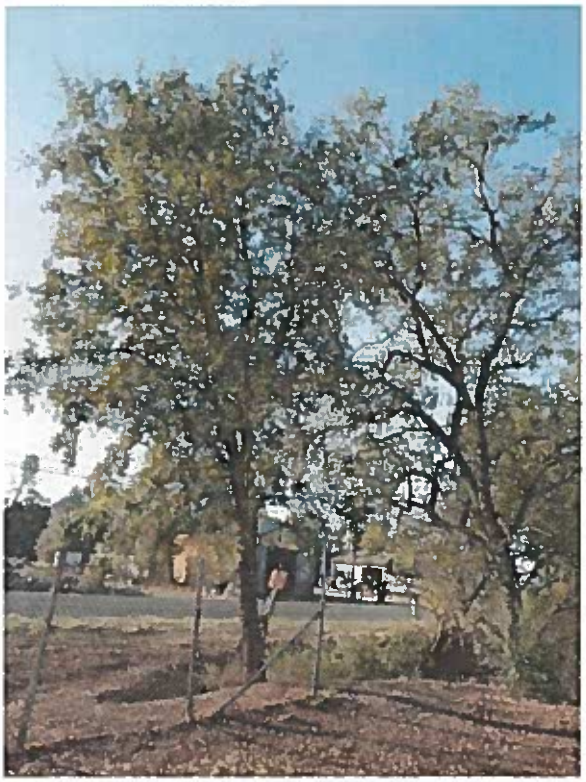
26	Yes	*Quercus douglasii*	blue oak	26	26						56	48	Fair	Fair-Good	Fair-Poor	Basal decay, hollow at base, asymmetrical crown, bee observed flying out of base (hive?)	Removal	Yes
27	Yes	*Quercus douglasii*	blue oak	15	15						26	44	Fair	Fair	Fair	Arched trunk, asymmetrical crown	Removal	Yes
28	Yes	*Quercus wislizeni*	interior live oak	10	4	3	3				16	15	Fair-Good	Fair-Good	Fair	Did not tag, 2 feet north of fence, on private property, half of canopy overhangs property	Temporary	No
29	Yes	*Quercus lobata*	valley oak	14	14						40	35	Fair-Good	Fair	Fair-Good	Did not tag, 2 feet north of fence, on private property, half of canopy overhangs property	Temporary	No
30	No	*Olea europea*	olive	22	8	6	5	3			28	18	Good	Good	Fair-Good	Neighbor says this tree is on his property, 2 feet south of existing fence	Temporary	No
31	No	*Quercus wislizeni*	interior live oak	0	Dead								Dead	Dead	Dead	Dead, 21 inch DBH	None	No
32	No	*Juglans hindsii*	Northern California black walnut	9	4	3	2				16	16	Fair-Good	Fair-Good	Fair	Codominant, 1 foot west of fence	Temporary	No
33	Yes	*Quercus wislizeni*	interior live oak	11	4	4	3				16	15	Fair-Poor	Fair	Fair	Dead leaves, spotted leaves, crowded	Temporary	No
34	Yes	*Quercus wislizeni*	interior live oak	18	4	4	3	3	2	2	20	18	Fair	Fair-Good	Fair	Multiple limb attachment, crowded	Temporary	No
35	Yes	*Quercus wislizeni*	interior live oak	10	6	4					22	15	Fair	Fair-Poor	Fair-Poor	Crowded, asymmetrical crown, arched trunk, shaded	Removal	Yes
36	No	*Schinus molle*	Peruvian pepper	33	11	10	6	6			46	30	Fair	Fair-Good	Fair	Did not tag, on private property, fenceline, some historic pruning cuts, multiple limb attachment	Temporary	No
37	No	*Eucalyptus nicholii*	willowleafed peppermint gum	9	9						36	32	Fair	Fair	Fair-Poor	Did not tag, on private property, fenceline, some historic pruning cuts, multiple limb attachment, Leaning 45° to the west	Temporary	No
38	No	*Eucalyptus nicholii*	willowleafed peppermint gum	33	16	11	6				60	50	Fair	Fair-Good	Fair	Did not tag, on private property, fenceline, multi-trunked	Temporary	No

39	No	*Eucalyptus nicholii*	willowleafed peppermint gum	31	14	9	8				54	48	Fair	Fair-Good	Fair	Did not tag, on private property, fenceline, multi-trunked	Temporary	No
40	No	*Eucalyptus nicholii*	willowleafed peppermint gum	20	20						56	50	Fair	Fair-Good	Fair	Did not tag, on private property, fenceline, codominant	Temporary	No
41	No	*Eucalyptus nicholii*	willowleafed peppermint gum	8	8						36	22	Fair-Poor	Fair	Fair	Did not tag, on private property, fenceline, arched trunk	Temporary	No
42	No	*Eucalyptus nicholii*	willowleafed peppermint gum	6	6						20	15	Poor	Poor	Poor	Did not tag, on private property, fenceline, in decline	Temporary	No
43	No	*Eucalyptus nicholii*	willowleafed peppermint gum	0	Dead								Dead	Dead	Dead	Dead, 11 inch DBH, Did not tag, on private property, fenceline, possible sulfur fungus present	None	No
44	No	*Eucalyptus nicholii*	willowleafed peppermint gum	7	7						16	30	Fair	Fair-Poor	Fair	Did not tag, on private property, fenceline, shaded, sparse foliage	Temporary	No
45	No	*Eucalyptus nicholii*	willowleafed peppermint gum	33	33						70	65	Fair	Fair	Fair-Poor	Did not tag, on private property, fenceline, leans to the west at 30°, soil possibly heaving or mounded, codominant	Temporary	No
46	No	*Eucalyptus nicholii*	willowleafed peppermint gum	6	6						24	18	Poor	Fair-Poor	Fair-Poor	Did not tag, on private property, fenceline, in decline, arched trunk	Temporary	No
47	No	*Eucalyptus nicholii*	willowleafed peppermint gum	7	7						20	24	Fair	Fair-Poor	Fair-Poor	Did not tag, on private property, fenceline, historic pruning cuts	Temporary	No
48	No	*Eucalyptus nicholii*	willowleafed peppermint gum	14	14						46	38	Fair-Poor	Fair-Poor	Fair-Poor	Did not tag, on private property, fenceline, insects, crowded, asymmetrical crown, dead wood visible	Temporary	No
49	No	*Eucalyptus nicholii*	willowleafed peppermint gum	20	20						50	60	Fair	Fair	Fair-Poor	Did not tag, on private property, at fence corner, arched trunk to west	Temporary	No
50	No	*Quercus wislizeni*	interior live oak	4	4						16	14	Fair-Poor	Fair-Poor	Fair	1 foot north of fence, dead and spotted leaves, sparse foliage	Removal	No

51	No	*Prunus cerasifera*	cherry plum	10	5	5					16	20	Poor	Poor	Fair-Poor	Did not tag, 1 foot south of fence, in decline	Temporary	No
52	Yes	*Quercus lobata*	valley oak	6	6						20	25	Good	Good	Good	1 foot north of fence, young healthy tree	Removal	Yes
53	No	*Quercus wislizeni*	interior live oak	8	4	4					16	16	Good	Good	Good	10 feet north of fence, codominant trunk	Removal	No
54	Yes	*Quercus wislizeni*	interior live oak	6	6						26	26	Fair-Good	Good	Fair	1 foot east of fence, codominant trunk	Temporary	No
55	Yes	*Quercus wislizeni*	interior live oak	14	14						30	30	Fair-Good	Good	Fair	Did not tag, 14 feet east of fence, in blackberries, data estimated	Removal	Yes
56	Yes	*Quercus wislizeni*	interior live oak	12	12						30	25	Fair	Fair-Good	Fair	Did not tag, 40 feet east of fence, in blackberries, data estimated	Removal	Yes
57	Yes	*Quercus lobata*	valley oak	26	14	12					48	38	Fair-Good	Fair-Good	Fair	Did not tag, 90 to 100 feet east of fence, data estimated	Removal	Yes
58	Yes	*Quercus wislizeni*	interior live oak	20	20						40	27	Fair-Good	Fair-Good	Fair	Did not tag, 70 feet west of NW parcel corner, data estimated	Removal	Yes

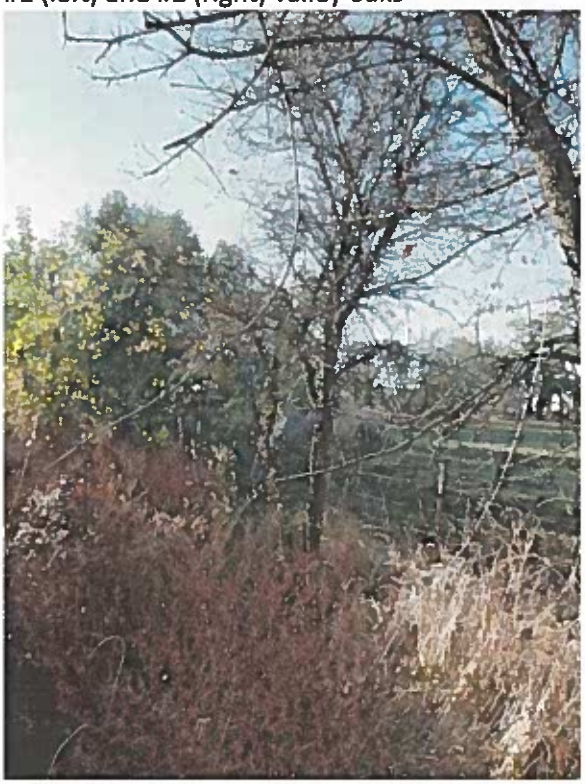
Attachment B

Tree Resource Photos



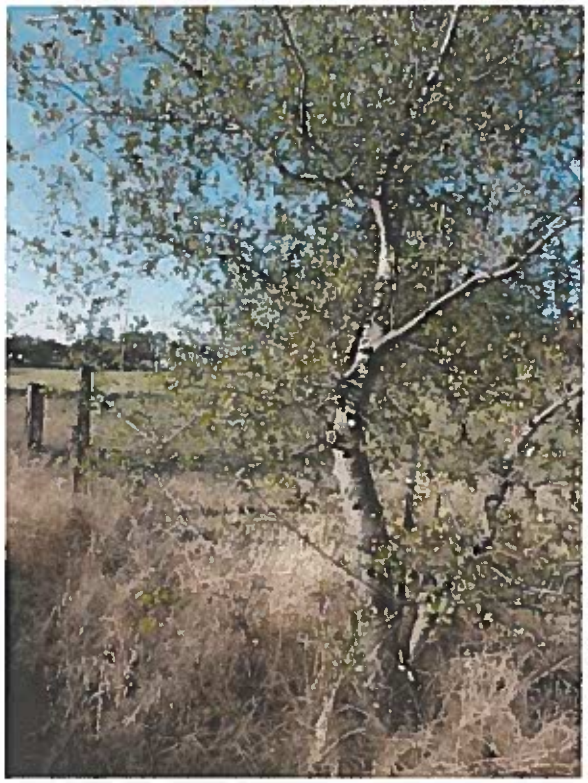
#1 (left) and #2 (right) valley oaks

#3 valley oak



#7 valley oak

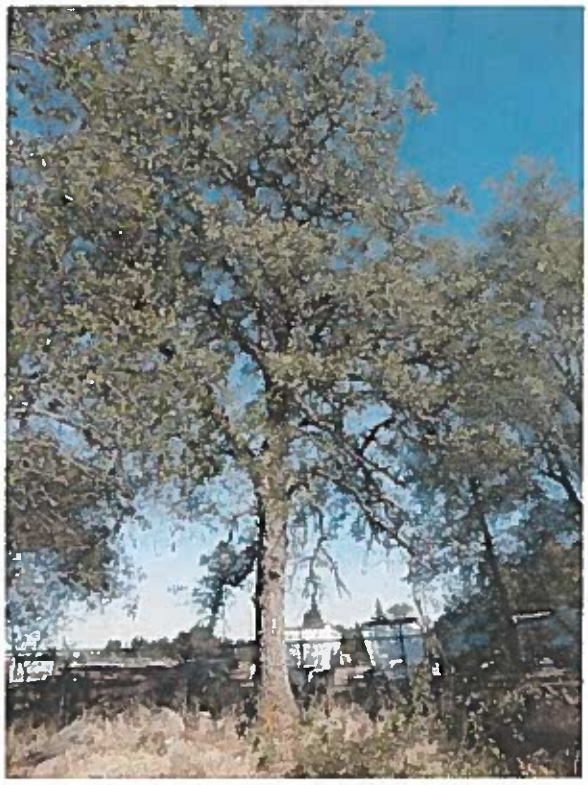
#8 (left) and #9 (right) valley oaks



#10 interior live oak

#11 interior live oak

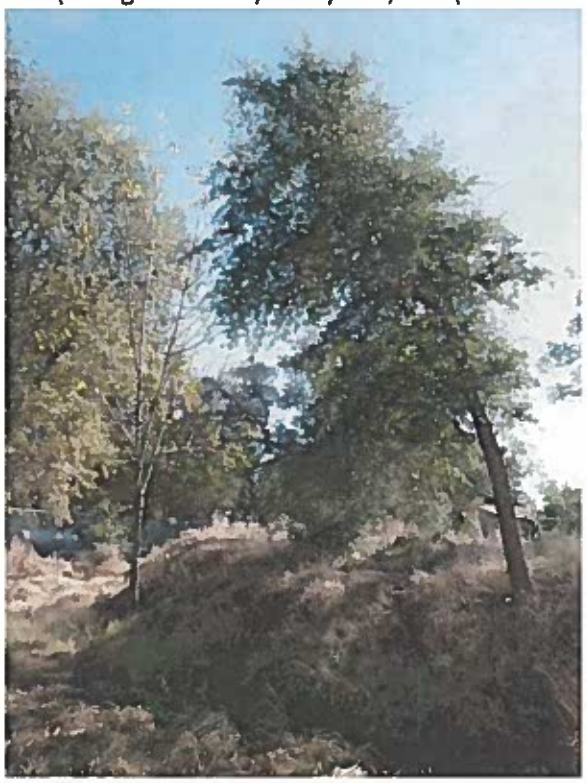
#12 interior live oak



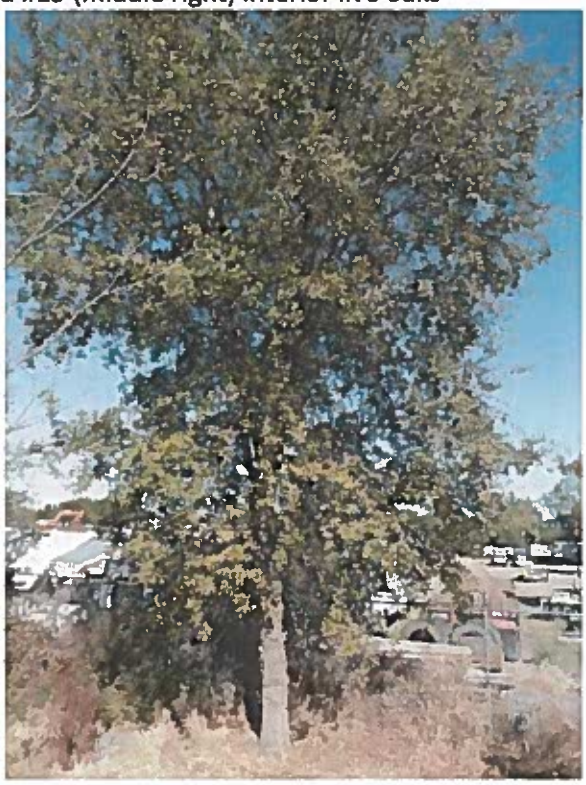
#15 blue oak

#13 (foreground) and #14 (middleground) interior live oaks, #15 (right) blue oak

#16 (background left) valley oak, #18 (middle left) and #19 (middle right) interior live oaks



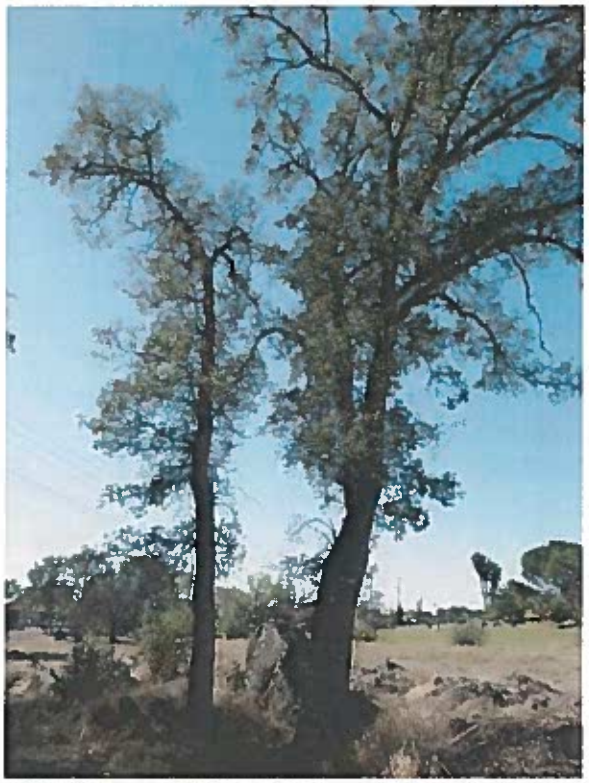
#21 valley oak



#23 valley oak

#24 interior live oak

#25 interior live oak



#27 (left) and #26 (right) blue oaks

#28 interior live oak

#29 valley oak

#30 olive

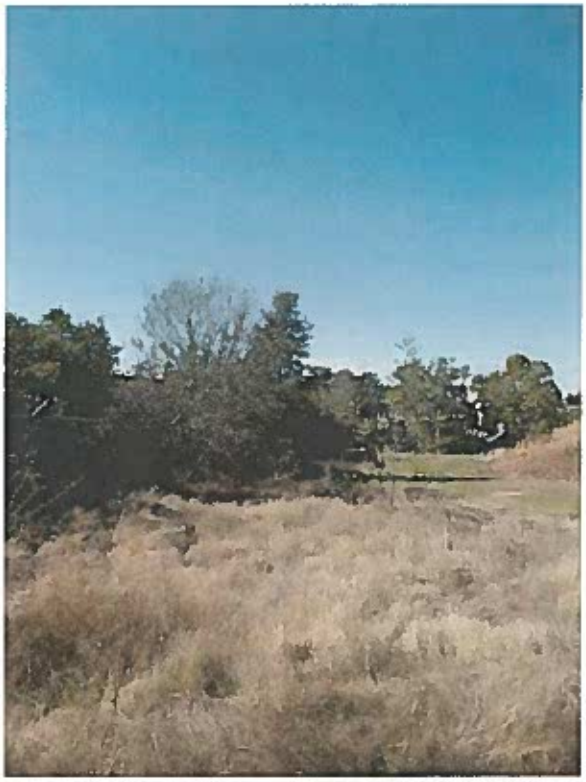
#33 (left), #34 (middle), and #35 (right) interior live oaks

#36 (left) Peruvian pepper; #38, #39, and #40 (right) willowleafed peppermint gums

#45 (center) and #49 (right) willowleafed peppermint gums

#52 valley oak

#53 interior live oak, #54 (out of view to right)



#54 (background center) interior live oak

#55 interior live oak

#56 interior live oak

#57 valley oak

#58 interior live oak

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

January 19, 2017

Regulatory Division (SPK-2017-00013)

Massie and Company
Attn: Mr. Dave Morton
1801 Tribute Road
Sacramento, California 95815

Dear Mr. Morton:

This concerns your proposed 3264 Taylor Road project which would construct a commercial development. The approximately 2-acre project site is located near Secret Ravine, Latitude 38.8340881°, Longitude -121.183069°, in Loomis, Placer County, California.

Based on the information you have provided, we have determined that the proposed work, as shown on the enclosed January 11, 2017, *Figure 4, Proposed Project* plan drawing (enclosure 1), prepared by Foothill Associates, will not result in a discharge of dredged or fill material within waters of the United States. Therefore, a Department of the Army (DA) Permit, under Section 404 of the Federal Clean Water Act (CWA), is not required for the proposed work.

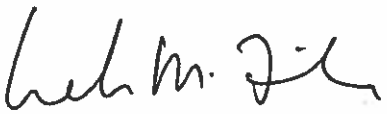
Measures should be taken to prevent construction materials and/or activities from entering any waters of the United States. Appropriate soil erosion and sediment controls should be implemented onsite to achieve this end. Our determination that a DA permit is not required is only for the proposed work identified in this letter, as shown on enclosure 1, and does not apply to any other proposed activities or development of the site which may require DA authorization. If any deviations to the enclosed plan are proposed, you should notify our office for a new determination, prior to initiating any work.

Our disclaimer of jurisdiction is only for the proposed activities as they pertain to Section 404 of the CWA and does not refer to, nor affect jurisdiction over any waters present on site. Other federal, state, and local laws may apply to your proposed activities. Therefore, in addition to contacting other federal and/or local agencies, you should also contact state regulatory authorities to determine whether your activities may require other authorizations or permits. In particular, your proposed activity may still be regulated by the State of California's Department of Fish and Wildlife and/or Regional Water Quality Control Boards.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey.*

Please refer to identification number SPK-2017-00013 in any correspondence concerning this project. If you have any questions, please contact me at our California North Branch Office, Regulatory Division, U.S. Army Corps of Engineers, 1325 J Street Room 1350, Sacramento, California 95814-2922, by email at *Leah.M.Fisher@usace.army.mil*, or telephone at (916) 557-6639. For more information regarding our program, please visit our website at: *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,



Leah M. Fisher
Senior Regulatory Project Manager
California North Branch
Regulatory Division

Enclosure

cc: (w/encl)
Mr. David Bise, Foothill Associates, dbise@foothill.com
Ms. Meredith Branstad, Foothill Associates, mbranstad@foothill.com
Mr. Rick Massie, Massie and Company, rick@massieco.com
Mr. Dave Morton, Massie and Company, dave@massieco.com
California Department of Fish and Wildlife, Central Region, R2Info@wildlife.ca.gov
California Regional Water Quality Control Board, Region 5, info5@waterboards.ca.gov
Placer County, Community Development Resource Agency, planning@placer.ca.gov

Aquatic Resource Delineation Report

3264 Taylor Road ±2.2-Acre Site
Town of Loomis, Placer County, California

Prepared for:

U.S. Army Corps of Engineers

Contracted By:

Massie and Company

November 23, 2016

Prepared by:

FOOTHILL ASSOCIATES

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Acronyms and Abbreviations

CWA	Clean Water Act
FAC	Facultative plants
FACU	Facultative upland plants
FACW	Facultative wetland plants
GIS	Geographic Information System
GPS	Global Positioning System
HUC	Hydrologic Unit Code
NAD	North American Datum
NRCS	Natural Resource Conservation Service
OBL	Obligate wetland plants
OHWM	Ordinary High Water Mark
UPL	upland
U.S.	United States
USACE/ Corps	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

Executive Summary

This report presents the results of a delineation of the aquatic resources at the ±2.2-acre 3264 Taylor Road Parcel (Site), located in the Town of Loomis, Placer County, CA. Aquatic resources were identified and delineated following the technical guidelines provided in the *Corps of Engineers Wetlands Delineation Manual* (Corps Manual) (Environmental Laboratory, 1987) and the U.S. Army Corps of Engineers (Corps) *Arid West Regional Supplement* (Supplement) (Corps 2008). The Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. The jurisdictional boundaries for other waters of the U.S. were identified based on the presence of an ordinary high water mark (OHWM) as defined in 33 C.F.R. 328.3(e).

A total of 0.10 acre of waters of the United States, comprising 0.10 acres of riverine seasonal wetland, and <0.01 acres (29 ft^2) of ephemeral drainage were delineated at the site.

1.0 INTRODUCTION

The purpose of this document is to present the results of a formal delineation of jurisdictional waters of the United States (U.S.), including wetlands, on the ±2.2-acre 3264 Taylor Road Parcel site located in the Town of Loomis, Placer County, California (**Figure 1**). This report was prepared in accordance with the *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2016) and presents the results of Foothill Associates' review of available literature, aerial photographs, soil surveys (**Figure 2**), and fieldwork within the Site. The delineation methodology is described in this report, followed by the results of the delineation. Contact information and directions to the Site are provided in **Appendix A**. Site Access notification information is provided in **Appendix B**. Details regarding soils, topography, hydrology, and vegetation are summarized herein and routine wetland determination data forms are provided in **Appendix C**. A detailed delineation map that illustrates potential waters of the U.S. within the Site is included in **Figure 3**.

2.0 REGULATORY BACKGROUND

The USACE regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes; and subaqueous utility lines [33 C.F.R. §328.2(f)].

Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a Federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Section 404 of the CWA requires approval prior to discharging dredged or fill material into the waters of the United States. Typical activities requiring Section 404 permits are:

- Depositing of fill or dredged material in waters of the U.S. or adjacent wetlands;
- Site development fill for residential, commercial, or recreational developments;
- Construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs; and
- Placement of riprap and road fills.

Section 10 of the Rivers and Harbors Act of 1899 requires approval prior to the accomplishment of any work in or over navigable waters of the United States, or which affects the course, location, condition, or capacity of such waters. Typical activities requiring Section 10 permits are:

- Construction of piers, wharves, bulkheads, dolphins, marinas, ramps, floats intake structures, and cable or pipeline crossings; and
- Dredging and excavation.

Any person, firm, or agency (including Federal, state, and local government agencies) planning to work in navigable waters of the United States, or dump or place dredged or fill material in waters of the United States, must first obtain a permit from the USACE. Permits, licenses, variances, or similar authorization may also be required by other Federal, state, and local statutes.

2.1. Waters of the United States

Waters of the United States were defined in a Federal Rule published on June 29, 2015 and which went into effect on August 28, 2015. The term "waters of the United States" includes (a) traditional navigable waters, (b) interstate waters, (c) territorial seas, (d) impoundments of

jurisdictional waters, and (e) their tributaries. Tributaries must have a bed and bank and ordinary high water mark and may have ephemeral, intermittent, or perennial flow. Additionally, the rule defines "adjacent waters" as jurisdictional due to their significant nexus with a jurisdictional water in class (a) through (e). Adjacent waters include any waters located in whole or part within 100 feet of a jurisdictional water in class (a) through (e); any waters located within the 100-year floodplain and within 1,500 feet of a jurisdictional water in class (a) through (e); and any waters within 1,500 feet (f) the ordinary high water mark of a traditionally navigable water, territorial sea, or the Great Lakes. Five classes of waters, prairie potholes, Carolina bays and Delmarva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands, were determined to be jurisdictional due to their nexus with jurisdictional waters when considered in combination with similarly situated waters. Other waters not previously defined as jurisdictional that are located within the 100-year floodplain of a traditionally navigable water, interstate water, or territorial sea or are within 4,000 feet of the ordinary high water mark of a jurisdictional water in class (a) through (e) are evaluated on a case-specific basis.

The rule specifically exempts the following types of features from Federal jurisdiction: waste treatment systems, including ponds or lagoons designed to meet the requirements of the Clean Water Act, prior converted cropland, ditches with ephemeral or intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands, ditches that do not flow directly or indirectly into a jurisdictional water, artificially irrigated areas that would revert to dry land should irrigation cease, artificial constructed lakes, ponds, reflecting pools, or swimming pools constructed in uplands, water filled depressions created in uplands incidental to mining or construction activity, erosional features, puddles, and stormwater control features and wastewater recycling structures constructed in uplands [33 C.F.R. § 328.3].

The new rule was challenged in court and on October 9, 2015 the U.S. Court of Appeals for the Sixth Circuit stayed the new rule nationwide. Until a final ruling is made, the USACE will continue to operate pursuant to the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208) and agency guidance subsequent to this decision. Under these rules, the USACE will assert jurisdiction over wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries (i.e., waters that have a continuous flow at least three months out of the year), and wetlands that abut relatively permanent tributaries. The USACE will determine jurisdiction over waters that are non-navigable tributaries that are not relatively permanent, and wetlands adjacent to these tributaries, by making a determination whether such waters "significantly affect the chemical, physical, and biological integrity of other jurisdictional waters more readily understood as "navigable." Finally, the USACE generally does not consider the following to be "waters of the United States": swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow) and ditches "wholly in and draining only uplands...which do not carry a relatively permanent flow of water." Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation.

Section 10 and/or Section 404 permits are required for construction activities in these waters. Boundaries between jurisdictional waters and uplands are determined in a variety of ways depending on which type of water is present. Methods for delineating wetlands and non-tidal waters are described below.

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit positive indicators of three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

The lateral regulatory extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the USACE as "*that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas*" [33 C.F.R. §328.3(e)].

3.0 METHODS

3.1. Site-Specific References

Available information pertaining to the natural resources of the region was reviewed. All references reviewed for this delineation are listed in **Section 6.0**. Pertinent site-specific reports and general references utilized for the delineation include the following:

- Baldwin. G., D. Goldman, D. Keil, R. Patterson, and T.J. Rosatti. 2012. *The Jepson Manual, 2nd Edition*. Vascular Plants of California. ISBN: 9780520253124. January 12, 2013;
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. U.S. Army Corps of Engineers Waterways Experiment Station. Vicksburg, MS;
- GretagMacbeth. 2000. *Munsell Soil Color Charts*. New Windsor, NY;
- Lichvar, R.W., Butterwick, M., Melvin, N.C., and Kirchner, W. 2016. *The National Wetland Plant List: 2016 Wetland Ratings*. Phytoneuron 2016-30: 1–17. Published April 28, 2016. ISSN 2153 733X;
- U.S. Army Corps of Engineers (USACE). 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0). U.S. Army Engineer Research and Development Center. Vicksburg, MS;
- U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS). 1993. *Soil Survey of Placer County, Western Part California*. USDA, NRCS, in cooperation with the Regents of the University of California (Agricultural Experiment Station);
- USDA, NRCS. 2010. *Field Indicators of Hydric Soils in the United States, Version 7.0*. L.M. Vasilas, G.W. Hurt, and C.V. Noble (Eds). USDA, NRCS in cooperation with the National Committee for Hydric Soils. Fort Worth, TX; and
- U.S. Geological Survey (USGS). 1980. *Rocklin, California* 7.5-minute series topographic quadrangle. U.S. Department of the Interior.

3.2. Research and Field Methodology

This delineation utilized the Corps' 1987 three-parameter (vegetation, hydrology, and soils) methodology to delineate aquatic resources. The Supplement was also used in conjunction with the Corps Manual for applications in the Arid West Region. Where differences in the two documents occur, the Supplement takes precedence over the Corps Manual.

The Arid West Region consists of all or significant portions of 11 states, including California (Corps 2008). This region is differentiated from other surrounding areas by having a predominantly dry climate and long summer dry season. Vegetation characteristics of the Arid West Region include little to no forest cover consisting of mainly annual grasslands, shrublands, hardwood savannas, deciduous woodlands, and pinyon/juniper woodlands. The Arid West Supplement was used on

this site because it is located in the *Mediterranean California* Land Resource Region (LRR C), which is characterized by warm, wet winters and dry summers.

The three-parameter methodology requires the collection of data on soils, vegetation, and hydrology at several locations to establish the jurisdictional boundary of wetlands. Additional methods to identify and delineate other waters of the U.S. (e.g., streams, drainages, lakes) were used as applicable. The method typically used for delineation of non-wetland waters of the U.S. is the delineation of the Ordinary High-Water Mark (OHWM). The OHWM was identified based on soils, vegetation, slope, and other indicators such as debris and high water marks.

A review of historic and recent aerial photographs, topographic maps, and soils survey data was conducted before delineating the site on October 21, 2016 between 10 AM and 2 PM and on November 16, 2016. The weather during both site visits was clear with average temperatures of 71°F in October of and 62°F in November. The previous rain event occurred 5 days prior to the October site visit and 15 days prior to the November site visit. Biologists visually inspected the entire site and collected representative data at points within potential wetland areas and corresponding uplands. The location of each data point is depicted in **Figure 3** and corresponding routine wetland determination data forms are provided in **Appendix C**.

Correlations were developed between the three parameters (vegetation, hydrology, and soils) to make wetland determinations. Specifically, plots at data point locations were evaluated to determine the composition and identification of dominant plant species. The indicator status of all dominant plant species [as determined by the *National Wetland Plant List*] was applied and evaluated as part of the vegetation assessment portion of the wetland determination process. The plant indicator status includes the following categories:

Obligate wetland plants (OBL):	Occur almost always under natural wetland conditions (estimated probability > 99%).
Facultative wetland plants (FACW):	Usually occur in wetlands, but occasionally found in non-wetlands (67-99%).
Facultative plants (FAC):	Equally likely to occur in wetlands and non-wetlands (34-66%).
Facultative upland plants (FACU):	Usually occur in non-wetlands, but occasionally found in wetlands (1-33%).
Upland (UPL):	Occur almost always under natural conditions in non-wetlands (>99%); may occur in wetlands in other regions.

The absolute cover was estimated for each vegetation stratum; these strata include tree, sapling/shrub, herb, and woody vine. Species that are dominant in more than one stratum were counted multiple times. Some wetland plant communities may fail a test based only on dominant species. Where indicators of hydric soils and hydrology are present and vegetation is

not dominated by hydrophytes, the vegetation was re-evaluated with the prevalence index, which takes into consideration all plant species in the community, not just the subset of dominant species.

The onsite soils were examined for hydric indicators. Hydric soil indicators are described in the *Field Indicators of Hydric Soils in the U.S.*, Version 7.0 (USDA, NRCS, 2010 and 2015). If one or more of these indicators are present, then the soil is hydric. Nearly all hydric soils exhibit characteristic morphologies that are caused by anaerobic, reduced soil conditions due to prolonged soil saturation. The most commonly observed indicators are related to iron (Fe) and manganese (Mn) redox concentrations or depletions. Less commonly observed indicators include gleyed matrix and black histic (low amounts of Fn-Mn and accumulations of organic carbon).

Observations were made and recorded for both primary and secondary wetland hydrology indicators, if present. Without monitoring or direct observation of inundation/saturation, indirect indicators of wetland hydrology are typically used and include primary indicators such as water marks, drift lines, and sediment deposits, or secondary indicators such as crayfish burrows or the FAC-neutral test.

3.3. GPS Data Integration

Boundaries of wetlands and other waters of the U.S. within the site were surveyed and mapped with a Trimble GeoXT Global Positioning System (GPS) hand-held unit. This is a mapping-grade GPS unit capable of real-time differential correction and sub-meter accuracy. The GPS data were downloaded from the unit and differentially corrected utilizing Trimble Pathfinder Office software and appropriate base station data, and then converted to ESRI ® shape file format. Data are typically exported to the Geographic Information System (GIS) software in the State Plane coordinate system (NAD 83) with units as "survey feet." Within the GIS, data are edited and linear features are built into polygons using recorded width information. Due to fences and lack of permission of entry, portions of the proposed sewer alignment area were inaccessible. Aquatic resources in this area were mapped using aerial photo interpretation, topography, and field observations. All wetland shape files are merged to create a single wetland file with calculated acreages. These results are presented in **Figure 3**.

4.0 RESULTS

4.1. Site Location and Land Use

4.1.1. Site Location

The ±2.2-acre site is located in the town of Loomis within western Placer County, immediately north of Taylor Road and approximately one mile north of Interstate 80. The site is bound by Taylor Road on the south, residential parcels on the west and east, and a commercial equipment yard on the north. The site is located within Section 3 Township 11 North, Range 7 East on the USGS *Rocklin, California* 7.5-minute quadrangle map (**Figure 1**).

4.1.2. Land Use

The majority of the site is composed of annual grassland habitats with scattered oak tree canopy. Surrounding land use includes commercial and low-density residential developments. The sewer easements follow existing sanitary sewer lines.

4.1.3. Site History

A review of historic aerial imagery indicates the site was utilized as an equipment storage yard in the early 2000s. Since that time, the site appears to have not been utilized for commercial purposes. At the time of the site survey, several soil test pits had been dug in upland areas of the site. The riverine wetland feature along the western boundary of the site is observable in aerial photos as far back as 1993 (Google Earth 2016).

4.2. Physical Features

4.2.1. Soils

The NRCS has identified and mapped one soil occurring on the site (**Figure 2**): **Andregg coarse sandy loam, 2 to 9 percent slopes**. The general characteristics and properties associated with this soil is described below.

- **Andregg coarse sandy loam, 2 to 9 percent slopes (106)**: This soil type is found on low hills in the Loomis Basin at elevations from 200 to 1,000 feet. It is a moderately deep and well-drained soil underlain by weathered granitic bedrock. Permeability is moderately rapid and surface runoff is medium. Natural vegetation associated with this soil type includes annual grasses and herbaceous species, blue and live oaks, and scattered pines. The hydric soils list for Placer County identifies one unnamed hydric inclusion located within drainageways in this soil type.

4.2.2. Topography

The site is generally flat with little change in topography with the exceptions of the northern and western boundaries of the main site. The western boundary of the site slopes steeply down to a riverine seasonal wetland feature. It is likely that the site was graded at some point in the past, as the slopes along the western boundary are steeper and more consistent than

one might expect in a naturally occurring system. Given the size of the trees growing on the slope, any grading on the site was probably done at least 50 years ago. There is a slight excavated depression between the property fenceline and Taylor Road, which collects stormwater from the road (**Photo 6**).

4.2.3. Regional Hydrology

The Site is located in the Miners Ravine watershed in USGS National Hydrologic Unit Code (HUC12-18020110102). Miners Ravine is tributary to Secret Ravine, which is tributary to Dry Creek. Dry Creek flows east approximately 8 miles to Steelhead Creek. From that confluence, Steelhead Creek flows south to the Sacramento River.

4.2.4. Site-Specific Hydrology

Hydrologic features identified and mapped within the site include the following: riverine seasonal wetland and ephemeral drainage (**Figure 3**). Diagnostic characteristics of the features mapped on the site are defined and discussed in **Section 4.4**.

The hydrologic regime on the site is supplemented by seasonal storm water runoff and precipitation, primarily between November and March. Annual average precipitation is 18-20 inches. The majority of seasonal surface runoff is conveyed throughout the site via the riverine seasonal wetland on the western boundary of the site. The riverine seasonal wetland appears to receive runoff from adjacent parcels to the north via a culvert. The wetland exits the site via a culvert under Taylor Road on the southwest corner of the site.

4.3. Vegetation

The vegetation assemblages and habitat types occurring on the site include the following: California annual grassland alliance, and riverine seasonal wetland. A list of all plants observed on the site is included in **Appendix D**.

4.3.1. California Annual Grassland

California annual grassland consists of a myriad of native and non-native annual plant species and occurs in a majority of the state at elevations from sea level to approximately 4,000 feet above MSL. Composition of this vegetation community varies depending on distribution, geographic location and land use. Additional major influences on this vegetation community include soil type, annual precipitation and fall temperatures.

Dominant plant species within the California annual grassland on the site include the following: wild oat (*Avena fatua*), soft brome (*Bromus hordeaceus*), winter vetch (*Vicia villosa*), vinegarweed (*Trichostema lanceolatum*), long-beaked filaree (*Erodium botrys*), and Bermudagrass (*Cynodon dactylon*). Areas mapped as California annual grassland also include areas with scattered trees including interior live oak (*Quercus wislizeni*) and blue oak (*Quercus lobata*). California annual grassland alliance occurs throughout the entirety of the site with the exception of the riverine seasonal wetland along the western boundary of the site.

4.3.2. Seasonal Wetland

Seasonal wetlands are depressions or folds within the topography that inundate or saturate for short periods of time following intense rains but do not maintain seasonal aquatic or saturated soils conditions for durations long enough for colonization by perennial, obligate plant species. As such, plant species in seasonal wetlands are generally of two types: species that can tolerate short periods of inundation but have not adapted to withstand sustained aquatic or saturated soils conditions, and short-lived (primarily annual) species that take advantage of ephemeral aquatic and/or saturated soils conditions.

Plant species observed occurring within the riverine seasonal wetland on the site include toad rush (*Juncus bufonis*), penny royal (*Mentha pulegium*) cocklebur (*Xanthium strumarium*) and dock (*Rumex crispus*). The riverine seasonal wetland also has scattered tree coverage including valley oak, Fremont's cottonwood (*Populus fremontii*), black willow (*Salix goodingii*) and common fig (*Ficus carica*). The riverine seasonal wetland is located along the western boundary of the site.

4.4. Classification of Aquatic Resources

As discussed previously in **Section 2.0**, aquatic resources are classified into multiple types based on topography, edaphics (soils), vegetation, and hydrologic regime. Primarily, the Corps establishes two distinctions: wetland and non-wetland waters, which are commonly referred to as other waters.

Wetland types mapped within the site include the following: riverine seasonal wetland. Other waters delineated within the site include ephemeral drainage. A description of all of the features delineated within the site is provided in the following sections. Wetland data sheets are included in **Appendix C**. Representative photographs of aquatic features are included in **Appendix E**.

One upland swale crosses the northernmost portion of the site for approximately 30 feet from the northern boundary of the site. This feature is not included on the aquatic resources delineation map because it exhibits neither an ordinary high water mark nor meets wetland criteria based on vegetation within the swale. This feature is located at data point 2b on **Figure 3** and in **Appendix C**, but is not further discussed in this document. As discussed previously, a slight topographical depression has been excavated along Taylor Road to collect road runoff **(Photo 6)**. This upland swale does not exhibit indicators of an ordinary high water mark and drains only uplands, so it is not further discussed in this report.

4.4.1. Riverine Seasonal Wetland

A total of **0.10 acre** of riverine seasonal wetlands has been delineated within the site over approximately 509 linear feet. Riverine seasonal wetlands are defined by a hydrologic regime dominated by unidirectional flow of water. Riverine seasonal wetlands typically occur in topographic folds or swales and represent natural drainages that convey sufficient water to support wetland vegetation. Riverine seasonal wetlands typically convey water during and shortly after storm events. Riverine seasonal wetlands may have a moderately defined bed and

bank and often exhibit sufficient gradient to convey water off of the site. Plant species found within riverine seasonal wetlands are typically adapted to a hydrologic regime dominated by saturation rather than inundation. Vegetation observed in the seasonal wetlands on site included: nutsedge, toad rush, pennyroyal, dock, black willow and valley oak along the upper banks of the drainage.

4.4.2. Ephemeral Drainage

A total of **<0.001 acre(s)** (29 square feet) of ephemeral drainage has been delineated on the site over approximately 30 linear feet. Ephemeral drainages are features that do not meet the three-parameter criteria for vegetation, hydrology and soils but do convey water and exhibit an "ordinary high water mark". Ephemeral drainages are primarily fed by storm water runoff. These features convey flows during and immediately after storm events but may stop flowing or begin to dry if the interval between storm events is long enough. Typically, these features exhibit a defined bed and bank and often show signs of scouring as a result of rapid flow events. Within ephemeral drainages, topographic depressions in the bed of the feature may exhibit vegetation patterns commonly associated with vernal pools or depressional seasonal wetlands. The ephemeral drainage on the site receives water from an excavated upland roadside ditch and drains into the seasonal wetland. It exhibits a small bed and bank and evidence of water flow (**Photo 5**).

5.0 CONCLUSIONS

The wetland types mapped within the site include riverine seasonal wetland. Non-wetland waters include an ephemeral drainage. The riverine seasonal wetland along the western boundary of the site has a surface hydrologic connection to downstream features via a culvert under Taylor Road. The ephemeral drainage is located along Taylor Road and feeds into the riverine seasonal wetland at the southwest corner of the site. Areas deemed jurisdictional will then be subject to the regulatory requirements of the Federal Clean Water Act including permitting and mitigation, as required.

Table 1, below, details the aquatic features on the site. Additional information can be found in **Appendix F**.

TABLE 1 — AQUATIC RESOURCES WITHIN THE SURVEY AREA

Aquatic Resource Name	Aquatic Resources Classification		Location (Lat/Long)	Aquatic Resource Size	
	Name	*Cowardin Code*		*(acres)*	*(linear feet)*
RSW1	Riverine Seasonal Wetland	PEM2B	38.8340675/-121.1830551	0.10	509
ED2	Ephemeral Drainage	R4SB	38.8334298/-121.828508	<0.001 (29 ft^2)	30
Total	–	–	–	**0.10**	**539**

6.0 REFERENCES

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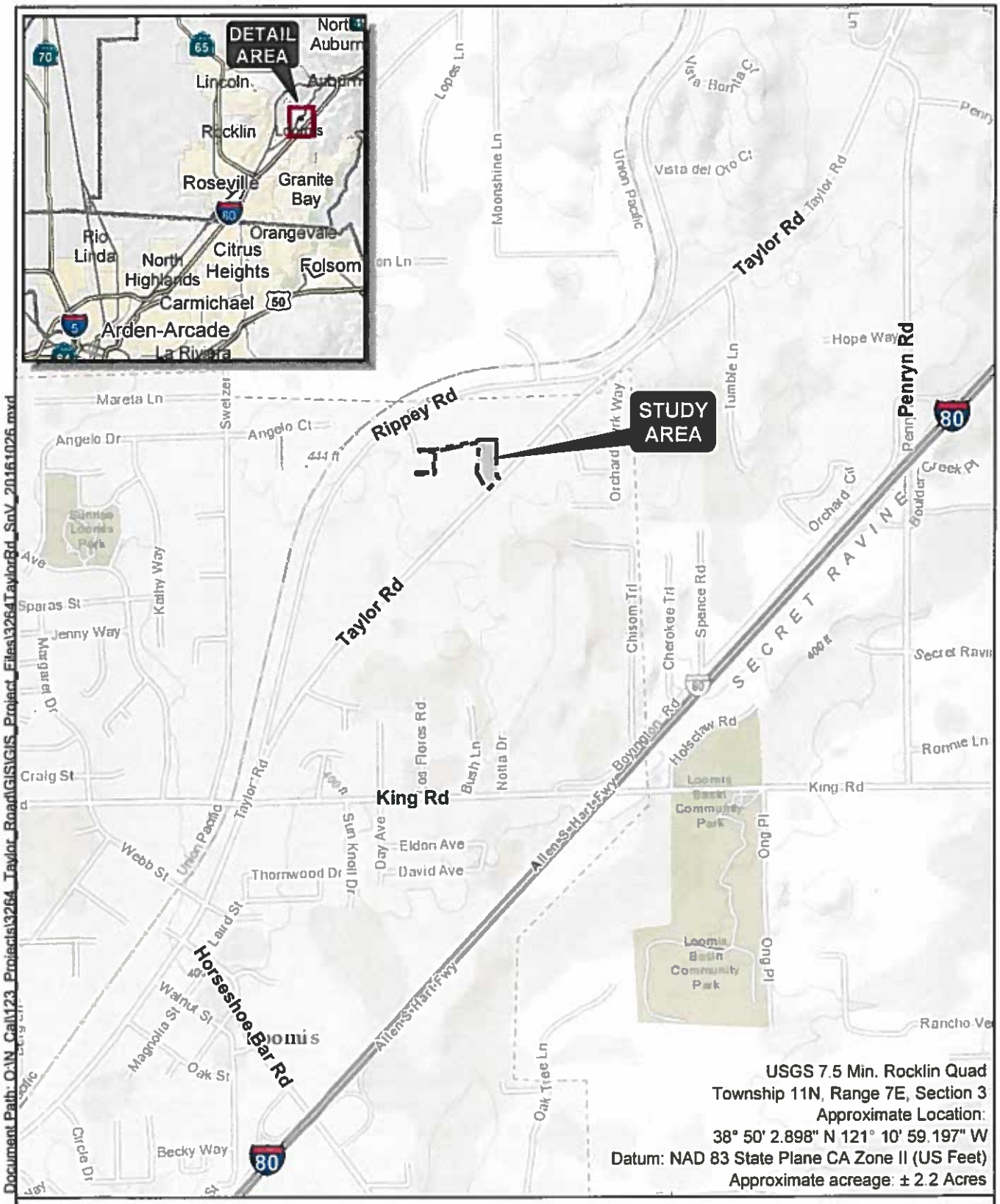

USGS 7.5 Min. Rocklin Quad
Township 11N, Range 7E, Section 3
Approximate Location:
38° 50' 2.898" N 121° 10' 59.197" W
Datum: NAD 83 State Plane CA Zone II (US Feet)
Approximate acreage: ± 2.2 Acres

SITE AND VICINITY

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 0.125 0.25
Miles
1 in = 0.25 miles

Drawn By: MUB
QA/QC: AMP
Date: 10/27/2016

FIGURE 1

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SOILS

FOOTHILL ASSOCIATES
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N

0 100 200
Feet
1 inch = 100 feet

Drawn By: MUB
QA/QC: AMP
Date: 10/28/2016

FIGURE 2

3264 TAYLOR ROAD

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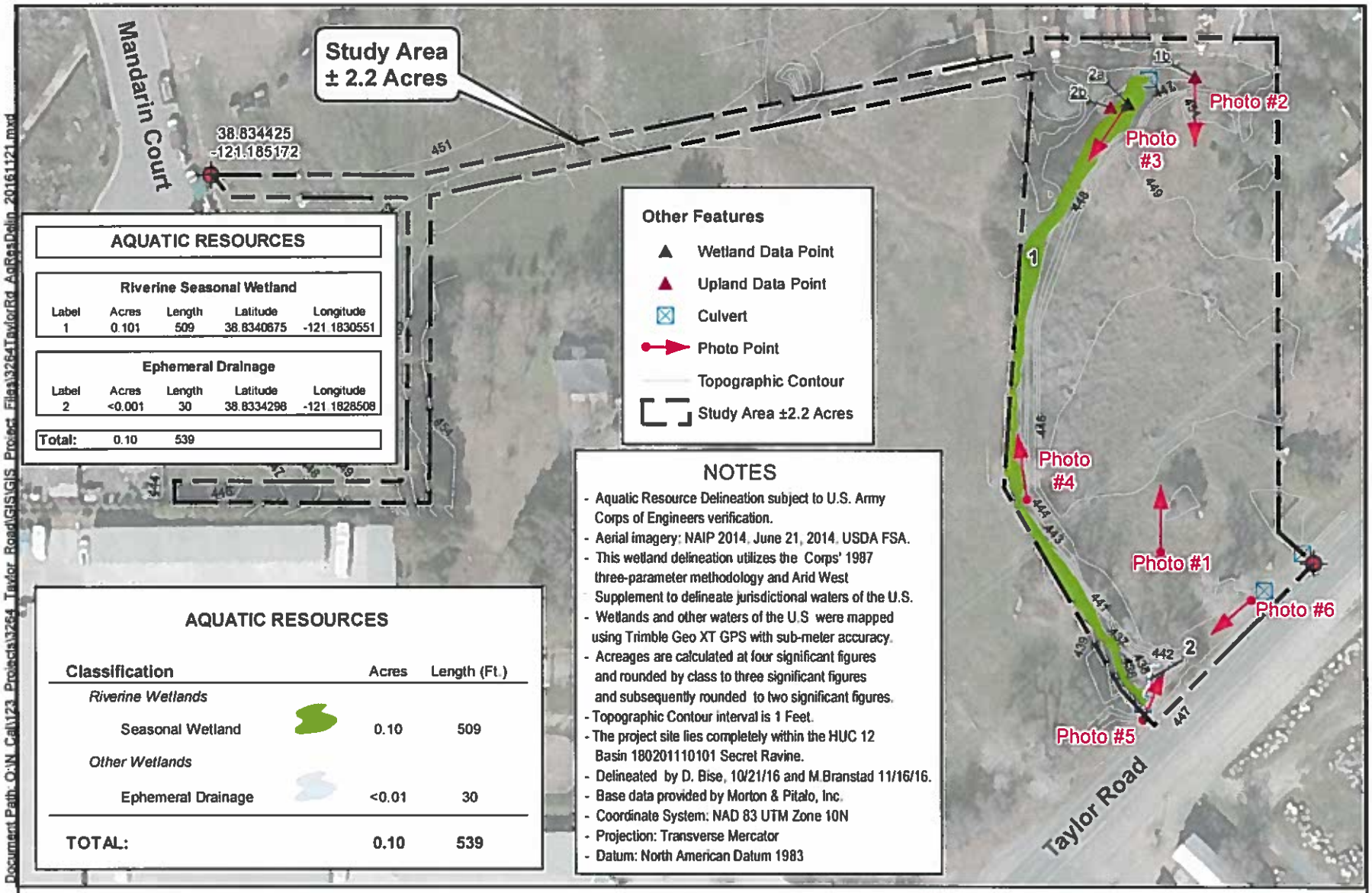


AQUATIC RESOURCE DELINEATION

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

N

0 100 200
Feet
1 inch = 100 feet

Drawn By: MUB, MMB
QA/QC: CTG
Date: 11/21/2016

FIGURE 3

3264 TAYLOR ROAD

Document Name: 3264TaylorRd_AqResDelin_20161121.mxd : : 11/21/2016 10:48:57 AM

Appendix A — Contact Information and Directions

Property Owner Contact Information:	Dave Morton Massie and Company 1801 Tribute Road Sacramento, CA 95815 Phone Number: (916) 923-4000 Email: dave@massieco.com
Client/Agent Contact Information:	David Bise Foothill Associates 590 Menlo Drive, Suite 5 Rocklin, CA 95765 Phone Number: (916) 435-1202 Email: dbise@foothill.com
Delineation Conducted By:	David Bise Foothill Associates 590 Menlo Drive, Suite 5 Rocklin, CA 95765 Phone Number: (916) 435-1202 Email: dbise@foothill.com
Directions to the Project Site:	From Sacramento: -Take I-80 East approximately 20 miles -Exit Horseshoe Bar Road in Loomis -Turn Right on Taylor Road -Site is on left (north) side of Taylor Road.

Appendix B — Signed Statement Form Property Owner(s) Allowing Access

In the event the U.S. Army Corps of Engineers determined that a site inspection is necessary, I request the USACE to first contact Foothill Associates (Attn: David Bise) at (916) 435-1202 to schedule a date and time to enter the property described in this report. If the property is land-locked, the owner or proponent must obtain permission from the adjacent property owner(s) in order to provide access. I understand that this may delay the USACE's jurisdictional determination and the USACE's issuance of a determination letter.

Signature of Property Owner (s) — Date: 11/22/2016

Dave Morton
Printed Name

Signature of Property Owner (s) — Date

Printed Name

Appendix C — Routine Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 3264 Taylor Road City/County: Loomis/ Placer Sampling Date: 10/21/2016

Applicant/Owner: Massie and Company State: CA Sampling Point: 1B

Investigator(s): David Bise, Marisa Brilts Section, Township, Range: Section 3, Township 11N, Range 7E

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): LRR C Lat: 38 50' 2.675 N Long: 121 10' 58.254 W Datum: NAD 83

Soil Map Unit Name: Andregg Coarse Sandy Loam, 2 to 9 Percent Slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus lobata	15	Yes	FACU
2.			
3.			
4.			
	15 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Quercus lobata	5	Yes	FACU
2.			
3.			
4.			
5.			
	5 = Total Cover		
Herb Stratum (Plot size: ____)			
1. Cynodon dactylon	80	Yes	FACU
2. Hirshfeldia incana	5	No	UPL
3. Daucus carota	5	No	UPL
4. Rumex crispis	5	No	FAC
5. Vicia villosa	2	No	FACU
6.			
7.			
8.			
	97 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 3 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = 0
FACW species ____	x 2 = 0
FAC species 5	x 3 = 15
FACU species 102	x 4 = 408
UPL species 10	x 5 = 50
Column Totals: 117 (A)	473 (B)

Prevalence Index = B/A = 4.042735042

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: 1B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5 YR 3/3	95	5 YR 4/6	5	C	M	sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ✓ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

In depression.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 3264 Taylor Road City/County: Loomis/ Placer Sampling Date: 10/21/2016

Applicant/Owner: Massie and Company State: CA Sampling Point: 2A

Investigator(s): David Bise, Marisa Brilts Section, Township, Range: Section 3, Township 11N, Range 7E

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): LRR C Lat: 38 50' 2.675 N Long: 121 10' 58.254 W Datum: NAD 83

Soil Map Unit Name: Andregg Coarse Sandy Loam, 2 to 9 Percent Slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus lobata	20	Yes	FACU
2. Salix gooddingii	10	Yes	FACW
3.			
4.			
	30	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: ____)			
1. Cyperus eragrostis	90	Yes	FACW
2. Rumex crispis	1	No	FAC
3. Cynodon dactylon	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	96	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 4 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = 0
FACW species ____	x 2 = 0
FAC species ____	x 3 = 0
FACU species ____	x 4 = 0
UPL species ____	x 5 = 0
Column Totals: 0 (A)	0 (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	5 YR 2.5/2	100	None				clay loam	
2-10	7.5 YR 3/2	100	5 YR 5/8	2	C	M	clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ✓ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ✓ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✓ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ✓ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 3264 Taylor Road City/County: Loomis/ Placer Sampling Date: 10/21/2016

Applicant/Owner: Massie and Company State: CA Sampling Point: 2B

Investigator(s): David Bise, Marisa Brilts Section, Township, Range: Section 3, Township 11N, Range 7E

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): LRR C Lat: 38 50' 2.675 N Long: 121 10' 58.254 W Datum: NAD 83

Soil Map Unit Name: Andregg Coarse Sandy Loam, 2 to 9 Percent Slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: ____)			
1. Cynodon dactylon	90	Yes	FACU
2. Daucus carota	1	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
	91	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 9 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	0
FACW species ____	x 2 =	0
FAC species ____	x 3 =	0
FACU species 90	x 4 =	360
UPL species 1	x 5 =	5
Column Totals: 91 (A)		365 (B)

Prevalence Index = B/A = 4.010989010

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks:

SOIL

Sampling Point: 2B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5 YR 3/3	100	None				silty clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

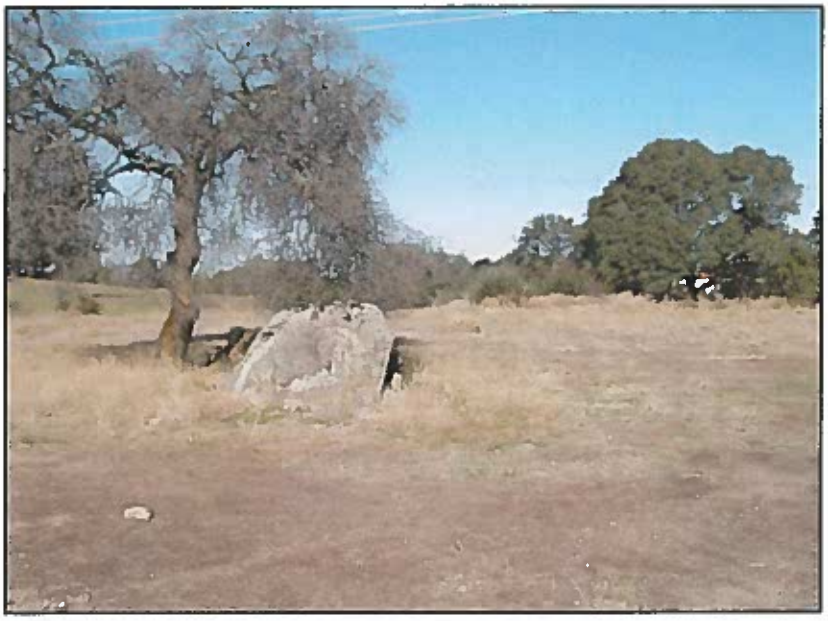
Upland bank

Appendix D — List of Plants Observed on the Project Site

List of Observed Plants on the Project Site

Species	Common Name	Wetland Indicator Status (WIS)
Avena fatua	Wild oat	UPL
Brassica nigra	Black mustard	UPL
Bromus hordeaceus	Soft chess	FACU
Centromadia fitchii	Spikeweed	FACU
Cercis occidentalis	Redbud	UPL
Cichorium intybus	Chicory	UPL
Cirsium vulgare	Bull thistle	UPL
Convolvulus arvensis	Field bindweed	UPL
Croton setigerus	Turkey-mullein	UPL
Cynodon dactylon	Bermuda grass	FACU
Cyperus eragrostis	Tall flatsedge	FACW
Daucus carota	Carrot, Queen Anne's lace	UPL
Epilobium brachycarpum	Annual fireweed	UPL
Eucalyptus sp.	Eucalyptus	NI
Festuca perennis	Italian rye grass	FAC
Ficus carica	Common fig	NI
Hirshfeldia incana	Wild mustard	UPL
Holocarpha virgata	Narrow tarplant	UPL
Hordeum marinum	Seaside Barley	FAC
Juncus bufonius	Toad Rush	FACW
Leontodon saxatilis	Lesser Hawkbit	FACU
Mentha pulegium	Pennyroyal	OBL
Mollugo verticillata	Green carpetweed	FACU
Morus alba	White mulberry	UPL
Pistacia chinensis	Chinese pistache	UPL
Plantago lanceolata	English plantain	FAC
Platanus racemosa	California sycamore	NI
Populus fremontii ssp. *fremontii*	Fremont cottonwood	NI
Prunus cerasifera	Cherry plum	NI
Quercus douglasii	Blue oak	UPL
Quercus wislizeni	Interior live oak	UPL
Rubus discolor	Himalayan blackberry	FAC
Rumex crispus	Curly dock	FAC
Salix gooddingii	Goodding's black willow	FACW
Schinus molle	Peruvian pepper tree	FACW
Senecio vulgaris	Common groundsel	FACU
Trichostema lanceolatum	Vinegar weed	FACU
Trifolium hirtum	Rose clover	UPL
Vicia villosa	Hairy vetch, winter vetch	UPL
Xanthium strumarium	Cocklebur	FAC

Appendix E — Representative Site Photographs



Description: Photo taken facing northwest, sparsely vegetated upland.

Date: 10/21/2016 Photographer: Marisa Brilts

Description: Northern portion of site boundary and non-wetland swale.

Date: 10/21/2016 Photographer: Marisa Brilts

Description: Northern portion of the riverine seasonal wetland feature.

Date: 10/21/2016 Photographer: Marisa Brilts

Description: Photo taken from the southwest corner, facing north, from an upland slope of the riverine seasonal wetland.

Date: 10/21/2016 Photographer: Paul Weller

REPRESENTATIVE SITE PHOTOGRAPHS

Description: View of south end of seasonal wetland and ephemeral drainage from edge of Taylor Road.

Date: 11/16/2016 Photographer: Meredith Branstad

Description: View looking west along excavated upland drainage swale parallel to Taylor Road from access drive.

Date: 11/16/2016 Photographer: Meredith Branstad

REPRESENTATIVE SITE PHOTOGRAPHS

Appendix F — Aquatic Resources Excel Spreadsheet

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway
RSW1	CALIFORNIA	PEM2		Area	0.1012	ACRE	DELINEATE	38.83406753	-121.1830551	
ED2	CALIFORNIA	R4SB		Area	0.0007	ACRE	DELINEATE	38.83342978	-121.1828508	

South Placer Municipal Utility District
5807 Springview Drive
Rocklin, CA 95677
(916) 786-8555

February 9, 2017

Town of Loomis
Planning Department
P.O. Box 1330
Loomis, CA 95650

Attention: Robert King, Town Planner

Subject: #17-02 Conditional Use Permit and Design Review to Allow the Construction and Operation of an 11,000 Square Foot Retail Furniture Store
APN: 043-014-011-000

Dear Mr. King,

Thank you for the opportunity to comment on the application to construct and operate a new 11,000 square foot furniture store to be known as the "Featured Nest."

The Town of Loomis application indicates that the furniture store will utilize a septic system, not the SPMUD public sewer system. Should the applicant decide to connect to the public sewer system, the design and construction of all on-site and off-site facilities which may be required as a result of this project, including the acquisition and granting of sewer easements, will be the responsibility of the developer/owner. All work shall conform to the Standard Specifications of SPMUD. Improvement plans shall be submitted to SPMUD for review and approval. A copy of the District's facility map has been provided for your use. Please refer to Ordinance 09-02 for information regarding participation fees.

Additional requirements may be required as design information is provided.

Should the applicant decide to move forward with public sewer, the owner and/or owner's representative will need to schedule a meeting with District staff in order to discuss the project and to determine specific requirements prior to issuance of a will-serve letter.

Please note that the District's Standard Specifications and Improvement Standards for Sanitary Sewers can be viewed at SPMUD's website: http://spmud.ca.gov/developer-resources/standards-specifications/.

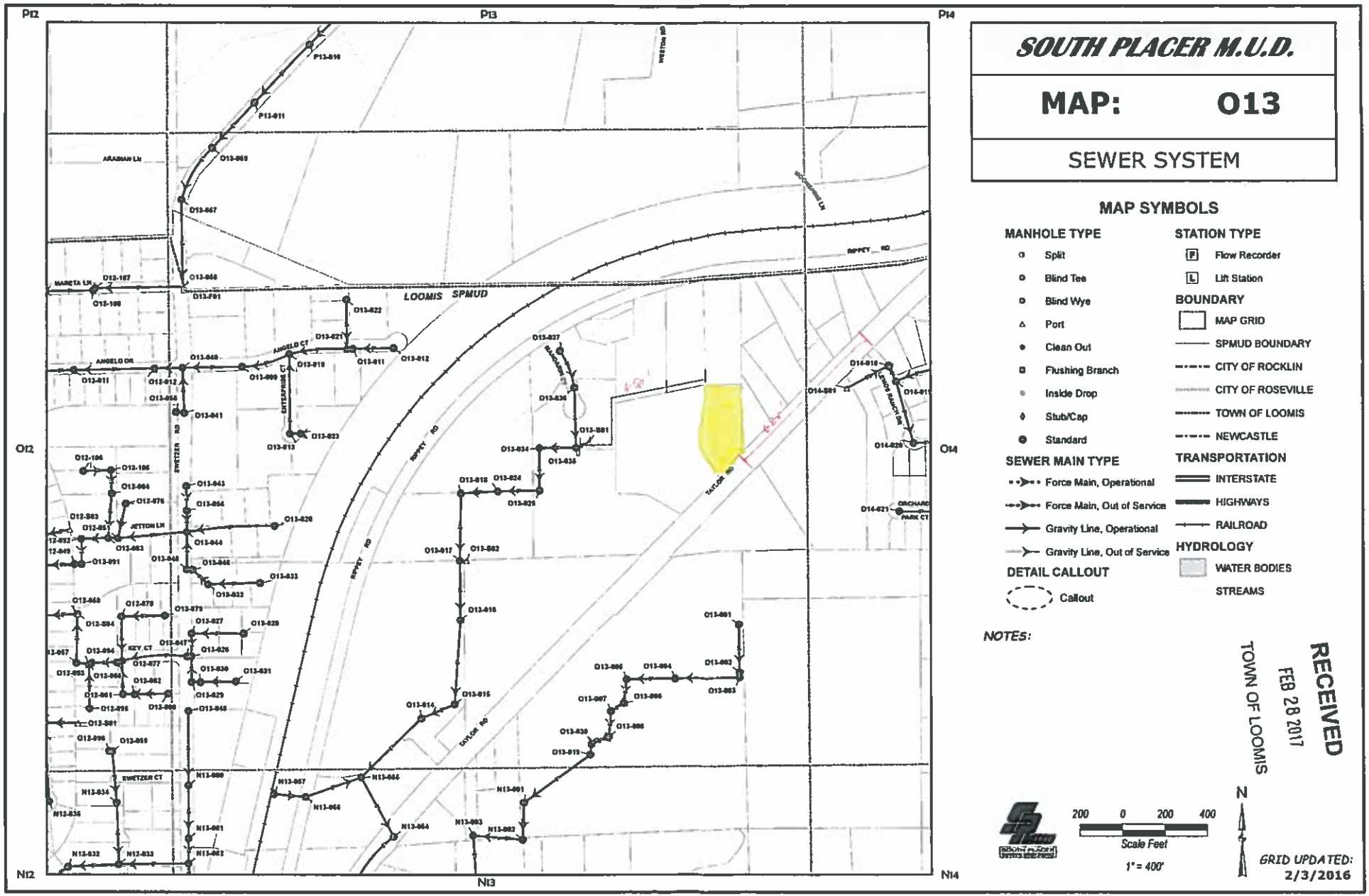
Please do not hesitate to contact me at (916) 786-8555 extension 311 or chuff@spmud.ca.gov if you have any questions or need additional information.

Sincerely,

Carie Huff

Carie Huff, P.E.

EXHIBIT 1



SOUTH PLACER M.U.D.

MAP: O13

SEWER SYSTEM

MAP SYMBOLS

MANHOLE TYPE
- Split
- Blind Tee
- Blind Wye
- Port
- Clean Out
- Flushing Branch
- Inside Drop
- Stub/Cap
- Standard

STATION TYPE
- F Flow Recorder
- L Lift Station

BOUNDARY
- MAP GRID
- SPMUD BOUNDARY
- CITY OF ROCKLIN
- CITY OF ROSEVILLE
- TOWN OF LOOMIS
- NEWCASTLE

SEWER MAIN TYPE
- Force Main, Operational
- Force Main, Out of Service
- Gravity Line, Operational
- Gravity Line, Out of Service

TRANSPORTATION
- INTERSTATE
- HIGHWAYS
- RAILROAD

DETAIL CALLOUT
- Callout

HYDROLOGY
- WATER BODIES
- STREAMS

NOTES:

RECEIVED
FEB 28 2017
TOWN OF LOOMIS

200 0 200 400
Scale Feet
1" = 400'

N

GRID UPDATED: 2/3/2016

Robert King

From: mhiggins@penrynfire.org
Sent: Monday, February 06, 2017 10:14 AM
To: Robert King
Subject: RE: Application #17-02 3264 Taylor Road

Robert,
We have reviewed the submittal, and I have been working with the company through the site plans for what we will be requiring from the fire side.
The road widths and approach look within requirements. We will be requiring two hydrants, 1500 gpm and one of those need to be within 20' of the FDC.
We will require a visible address to be posted. Readable from Taylor Rd.
All CFC's and District Ordinances will be required.
We have not seen any fire suppression plans of as yet, but we will have comments once we see them.

If you have any further questions or concerns, please do not hesitate in contacting me.

Sincerely,

Chief Mitch Higgins

Penryn Fire Protection District
P.O.Box 219
Penryn, CA 95663
916-663-3389 (Office)
916-663-1262 (Fax)
mhiggins@penrynfire.org

> -------- Original Message --------
> Subject: RE: Application #17-02 3264 Taylor Road
> From: Robert King <RKing@loomis.ca.gov>
> Date: Thu, January 26, 2017 3:44 pm
> To: Mitch Higgins <mhiggins@penrynfire.org>
>
> Good Afternoon Mitch,
>
> As you saw I sent my request for comments to Loomis Fire Protection District, when I should have sent them to you at the Penryn Fire Protection District. Nevertheless, here's a copy for you folks to review and comment.
> Thanks, Bob
>
> **Robert F. King**
> **Town Planner**
>
> Loomis Town Hall
> 3665 Taylor Road
> P.O. Box 1330
> Loomis, CA 95650

PLACER COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Ken Grehm, Executive Director
Brian Keating, District Manager
Brad Brewer, Development Coordinator

February 9, 2017

Robert King
Town of Loomis Planning Department
P.O. Box 1327
Loomis, CA 95650

RE: Application #17-02 Conditional Use Permit and Design Review for Feathered Nest APN: 043-014-011

Robert:

We have reviewed the application package dated January 17, 2017 for the subject project. The applicant is referred to the District's 1990 Stormwater Management Manual for applicable future drainage related design standards, a copy of which is available for download off the County website at www.placer.ca.gov. This project is located within the Secret Ravine Watershed. A general assessment of flooding in this watershed is provided in the *Update to the Dry Creek Watershed Flood Control Plan* dated November 2011. This study indicates that this project is located where onsite stormwater detention is not recommended. However, the District recommends that the applicant assess the capacity of the existing downstream drainage facilities to determine if mitigation measures are needed for controlling stormwater runoff. It is also recommended that the applicant analyze and map the 100-year floodplain for Secret Ravine which flows through the property. Because the development will likely create or replace more than 2,500 square feet of impervious surface, the project is likely subject to the requirements of Hydromodification Management and Low Impact Design (LID) measures, in the Town's new Phase II NPDES Permit. Please consider these requirements and design measures within future submittals.

Please call me at (530) 745-7541 if you have any questions.

Brad Brewer, M.S., P.E., QSD/P
Development Coordinator

t:\dpw\cd\development review\letters\loomis\cn17-20 feathered nest.docx

Robert King

From: Kathryn von Seeburg [KvonSeeburg@recology.com]
Sent: Friday, February 03, 2017 12:55 PM
To: Robert King
Subject: Feathered Nest

The enclosure for this project is in a serviceable location. However, we would like to ensure there is sufficient room for the service vehicle to turn around to exit the property without backing out. In addition, we would need to review enclosure specifications prior to issuing a will serve letter.

Please let me know if you have any questions.

Kathryn von Seeburg
Office Manager

Recology™ Auburn Placer
12305 Shale Ridge Road | P.O. Box 6566 | Auburn, CA 95604
T: 530.885.3735
kvonseeburg@recology.com

WASTE ZERO

Robert King

From: Calderaro, Angela@Wildlife [Angela.Calderaro@wildlife.ca.gov]
Sent: Friday, January 27, 2017 11:39 AM
To: Robert King
Cc: Wildlife R2 CEQA
Subject: Review: Feathered Nest Furniture Store at 3264 Taylor Road (CEQA-2017-0036-0000-R2)

Dear Mr. King,

The California Department of Fish and Wildlife (Department) is providing comments on the information sent regarding the Feathered Nest Furniture Store at 3264 Taylor Road (project).

The project proposes to construct and operate a new 11,0000 square foot furniture store to be known as the "Featured Nest."

Riparian Habitat/ Streambed Alteration Agreement

The CEQA analysis should state what, if any, Department-jurisdictional features will be removed, disturbed, or otherwise altered by the project. The wetland delineation study does not mention or show the limit of the Department's jurisdiction under FGC 1600. The Department's jurisdiction includes the bed, bank and channel and any associated habitat including areas where water has flowed and where the width of its course can be identified by physical or biological indicators which may include the area encompassed by the riparian area on the project site. The CEQA document should include a map showing a delineation of Department-jurisdictional features including but not limited to the riparian habitat and seasonal wetlands and quantify impacts to our jurisdiction, which is distinct from the USACE's and SWRCB's definitions. If riparian habitat is present on the project site, the project could result in direct and indirect impacts to Department-jurisdictional features. The CEQA document should address direct (temporary and permanent), indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts.

Direct Impacts

An entity (any person, State, local government agency, or public utility) should consider and analyze whether implementation of the proposed project will result in reasonably foreseeable potentially significant impacts subject to regulation by the Department under Section 1600 et seq. of the FGC. In general, such impacts result whenever a proposed project involves work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel, including ephemeral streams and watercourses. As a responsible agency under CEQA, the Department must rely on the CEQA analysis for the project when exercising our discretion after the lead agency to approve or carry out some facet of a proposed project, such as the issuance of a Lake and Streambed Alteration Agreement (LSAA). Therefore, the CEQA document should include specific, enforceable measures to be carried out onsite or within the same stream system that will avoid, minimize and/or mitigate for project impacts to the natural resources. If CDFW-jurisdictional features will be removed as a result of the project, the Department recommends a minimum *3 acres of restored habitat for each acre removed.* Mitigation measures should also describe when the mitigation measure will be implemented, and explain why the measure is feasible. The Department recommends that the CEQA document does not defer mitigation details to some future time. The CEQA document should identify the following items: how each measure will be carried out; who will perform the measures; when the measures will be performed; the performance standards and mechanisms for achieving success, and an assured source of funding to acquire and manage identified mitigation lands. The CEQA document should describe a range of enforceable mitigation measures that will be implemented in instances where approval and cooperation with the entities identified above either does or does not occur.

Indirect Impacts

Project activities may result in disrupted reproduction depending on the time of year construction occurs; noise, light, dust, and ground vibration during construction; and possible increased sedimentation into the seasonal wetlands and floodplain resulting from fill material inadvertently entering the waterway. Indirect impacts from development may occur from effects to water quality, increase in noise, light and human-wildlife interaction, as well as disturbances to wildlife species and the habitats on which they depend.

Nesting Birds and Raptors

The project has the potential to disturb bird species or nests protected under the Migratory Bird Treaty Act (MBTA), FGC §3503 and 3503.5. Since project activities may occur during the nesting season (determined by region, species, and climate), construction activities could result in disturbance to nesting raptors and other migratory birds. Raptors and other migratory birds are protected under the MBTA and FGC §3503.5; therefore, potential impacts may be considered potentially significant unless adequate avoidance, minimization and/or mitigation is incorporated. If nests are identified on or adjacent to the project site, implementation of the project may adversely impact the success of the nest site and/or take a bird, their eggs and/or nest.

The Department recommends including performance-based protection measures for avoiding all nests protected under the Migratory Bird Treaty Act and FGC §3503.5. A 500-foot no-work buffer may be sufficient; however, that buffer may need to be increased based on the birds' tolerance level to the disturbance. Below is an example of a performance-based protection measure:

Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer will be increased such that activities are far enough from the nest to stop this agitated behavior. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

Please let me know if you have any questions or concerns. My contact information is below.

Angela Calderaro

Senior Environmental Scientist (Specialist)
Habitat Conservation Branch
California Department of Fish and Wildlife, North Central Region
1701 Nimbus Road, Rancho Cordova CA 95670
Office: 916-358-2920
Fax: 916-358-2912
Angela.Calderaro@wildlife.ca.gov
www.wildlife.ca.gov

To report a violation please notify the Californians Turn in Poachers and Polluters (CalTIP) program by calling 1-888-DFG-Caltip or texting "tip411" (numerically, 847411 – Start message with "Caltip") You can even send photos via text. Also, the CalTIP App can be downloaded for free via the Google Play Store and iTunes App Store.

Note: I do not work most Thursdays.

FOOTHILL ASSOCIATES

ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

February 13, 2017

Mr. Dave Morton
Massie and Company
1801 Tribute Road
Sacramento, CA 95815

RE: Response to California Department of Fish and Wildlife Comment Letter on Proposed Feathered Nest Furniture Store Project at 3264 Taylor Road, Town of Loomis, California

Dear Mr. Morton:

This letter has been prepared in response to a comment email received by the Town of Loomis on January 27, 2017 by the California Department of Fish and Wildlife (CDFW) in regards to the site located at 3264 Taylor Road in the Town of Loomis, California (**Figure 1**). The comment letter from CDFW requests information on the potential extent and location of features subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code. CDFW's jurisdiction includes the bed, bank, and channel and any associated habitat including areas where water has flowed and where the width of its course can be identified by physical or biological indicators which may include the area encompassed by the riparian area on the project site. The comment letter also states that the site may potentially support nesting bird species that are protected by California Fish and Game Codes.

To address the estimated extent of CDFW jurisdiction on the site, a site visit was performed by Foothill Associates on February 9, 2017 to map the extent of the bed, bank, and riparian canopy associated with the mapped riverine seasonal wetland on the site. The estimated extent of CDFW jurisdiction associated with this feature is shown in **Figure 2**. The proposed site plan is also included in **Figure 2** to show the relationship of the estimated extent of CDFW jurisdiction in reference to proposed development on the site. The riverine seasonal wetland onsite has a steep bed and bank and wetland plants and associated riparian canopy are generally confined to within the Ordinary High Water Mark (OHWM) of the riverine seasonal wetland. Tree canopy within the bed and bank of the riverine seasonal wetland includes interior live oak (*Quercus wislizeni*) and valley oak (*Quercus lobata*). There is one black willow (*Salix gooddingii*) associated with the riverine seasonal wetland that is generally confined to within the OHWM although there are areas of canopy that extend outside of the bed and bank of the riverine feature. Photos of the bank of the riverine seasonal wetland are included in **Attachment 1** of this letter. As shown in **Figure 2**, the estimated extent of CDFW jurisdiction is outside of the proposed project footprint. Therefore, it is not expected that the project will require the

acquisition of a Streambed Alteration Agreement from CDFW. It should be noted that this extent of jurisdiction is an estimate and CDFW determines the extent of their jurisdiction.

The second portion of this letter addresses the potential for the site to support nesting bird species protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Codes. As referenced in the CDFW comment letter, the site provides suitable nesting habitat for a variety of bird species including large oak trees that provide suitable nesting habitat for raptor species. Therefore, tree removal or construction activities that occur during the nesting season (generally February 15 through August 31) have the potential to result in nest removal or nest abandonment as outlined in the CDFW comment letter. This would potentially result in a significant impact under the California Environmental Quality Act (CEQA). The following mitigation measure language is suggested for inclusion in the CEQA document for the project to address these potential impacts on nesting birds protected by California Fish and Game Codes:

"The following measures shall be implemented by the project proponent to avoid or minimize potential project impacts on nesting migratory birds and or birds of prey protected by the federal Migratory Bird Treaty Act and California Fish and Game Codes:

- If feasible, any tree removal required for project construction and operation shall be completed outside of the nesting season (September 1 through February 14). The nesting season is from February 15 through August 31.

- If construction or tree removal is expected to occur during the nesting season (February 15 through August 31), a Qualified Biologist shall conduct an environmental awareness training for all construction personnel. The training should include information pertaining to the potential for active nests to occur within or adjacent to the construction footprint and procedures to follow in the event that an active nest is found during construction or tree removal.

- If construction or tree removal is scheduled to occur during the nesting season, a Qualified Biologist shall conduct a pre-construction survey for active nests within 14 days prior to commencement of construction activities or tree removal within the project construction footprint and a 500-foot buffer, where accessible. If the pre-construction survey shows that there is no evidence of active nests, then a letter report shall be submitted to the Town of Loomis for their records and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or is suspended for more than 14 days, an additional pre-construction survey shall be conducted.

- If any active nests are located within the project site, a Qualified Biologist shall establish an appropriate buffer zone around the nests. The Qualified Biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and up to 500 feet for raptor nests. If active nests are found on the site, a Qualified Biologist shall monitor nests weekly during construction to evaluate

potential nesting disturbance by construction activities. If establishing the typical buffer zone is impractical, the Qualified Biologist may reduce the buffer depending on the species. If the nesting buffer must be reduced, daily monitoring is recommended to ensure that the nest is not disturbed and no forced fledging occurs. Weekly or daily monitoring shall occur until the Qualified Biologist determines that the nest is no longer active. Once it has been determined that the nest is no longer active, then a letter report shall be submitted to the Town of Loomis and the CDFW documenting the results of the nest monitoring and the outcome of the active nest."

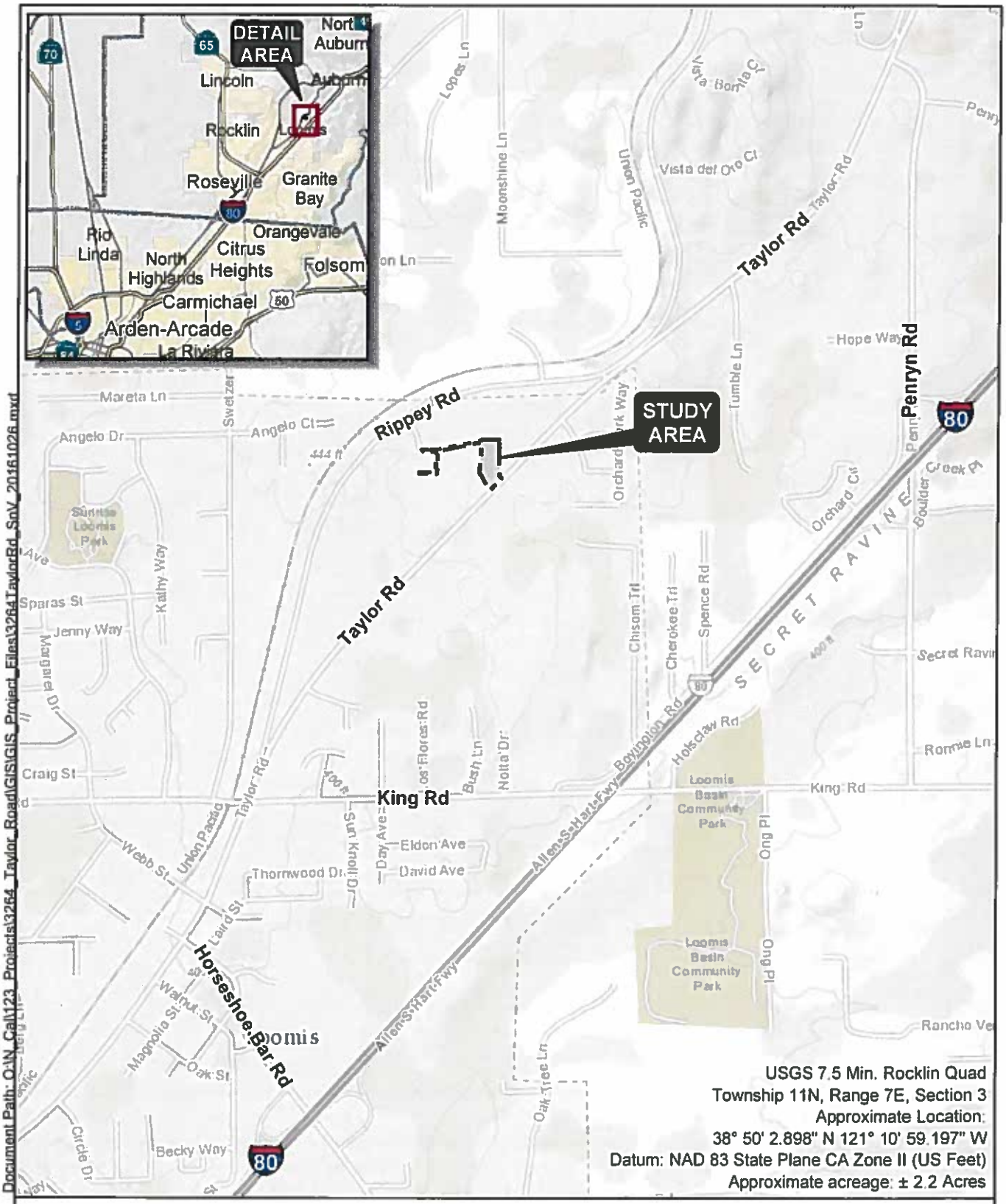
With the inclusion of these mitigation measures, it would be expected that potential impacts to nesting birds protected by the MBTA and California Fish and Game Codes would be reduced to less than significant. Please feel free to contact me with any questions regarding the contents of this letter.

Sincerely,

David Bise
Senior Project Manager/ Wildlife Biologist

Enclosures (3)

cc: Rick Massie, Massie and Company



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SITE AND VICINITY

FOOTHILL ASSOCIATES
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N

0 0.125 0.25
Miles
1 in = 0.25 miles

Drawn By: MUB
QA/QC: AMP
Date: 10/27/2016

FIGURE 1

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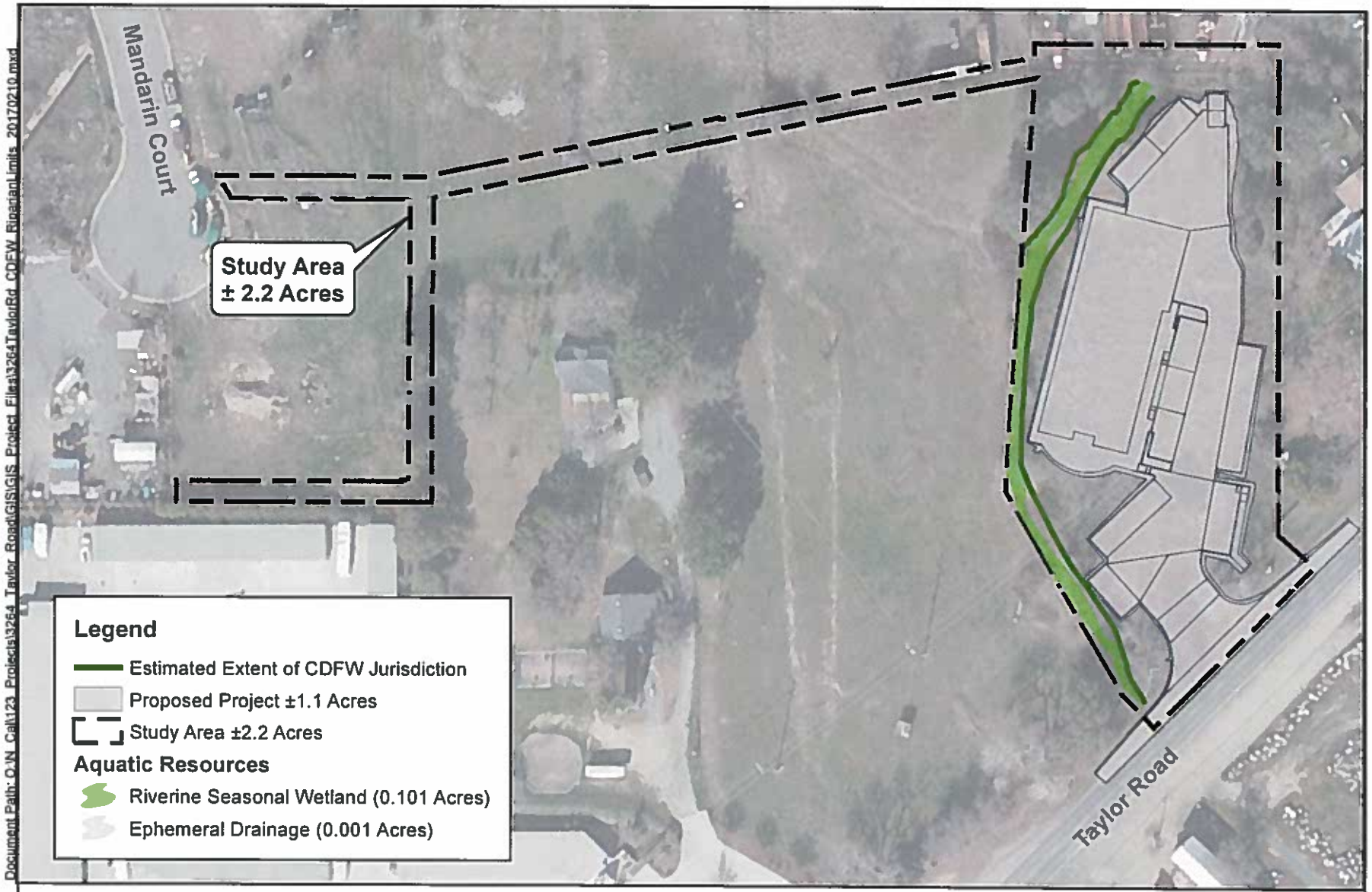

ESTIMATED EXTENT OF CDFW JURISDICTION

FOOTHILL ASSOCIATES
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N

0 100 200
Feet
1 inch = 100 feet

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FIGURE 2

3264 TAYLOR ROAD

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Photograph 1: View looking north at northern end of riverine seasonal wetland with oak overstory.

Date: February 9, 2017 Photographer: David Bise

Photograph 2: View of riverine seasonal wetland showing limited tree canopy with willow shrubs in background.

Date: February 9, 2017 Photographer: David Bise

REPRESENTATIVE SITE PHOTOGRAPHS

Photograph 3: View of riverine seasonal wetland with interior live oak within channel.

Date: February 9, 2017 Photographer: David Bise

Photograph 4: View looking south of riverine seasonal wetland.

Date: February 9, 2017 Photographer: David Bise