

TECHNICAL MEMORANDUM

Open Space Reconfiguration Justification Mitchell Minor Subdivision and Development Plan Modification 1975 Ollivier Road, McKinleyville, Humboldt County, California Assessor's Parcel Number (APN): 511-141-017

Date: Project No.:	April 28, 2023 6849.09	
Prepared For:	Mike and Karen Mitchell	
Prepared By:	Megan Marruffo, Senior Planner/Pro	pject Manager <u>Magn Mark</u>
Reviewed By:	Meghan Ryan, Planning Director	Meghanker
Cc:	County of Humboldt Planning and Bu	ilding Department
Attachments:	Figure 1: Figure 2: Figure 3a: Figure 3b: Figure 4:	Existing Open Space Allocation Proposed Open Space Allocation Identified Tree Map Identified Tree Table Existing & Proposed Open Space Comparison
	Appendix 1: Appendix 2: Appendix 3:	Tentative Map Tree Identification Letter Waters of the United States/State Delineation

1.0 PROJECT OVERVIEW

Michael and Karen Mitchell, Trustees of The Michael and Karen Mitchell Family Trust (Applicants), propose a minor subdivision of the approximately 8.12-acre property identified as Assessor's Parcel Number (APN): 511-141-017, located at 1975 Ollivier Road, in McKinleyville in unincorporated Humboldt County (Site; County Application No.: PLN-2020-16281). The Applicants propose subdividing the Site into three (3) individual parcels. Parcel lines would run north to south and each individual parcel would be accessed off Ollivier Road, via minimum 16-foot-wide private driveways. The first westerly parcel (Lot 1) is proposed to be 3.12 acres in size, and the middle parcel (Lot 2) and the easternmost lot (Lot 3) are proposed to each be 2.50 acres in size,

21 W Fourth Street Eureka, CA 95501 707 443-5054 1072 N State Street Ukiah, CA 95482 707 462-0222 1550 Airport Blvd., Suite 120 Santa Rosa CA 95403 707 525-1222 1209 Esplanade, Suite 4 Chico, CA 95926 530 801-6170 respectively. A tentative map showing the proposed parcel configuration, as well as the location of a drainage feature within the southern portion of the Site, is enclosed as Appendix 1.

In addition, the Applicants are seeking to modify a portion of the previously approved Development Plan (PMS-57-88, approved by the Humboldt County Planning Commission on September 25, 1989) for the properties located along Ollivier Road, including the subject Site. Specifically, the Applicants are requesting the location of the required open space (currently established for the northerly 280 feet of Parcel 1, the subject property; see Figure 1) be reconfigured as shown on the Proposed Open Space Allocation exhibit (Figure 2). The amount of open space required under the current Development Plan (PMS-57-88) equates to 4.09 acres, or approximately 50 percent of the subject Site. The amount of open space required under the current Development Plan (PMS-57-88) equates to would comply with the minimum 40 percent of open space required under Policy 2514.D of the 1985 McKinleyville Community Plan. Table 1, below, presents the existing and proposed open space amounts per individual lot, in addition to the percentage of open space per lot. The benefits associated with the proposed project are also presented, further below. A modification to the established open space location on Parcel 3 (APN: 511-141-18, parcel immediately east of the Site and owned by the Applicants) was authorized under PMS-00-02 on April 10, 2001.

Lot Number	Lot Size (acres)	Open Space (acres)	% Open Space		
	EXISTING				
1 8.12 4.09 50%					
PROPOSED					
1	3.12	1.37	44%		
2	2.50	1.36	54%		
3	2.50	1.36	54%		
Total	8.12	4.09	50%		

Table 1. Existing and Proposed Open Space Amounts (Per Lot)

No development is proposed at this time under the project. However, residential development, consistent with surrounding development, is anticipated in the future and may include construction of a single-family residence and accessory dwelling unit on each lot. The individual lots are likely to be sold and developed by the individual landowner(s) in the future, as desired.

1.1 Site Description

The Site, located between Hooven and Ollivier Roads, was purchased by the Applicants in 2007. The Applicants own two adjacent parcels (APNs: 511-141-021 and -022), located immediately east of the Site. The Site is currently designated as Residential Low Density with Airport Land Use Compatibility Zone Overlay (RL-AP) under the Humboldt County General Plan and zoned Agriculture General with a 1-acre minimum lot size and Airport Safety Review Combining Zone [AG-B-7(1)-AP] under the Humboldt County Zoning Regulations.



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The Site is located approximately 0.9 miles east of the Coastal Zone boundary and is relatively flat in nature. An existing fence surrounds the Site and an existing shed structure is located in the southeastern portion of the Site. Additionally, Ollivier Road is partially located within the southern portion of the Site within the 50-foot easement established for ingress, egress, and public utilities (25 PM 17). Surrounding parcels contain residential uses to the west, south, and east of the Site. The parcel to the north of the Site, across Hooven Road, is vacant and primarily forested, with an open grassy area in the western portion of the parcel with intermixed trees and shrubs.

Currently, vegetation primarily consists of grasses with interspersed trees and shrubs. The Site is regularly mowed and maintained by the Applicants, who access the Site via an existing gate along the Site's eastern boundary. The Site is not under a Williamson Act contract, although it contains prime agricultural soils. The Site is located approximately 240 feet north of Norton Creek, a perennial stream, and is outside of the County-designated Streamside Management Area (SMA). The Site is located within the State Responsibility Area (SRA) for fire protection services, but is served by both the California Department of Forestry and Fire Protection (CAL FIRE) and the Arcata Fire Protection District. The majority of the Site is within the High Fire Hazard Severity Zone (FHSZ), with the northwestern and southeastern-most portions of the Site located within the Moderate FHSZ. The Site does not contain any known earthquake faults and is located approximately 1,800 feet northeast of the Alquist-Priolo Fault Zone (Web GIS, 2019).

The Site is located approximately 2,025 feet east of the California Redwood Coast-Humboldt County Airport's eastern boundary and is located within Airport Compatibility Zone C, but outside of the Federal Aviation Regulation (FAR 77) and Building Height Restriction (CC 333-3) areas.

1.2 Potential Future Development

Though no development is proposed at this time, future development of the Site is anticipated. Future development on-site may entail construction of a single-family residence and at least one accessory dwelling unit in compliance with Section 314-69.05 (Accessory Dwelling Units) of the Humboldt County Zoning Regulations, although a variety of uses are allowed within the Site's principal zoning district [Agriculture General (AG)].

The Agriculture General (AG) zoning district "is intended to be applied in areas in which agriculture is the desirable predominant uses and rural residential uses are secondary" (§314-7.2 AG: Agriculture General Zone, Humboldt County Zoning Regulations) allows for a variety of uses. As provided in Section 314-7.2 of the County's Zoning Regulations, principally permitted uses include general agriculture (including accessory agricultural uses and structures), one-family dwellings and farm dwellings, rooming and boarding of not more than two (2) persons not employed on the premises, and manufactured homes. Uses permitted with a Use Permit include but are not limited to:

- Guest houses, servants' quarters, labor camps, and labor supply camps
- Hog farms, turkey farms, frog farms, and fur farms
- Animal feed lots and sales yards
- Agricultural and timber products processing plants
- Rental and sales of irrigation equipment and storage incidental thereto
- Animal hospitals and kennels
- Golf courses



- Private institutions and cemeteries
- Any use not specifically enumerated in this Division, if it is similar to and compatible with the uses permitted in the AG zone.

1.2.1 Subdivision Improvements

Since no specific development plans for the Site are proposed at this time, the Applicants are requesting the required minor subdivision improvements be deferred until specific development plans are proposed for the Site, pursuant to Section 66411.1 of the Subdivision Map Act.

1.2.2 Services and Utilities

The Site is located within the McKinleyville Community Services District (MCSD) and would be served by MCSD for community water service, but private individual on-site septic systems for wastewater disposal. On-site septic suitability evaluation and testing performed by LACO in February 2008 and February 2020 indicates each lot proposed under the project is suitable for a Class A disposal system consisting of a gravity-fed dual-disposal field with a 100 percent reserve area. Class D single-disposal fields would also be acceptable for the Site, provided percolation testing conducted by a qualified individual is performed in order to size the system(s) appropriately.

Electricity and natural gas would be provided by Pacific Gas and Electric Company (PG&E). Several information providers (Optimum, AT&T, DirecTV) are available to provide land-line telephone service and internet. All utility lines within the project Site would be underground.

1.2.3 Site Access

Site access is currently and would continue to be provided off Ollivier Road, a private road approximately 1,325 feet in length and 50 feet in width, with an existing turnaround. Each proposed lot is proposed to be served by an individual driveway off Ollivier Road that is a minimum of 16 feet in width, in accordance with Humboldt County Code Section 411-51. Although specific driveway locations have not been identified at this time, please note that driveway installation will not require any existing trees to be removed.

Three existing easements are also located within or adjacent to the Site, including:

- 1. A 50-foot non-exclusive right-of-way for ingress, egress, and public utilities per 1090 OR 70, along the Site's western boundary;
- 2. A 50-foot easement for ingress, egress, and public utilities per 25 PM 17, along the southern portion of the Site; and
- 3. A 25-foot easement for ingress, egress, and public utilities per 25 PM 17, along the Site's eastern boundary.

1.2.4 Drainage

Currently, stormwater run-off is in the form of sheet flow and until development is proposed on the Site, stormwater detention on-site is not proposed. Any future development on the Site would be anticipated to increase stormwater runoff, as the Site currently does not contain any impervious surfaces. The Site is located within a municipal separate storm sewer system (MS4) permit area (Web GIS) and, as a result, would be subject to the County's MS4 requirements. Future anticipated development of the Site, which would likely include construction of a single-family residence and accessory dwelling unit on each lot, would likely be



subject to the Small Projects standards specified in the Humboldt LID Stormwater Manual, where projects that create or replace between 2,500 and 5,000 square feet of impervious surface must incorporate specified Site Design Measures to reduce stormwater runoff. However, should future development on any of the proposed lots exceed 5,000 square feet or more of impervious surface, a comprehensive Stormwater Control Plan for Regulated Projects would be required.

Once anticipated future development is proposed for the Site, it is anticipated that drainage would be retained on-site using Low Impact Development (LID) elements and other methods to prevent impacts to the County's storm drain system and to comply with the requirements of the Phase II Small MS4 General Permit (for municipalities servicing less than 100,000 persons).

1.3 Identification of On-Site Trees

LACO's Senior Biologist/Botanist, Gary Lester, conducted a field visit on April 10, 2023, to identify and measure all trees located within the property boundaries. The diameter at breast height (dbh) of each tree was measured in inches. A total of 32 trees were identified on-site, including:

- Shore pine (Pinus contorta) = 19 trees
- Douglas-fir (Pseudotsuga menziesii) = 11 trees
- Red alder (Alnus rubra) = 2 trees

A letter describing the results of the tree identification survey is enclosed as Appendix 2. Figure 3a depicts the location of each tree species identified on the subject Site, with a corresponding table identifying the individual trees and respective measurements included as Figure 3b.

1.3.1 Sensitive Species Identified

In addition to the identified trees during the April 10th survey, a small population (approximately 4 square feet) of Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*) was identified within the northeastern corner of the Site. Although Siskiyou checkbloom is a not State- or federal-listed species, this plant species has a California Native Plant Society (CNPS) listing of 1B.2, meaning the plant species is rare, threatened, or endangered in California and elsewhere, moderately threatened in California.

As further described in Appendix 2, it is the professional opinion of LACO's biologist that the identified checkerbloom population would be adequately protected if located within the designated open space area. As shown on Figure 4, the identified checkerbloom population would be located within the proposed open space area of Lot 3, and would therefore be adequately preserved under the proposed project.

2.0 ADDITIONAL JUSTIFICATION IN SUPPORT OF THE PROPOSED OPEN SPACE MODIFICATION

As previously described, the Applicants are requesting modifications to the currently approved open space configuration, which is located within the northern 280 feet of the subject Site, as required under the September 1989 Development Plan (PMS-57-88). For the reasons provided below, the proposed modifications would be functionally equivalent to the current configuration and, in some cases, would result in net improvements for the Site, including but not limited to the following: 1) no net change in the total amount of open space on the subject property; 2) no net change in the total number of trees that may be removed from the Site; 3) greater number of shore pines to be retained on-site than the currently approved



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configuration; 4) adequate setback distances from the drainage identified within the southern portion of the Site (within proposed Lot 2); and 5) increased wildlife corridors and connectivity.

2.1 No Net Change in Total Amount of Open Space

Although the proposed open space modification would adjust the location of the open space on the subject Site, the overall amount of open space proposed under the proposed configuration as compared to the amount required under the previously approved Development Plan (PMS-57-88) would be the same (4.09 acres, or approximately 50 percent of the total parcel area). As shown on the Proposed Open Space Allocation exhibit (Figure 2), the proposed configuration includes the same portions of the 50-foot right-ofway (1098 OR 70) located along the western and northernmost portions of the Site and 25-foot easement (25 PM 17) along the eastern portion of the property.

Additionally, as proposed, approximately 63% of the current designated open space area (as approved under PMS-57-88) is included as open space in the proposed modified configuration.

2.2 No Net Change in Number of Trees That May be Removed

The subject Site contains numerous trees throughout the subject property. There would be no net change in the number of trees to be retained on-site under the proposed open space configuration when compared to the currently approved configuration.

With the current configuration (approved under PMS-57-88), which requires the open space be located along the northerly 280 feet of the subject property, 17 trees are located within the dedicated open space area, with 15 trees located outside of the required open space area. Of these 15 trees located outside of the required open space area, 6 trees appear to be located within required setback areas, and would therefore be retained. As such, 9 trees appear within the developable area of the current configuration and may therefore be removed (see Figure 4).

However, under the configuration proposed by the Applicants, the developable area would shift more towards the center of each respective parcel, allowing for open space along both the northern and southern sides of each proposed lot. In addition, open space is also proposed between the respective lots, within the required 30-foot setback areas. As proposed, 23 trees are located within the proposed open space areas, with 9 trees located outside of the proposed open space areas (which includes the proposed developable area and the existing easement area along the western side of the Site), and may therefore be removed subject to permit requirements. The Applicants are agreeable to retaining the identified trees within the proposed open space areas.

Under both the existing and proposed open space configurations, it is anticipated that approximately 23 trees would be retained on-site, while 9 trees may be removed from the property. This would ensure habitat and roosting sites for species are maintained, which may include bird species protected under the Migratory Bird Treaty Act (MBTA).

Please note that under the proposed open space configuration, the current or future property owners would not be precluded from removing dead, diseased, or hazardous trees from within their respective property boundaries or established right-of-ways.



2.3 Greater Number of Shore Pines to be Retained On-Site

Based on written comments received from the California Department of Fish and Wildlife (CDFW) in February 2022, it was requested that the project "retain shore pine trees" on the subject Site. When comparing the current and open space configurations, a greater number of shore pines would be retained on-site under the proposed open space configuration than under the currently-approved open space configuration.

Review of Figure 4 indicates that under the existing configuration, a total of 10 shore pines would be retained on-site. However, under the proposed open space configuration, which allows for open space areas within the northern and southern portions of the Site, in addition to between the individual proposed lots, a total of 13 shore pines would be retained on-site.

As such, the proposed open space configuration would result in a net increase of 3 additional shore pines to be retained on the subject property, as compared to the current configuration. Therefore, LACO believes the proposed configuration better addresses and satisfies the CDFW request than the current open space configuration.

2.4 Adequate Setback Distances from the Identified On-Site Drainage (Southern Portion of Proposed Lot 2)

As depicted on the enclosed figures, a natural drainage has been identified within the southern portion of proposed Lot 2. As described in the enclosed Waters of the United States/State Delineation, prepared by LACO in March 2021 (see Appendix 3), the drainage comes to a culvert flowing under Ollivier Road, where it drains to the south. As sample point (SP-1) was taken at the inlet of the culvert. While this area was noted to be the area on the Site with the largest volume of potential water, no indicators of wetland hydrology were observed. As a result, this area is considered uplands.

By shifting the developable area further to the north, this will ensure this identified area is outside of the developable area and adequate setback distances from the identified area are provided.

2.5 Increased Wildlife Corridors and Connectivity

Prior comments received from the County during a meeting in January 2022 requested larger, more cohesive sections of open space to allow for greater connectivity. The currently proposed open space configuration includes established open space along both the northern and southern portions of the proposed lots, as well as between the proposed lots. The proposed open space configuration has been designed as such in order to allow for greater connectivity between existing open space areas located to the north, south, and east of the Site.

3.0 CONCLUSION

Based on the information provided above, and further illustrated in the enclosed figures, the evidence and findings clearly demonstrate that the proposed open space configuration will result in an overall benefit to biological resources and on- and off-site habitat areas. This is due to the fact that the proposed project would result in:

- No net change in the total amount of open space on the subject property;
- No net change in the total number of trees that may be removed from the Site;

- A greater number of shore pines to be retained on-site than under the currently approved configuration;
- Adequate setback distances from the drainage identified within the southern portion of the Site (within proposed Lot 2); and
- Increased wildlife corridors through the subject Site and connectivity with existing open space areas located to the north, south, and east of the Site.

Additionally, as previously discussed, a modification to the established open space location on the adjacent property owned by the Applicants (APN: 511-141-18), immediately east of the Site, was previously approved by the County in April 201 under PMS-00-02, and sets a precedent for modifying open space locations. This proposal is similar to the prior project's request, and would be consistent with what was previously approved on the adjacent parcel.



FIGURES

Figure 1	Existing Open Space Allocation	
Figure 2	Proposed Open Space Allocation	
Figure 3a	Identified Tree Map	
Figure 3b	Identified Tree Table	
Figure 4	Existing & Proposed Open Space Comparison	





without LACO Associates express written authorization.



Ine information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

0 50 100 200 Feet

	PROJECT MITCHELL MINOR SUBDIVISION MCH	FIGURE
LAUU	CLIENT MICHAEL MITCHELL CHECK MMM/MKR	2
EUREKA 🔹 UKIAH 🔹 SANTA ROSA	LOCATION 1975 OLLIVIER ROAD, MCKINLEYVILLE, CA DATE 4/17/2023	JOB NO.
1-800-515-5054 www.lacoassociates.com	PROPOSED OPEN SPACE ALLOCATION	6849.09

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0 50 100 200 Feet Hoover Road

Lot 2

Lot 3

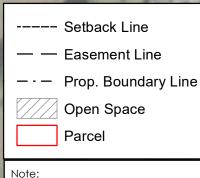
Lot 1

Ollivier Road

Lot Number	Lot Size (acres)	Open Space (acres)	% Open Space
	E	xisting	
1	8.12	4.03	50%
	Pi	roposed	
1	3.12	1.37	44%
2	2.5	1.36	54%
3	2.5	1.36	54%
Total	8.12	4.09	50%

Note: The open space modification would still meet the minimum 40% open space required on each individual lot under Policy 2514.d of the 1985 McKinlyville Community Plan and would be consistent with the amount of open space on the subject property (4.09 acres).

Note: Illustrated driveway locations are conceptual and final locations are subject to change: however, their size (including minimum driveway width of 16 feet in accordance with Humboldt County Code Section 411-51) will remain the same.



The information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

	PROJECT MITCHELL MINOR SUBDIVISION	BY MCH	
LALU	CLIENT MICHAEL MITCHELL	CHECK MMM/MKR	3a
EUREKA 🔹 UKIAH 🔹 SANTA ROSA	LOCATION 1975 OLLIVIER ROAD, MCKINLEYVILLE, CA	DATE 4/19/2023	JOB NO.
1-800-515-5054 www.lacoassociates.com	IDENTIFIED TREE MAP		6849.09

subsequent table (see Figure 3b).



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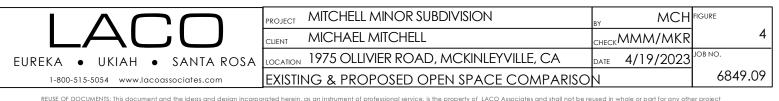
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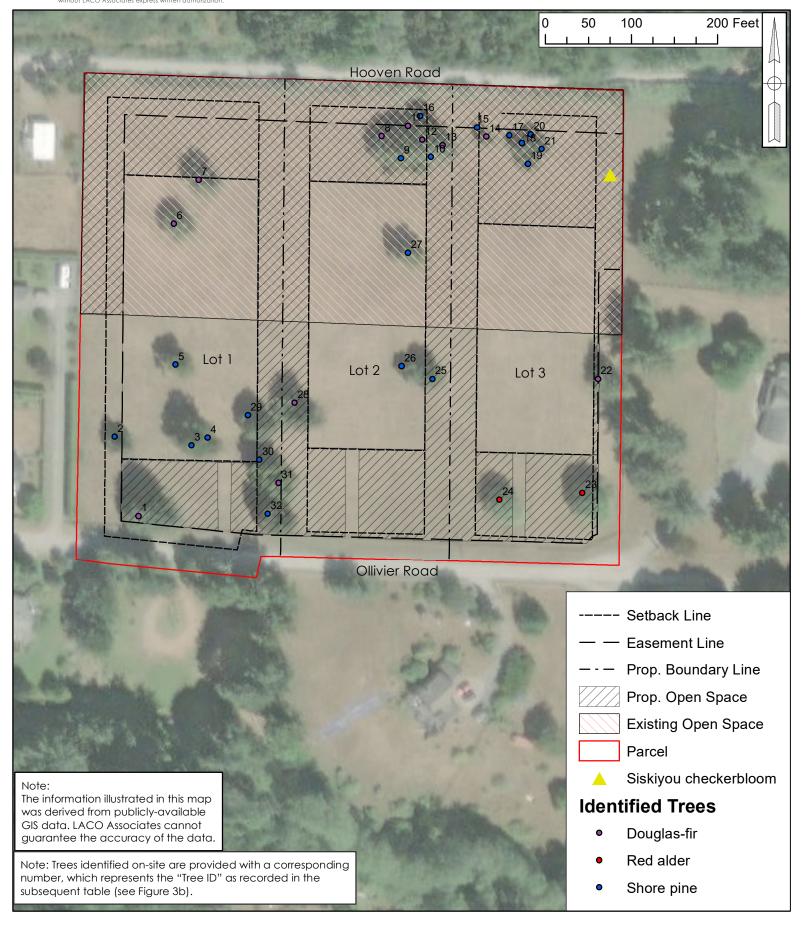
	PROJECT MITCHELL MINOR SUBDIVISION	BY MCH	
LALU	CLIENT MICHAEL MITCHELL	CHECK MMM/MKR	
EUREKA 🔹 UKIAH 🔹 SANTA ROSA	LOCATION 1975 OLLIVIER ROAD, MCKINLEYVILLE, CA	DATE 4/24/2023	JOB NO.
1-800-515-5054 www.lacoassociates.com	REFERENCE TABLE FOR IDENTIFIED TREES		6849.09

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Tree ID	Tree Cresies	Multiple Stores	Stem 1 dbh	Stem 2 dbh	Stem 3 dbh
Tree ID	Tree Species	Multiple Stems	(inches)	(inches)	(inches)
1	Douglas-fir	Y	30	30	
2	Shore pine	Ν	18		
3	Shore pine	Y	20	20	
4	Shore pine	Y	16	14	
5	Shore pine	Ν	24		
6	Douglas-fir	Ν	23		
7	Douglas-fir	Ν	25		
8	Douglas-fir	Ν	26		
9	Shore pine	Y	10	8	8
10	Shore pine	Y	14	11	
11	Douglas-fir	Ν	20		
12	Douglas-fir	Ν	16		
13	Douglas-fir	Ν	20		
14	Douglas-fir	Ν	18		
15	Shore pine	Ν	10		
16	Shore pine	Ν	12		
17	Shore pine	Y	8	7	
18	Shore pine	Ν	11		
19	Shore pine	Ν	12		
20	Shore pine	Ν	13		
21	Shore pine	Ν	12		
22	Douglas-fir	Y	20	15	
23	Red alder	Ν	19		
24	Red alder	Y	15	13	
25	Shore pine	Y	17	17	14
26	Shore pine	Ν	14		
27	Shore pine	Y	16	14	
28	Douglas-fir	Ν	34		
29	Shore pine	Y	20	18	
30	Shore pine	Ν	33		
31	Douglas-fir	Ν	19		
32	Shore pine	Ν	33		



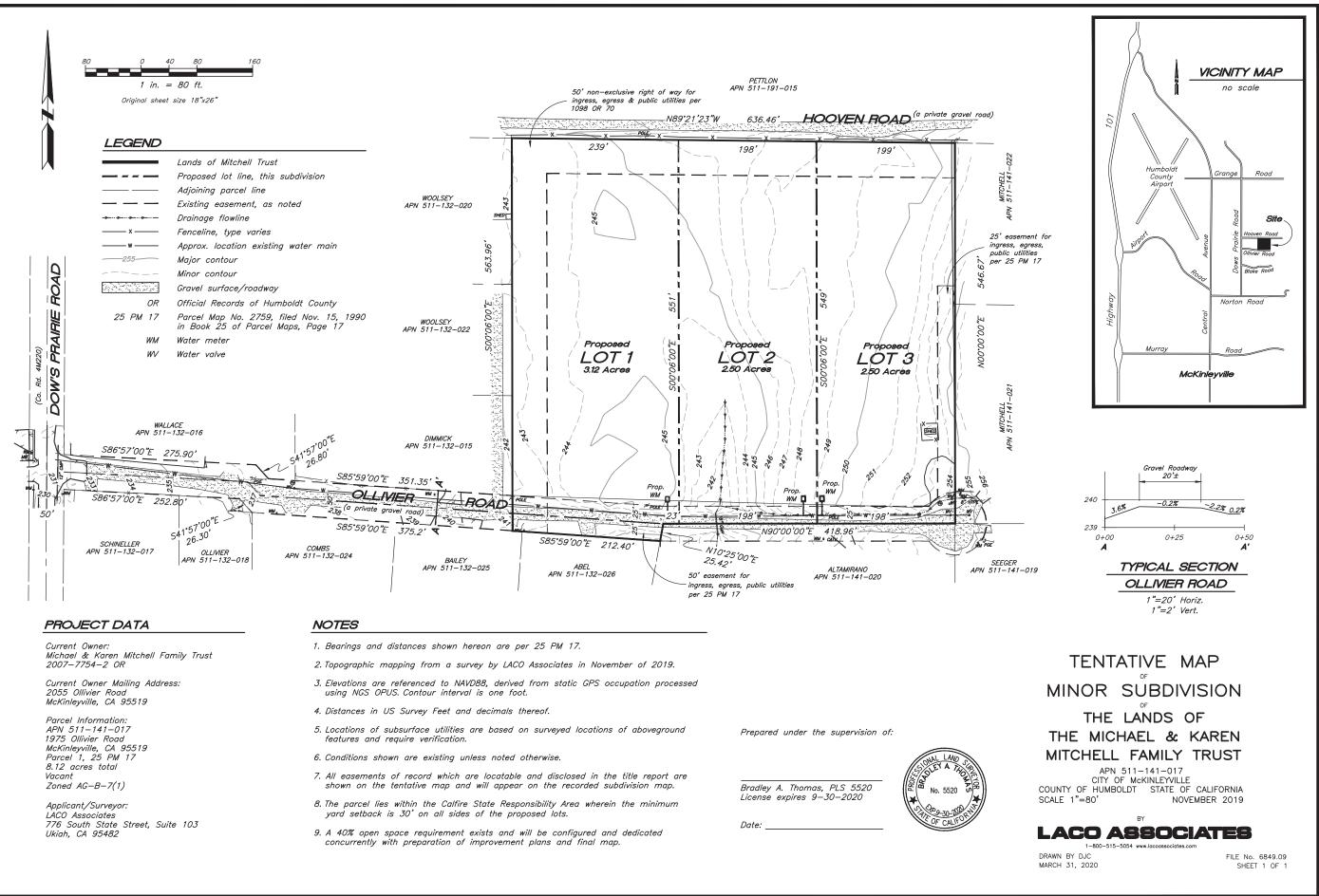
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APPENDIX 1

Tentative Map





APPENDIX 2

Tree Identification Letter





April 25, 2023

Mike and Karen Mitchell 2210 Peninsula Drive Arcata, California 95521

Subject: Tree Identification Site Visit Results Ollivier Minor Subdivision 1975 Ollivier Road, McKinleyville, Humboldt County, California Assessor's Parcel Number (APN): 511-141-017

Dear Mike and Karen Mitchell:

The purpose of this letter is to present the results of my site visit, conducted on April 10, 2023, at your property identified as Assessor's Parcel Number (APN): 511-141-017 and located at 1975 Ollivier Road in the unincorporated community of McKinleyville in Humboldt County, California (Site). The parcel is approximately 8.12 acres in size. The purpose of the site visit was to identify tree species on-site and measure their circumference utilizing diameter at breast height (dbh) measurements, in response to County comments. During the site visit, I identified a total of 32 individual trees, including 2 red alder (*Alnus rubra*), 11 Douglas-fir (*Pseudotsuga menzeisii*), and 19 shore pine (*Pinus contorta*). The locations of the identified trees are presented on the enclosed figure. Additionally, the dbh measurements of each of the trees are also enclosed. Although the identified tree species are not considered sensitive species, the noted observed trees may provide habitat for numerous bird species, which may include birds protected under the Migratory Bird Treaty Act (MBTA).

In addition to the 32 trees, I identified a small population (approximately 4 square feet) of Siskiyou checkerbloom (*Sidaclea malviflora* ssp. *patula*) observed within the northeastern portion of the Site (see enclosed map and photo). Although not a State- or federal-listed species, Siskiyou checkerbloom has a California Native Plant Society (CNPS) listing of 1B.2, meaning the plant species is rare, threatened, or endangered in California and elsewhere, moderately threatened in California. Siskiyou checkerbloom is known from several coastal prairie locations in northern California, especially near the California Redwood Coast-Humboldt County Airport, located approximately 0.39 miles east of the Site; however, much of the coastal terrace habitats have been converted to residences, roadways, businesses, and the airport in McKinleyville. Based on mapping associated with the proposed project, it appears the observed checkerbloom population is located within the existing open space area and would be located within the northern segment of open space proposed on Lot 3.

To ensure the adequate protection of birds and the identified Siskiyou checkerbloom population, the following measures are recommended to mitigate any potential impacts:

 To the extent feasible, tree removal activities shall be scheduled to avoid the nesting season (February 1 through August 31). If tree removal cannot be conducted outside the nesting season, a qualified biologist shall conduct a pre-construction survey no more than 14 days prior to vegetation removal to determine the presence of vulnerable nests (within 100 feet for passerines and 300 feet for raptors). Any active nests within the above-mentioned distances

21 W Fourth Street Eureka, CA 95501 707 443-5054 1209 Esplanade Suite 4 Chico, CA 95926 530 801-6170 Tree Identification Site Visit Results 1975 Ollivier Road, McKinleyville, California Mike and Karen Mitchell; LACO Project No. 6849.09 April 25, 2023 Page 2

shall be allowed to complete their nesting or until the biologist determines they are no longer active before removal.

2) The Siskiyou checkerbloom shall be left undisturbed in a designated open space area. If determined to not be within the boundaries of the open space area, the checkerbloom population can be moved to a designated open space, as required.

Please do not hesitate to contact me, should you have any questions.

Sincerely, LACO Associates

Gan, S. Jest

Gary Lester Senior Biologist/Botanist

MCH:mmm

Enclosures:

- 1) Field list of identified trees (Note: Tree ID #3 is listed as "double-tree x2, 20"/20"/16"/14" " this refers to two separate trees, each with two trunks/stems).
- 2) Map of Identified Trees
- 3) Photo of observed Siskiyou checkerbloom population

List of Identified Tree Species

1975 Ollivier Road, McKinleyville, California April 10, 2023

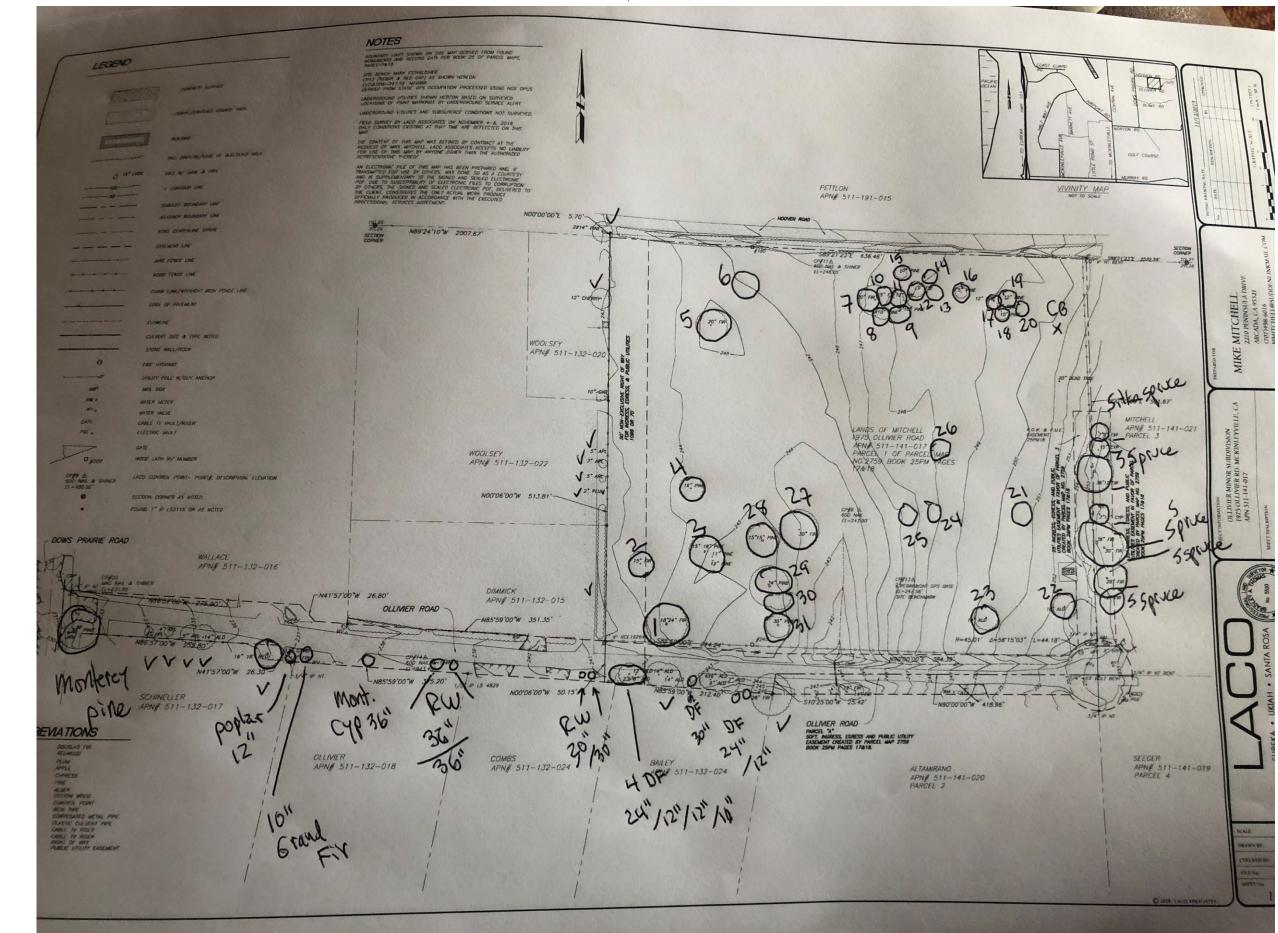
Map ID	Species	Diameter at Breast Height (dbh)
1	Douglas-fir (Pseudotsuga menzeisii)	Double-tree, 30"/30"
2	Shore pine (Pinus contorta)	18"
3	Shore pine	Double-tree (x2), 20"/20" and 16"/14"
4	Shore pine	24"
5	Douglas-fir	23"
6	Douglas-fir	25"
7	Douglas-fir	26"
8	Shore pine	Triple-tree, 10"/8"/8"
9	Shore pine	Double-tree, 10"/11"
10	Douglas-fir	20"
11	Douglas-fir	16"
12	Douglas-fir	20"
13	Douglas-fir	18"
14	Shore pine	10"
15	Shore pine	12"
16	Shore pine	Double-tree, 8"/7"
17	Shore pine	11"
18	Shore pine	12"
19	Shore pine	13"
	Shore pine	
20	(Siskiyou checkerbloom population	12"
	observed adjacent to tree)	
21	Douglas-fir	Double-tree, 20"/15"
22	Red alder (Alnus rubra)	19"
23	Red alder	Double-tree, 15"/13"
24	Shore pine	Triple-tree, 17"/17"/14"
25	Shore pine	14"
26	Shore pine	Double-tree, 16"/14"
27	Douglas-fir	34"
28	Shore pine	Double-tree, 20"/18"
29	Shore pine 33"	
30	Douglas-fir	19"
31	Shore pine	33"



Map of Identified Tree Species

1975 Ollivier Road, McKinleyville, California

April 10, 2023





Photograph of Observed Siskiyou Checkerbloom Population

Photo 1: Observed Siskiyou checkerbloom population (observed within the northeastern portion of the Site).



APPENDIX 3

Waters of the United States/State Delineation





TECHNICAL MEMORANDUM

Waters of the United States/State Delineation Mitchell Minor Subdivision 1975 Ollivier Road, McKinleyville, Humboldt County, California Assessor's Parcel Number 511-141-017

Date: Project No.:	March 31, 2021 6849.09	
Prepared For:	Mr. Mike Mitchell	
Prepared By:	Cameron Purchio Associate Planner	
Reviewed By:	Mike Nelson, AICP Planning Principal	Moder and Chen
Attachments:	Figures:	Figure 1: Wetland Delineation Map

1.0 INTRODUCTION

On February 25, 2021, a wetland and waters delineation was conducted by Ms. Cameron Purchio (Associate Planner) of LACO Associates (LACO) on Assessor's Parcel Number (APN) 511-141-017, owned by Mr. Mike Mitchell, located at 1975 Ollivier Road in the unincorporated community of McKinleyville, in Humboldt County, California (see Figure 1; hereinafter "Subject Property"). LACO's exploration assessed the Subject Property for the presence of jurisdictional waters and wetlands pursuant to the U.S. Army Corps of Engineers (ACOE, 2010) and ACOE (1987) wetland standards. This methodology is used to determine both Federal and State jurisdictional waters. The purpose of this delineation was to provide information regarding the feasibility of future development on site.

The Subject Property is located in the Arcata North 7.5-minute USGS quadrangle on a portion of Section 29, Township 7 North, Range 1 East, California. The Subject Property is located in an unincorporated portion Humboldt County, approximately 1.0 mile north of McKinleyville, California.

LACO's investigation included the entirety of the approximately 8.1-acre Subject Property, with areas containing minimal topography and consisting of fenced pasture which is maintained by mowing. The

21 W. Fourth Street Eureka, CA 95501 707 443-5054 776 S. State Street, Suite 103 Ukiah, CA 95482 707 462-0222 3490 Regional Parkway, Suite A Santa Rosa, CA 95403 707 525-1222 932 B W. Eighth Avenue Chico, CA 95926 530 801-6170 primary features of the Subject Property are the flat pasture, several scattered mature trees, and a single drainage which comes to a culvert flowing under Ollivier Road, where it drains to the south.

2.0 WATERS DELINEATION

LACO examined the Subject Property in accordance with the United States Army Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, version 2.0 (ACOE, 2010) and ACOE (1987). ACOE uses a three-parameter approach for making wetland determinations. It is based on the presence of indicators for: a predominance of hydrophytic vegetation (plants adapted to anaerobic conditions resulting from a prolonged inundation with water); hydric soils (soils formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1986)); and, wetland hydrology (permanent or periodic inundation or saturation of the soil to the surface at some time during the growing season of the prevalent vegetation). The ACOE (1987, 2010) identifies an area as wetland when all three parameters are present.

LACO also examined the Subject Property in accordance with the Humboldt County General Plan Community Plan Areas – McKinleyville Community Plan (Humboldt County, 2017). The McKinleyville Community Plan defines wetland areas according to the criteria utilized by the California Department of Fish and Wildlife (CDFW), which defines a wetland as any area which satisfies at least one of the following three criteria: the presence of at least periodic predominance of hydrophytic vegetation; predominantly hydric soils; or periodic inundation for seven (7) consecutive days.

2.1 Data Collection

Soils

Soil colors were described using *Munsell Soil Color Charts* (2000). Hydric soil determinations are based upon hydric soil indicators that include either a chroma color of one or a chroma color of two with oxidation-reduction (redox) features present. Redox features in the soil usually result from the presence of periodic reducing soil conditions. Soils with bright redox features and/or low matrix chroma are indicative of a fluctuating water regime. Additionally, the presence of low soil chroma (dark colors) in upper horizons is indicative of waterlogged conditions during at least a major part of the growing season and is used to determine wetlands. Low soil chroma can be developed when the soil is under prolonged anaerobic conditions and iron is chemically reduced to compounds that have low-chroma (gray, bluish, black, or gray-green) colors.

Soils with low chromas were verified as being hydric or upland utilizing the indicators outlined in the document *Field Indicators of Hydric Soils in the United States, Version 7.0, 2010, Natural Resources Conservation Service, 2010.* On the Subject Property, hydric soil definition can be defined as "soils that are frequently ponded for a long duration" (NRCS, 1995).

Hydrology

Wetland hydrology determinations were based upon the presence of at least one primary indicator (such as inundation or saturation in the upper 16 inches of soil) or at least two secondary indicators, in accordance with U.S. Army Corps of Engineers (COE, 1987) and COE (2010) methodologies. The presence of oxidized root



channels (called rhizospheres) in the upper 14 inches is considered a secondary wetland hydrology indicator and suggests that soils likely fluctuate between wet and dry for significant periods of time. At least two secondary indicators are required for a wetland hydrology determination when a primary hydrology indicator is lacking. Another common secondary indicator is the use of the Facultative Neutral (FAC-neutral) test, wherein plant species with a facultative designation are disregarded (due to their versatility in upland and wetland environments) and the remaining dominants are considered.

Vegetation

Herbaceous vegetation and saplings/shrubs were identified within 1 square meter of each soil pit, as per COE (2010) and COE (1987) methodologies. Determinations for dominant vegetation were made using visual estimations of percent cover for the herb stratum (some layering was present in the wetland monitored).

Plants reviewed during the wetland delineation were identified by their assigned wetland status indicator, taken from The National Plant List, State of California Wetland Plant List: 2016 (Phytoneuron 2016-30:1-17), as defined below. Taxonomy for all species listed in this report follows The Jepson Manual: Higher Plants of California, 2nd Edition (Baldwin, et. al. 2012).

- Obligate Wetland (OBL): Occurs in wetlands under natural conditions at an estimated probability > 99 percent
- **Facultative Wetland (FACW)**: Usually occurs in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands
- **Facultative (FAC):** Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%)
- **Facultative Upland (FACU)**: Usually occurs in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%)
- **Obligate Upland (UPL)**: Occur in wetlands in another region, but occur almost always (estimated probability > 99%) under natural conditions in non-wetlands in the region specified
- Not Indicated (NI): Recorded for those species for which insufficient information was available to determine an indicator status
- Not Listed (NL): Generally considered upland
- **Tentative Assignment (*)**: Due to limited information

2.2 Site Analysis

The Subject Property was examined to determine the presence of jurisdictional wetlands and other wet areas. Natural topography on the Subject Property is relatively flat, with slight depressional areas typical of pastureland and a drainage that runs north to south near the center. The Subject Property is grazed/mowed regularly, limiting the ability to identify pasture grasses; however, most of the common California pasture grasses are not considered hydrophytic vegetation. This is reasonably likely given all other observed and identified vegetation has upland indicator status. Wetland Indicator Status of plants observed on the Subject Property is summarized in Table 1.



Table 1. Wetland Indicator Status of Observed Plants

Species	Wetlands Indicator Status
Cirsium vulgare (bull thistle)	Facultative Upland (FACU)
Fragaria vesca (woodland strawberry)	FACU
Plantago lanceolata (buckhorn plantain)	FACU
Rubus ursinus (California blackberry)	FACU

Sample points were taken at the drainage and several of the depressional areas that showed the highest likelihood of wetland potential and are shown in the enclosed Wetland Delineation Map (Figure 1).

Sample Point 1 (SP-1)

Sample Point 1 (SP-1) was taken at the inlet to the culvert and represents the area on the Subject Property with the largest volume of potential water. No indicators of wetland hydrology were observed. Vegetation consisted of various pasture grasses (80%), California blackberry (*Rubus ursinus*; 4%)), woodland strawberry (*Fragaria vesca*; 3%), and buckhorn plantain (*Plantago lanceolata*; 2%). Vegetation was determined to be consistent with upland vegetation. Soil was determined to be non-hydric and was uniform throughout the Subject Property (Table 2). SP-1 did not meet any of the criteria to be a state or federal wetland and is considered uplands.

Table 2. SP-1 through SP-4 Soil Profile

Depth	Matrix	Percent	Redox Features	Notes
0-16"	7.5 YR 3/2	>95%	7.5 YR 4/3 <5%	Uniform texture with very few rocks.

Sample Point 2 (SP-2)

Sample Point 2 (SP-2) was taken at a sight depressional feature located in the southwest portion of the Subject Property. No indicators of wetland hydrology were observed. Vegetation consisted of various pasture grasses (75%), California blackberry (*Rubus ursinus*; 5%), woodland strawberry (*Fragaria vesca*; 2%), and bull thistle (*Cirsium vulgare*; 2%). Vegetation was determined to be consistent with upland vegetation. Soil was determined to be non-hydric and was uniform throughout the Subject Property (Table 2). SP-2 did not meet any of the criteria to be a state or federal wetland and is considered uplands.

Sample Point 3 (SP-3)

Sample Point 3 (SP-3) was taken at a sight depressional feature located among several mature trees in the northern portion of the Subject Property. No indicators of wetland hydrology were observed. Vegetation consisted of various pasture grasses (75%), California blackberry (*Rubus ursinus*; 5%), buckhorn plantain (*Plantago lanceolata*; 5%), and bull thistle (*Cirsium vulgare*; 2%). Vegetation was determined to be consistent with upland vegetation. Soil was determined to be non-hydric and was uniform throughout the Subject Property (Table 2). SP-3 did not meet any of the criteria to be a state or federal wetland and is considered uplands.

Sample Point 4 (SP-4)

Sample Point 4 (SP-4) was taken at a sight depressional feature located on the eastern side of the Subject Property, near the base of a slope located on the adjacent parcel. No indicators of wetland hydrology were observed. Vegetation consisted of various pasture grasses (80%), California blackberry (*Rubus ursinus*; 5%)



TECHNICAL MEMORANDUM Waters of the United States/State Delineation Mitchell Minor Subdivision 1975 Ollivier Road, McKinleyville, California Assessor's Parcel Number 511-101-017

5%, buckhorn plantain (*Plantago lanceolata*; 5%), and woodland strawberry (*Fragaria vesca*; 2%). Vegetation was determined to be consistent with upland vegetation. Soil was determined to be non-hydric and was uniform throughout the Subject Property (Table 2). SP-4 did not meet any of the criteria to be a state or federal wetland and is considered uplands.

3.0 CONCLUSION

The 8.1-acre Subject Property contains no features which can be classified as waters of the United States or State (see Figure 1) and can be described as uplands.



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FIGURES

Figure 1

Wetland Delineation Map



