



Mitigated Negative Declaration

Pursuant to Title 14, Division 6, Chapter 3, Article 6, Sections 15070 and 15071 of the California Code of Regulations and pursuant to the Procedures for Preparation and Processing of Environmental Documents adopted by the County of Sacramento pursuant to Sacramento County Ordinance No. SCC-116, the Environmental Coordinator of Sacramento County, State of California, does prepare, make, declare, publish, and cause to be filed with the County Clerk of Sacramento County, State of California, this Negative Declaration re: The Project described as follows:

1. Control Number: PLNP2020-00133

2. Title and Short Description of Project: Badger Valley ADU

The proposed project includes the construction of an accessory dwelling unit, associated utilities and driveway. The proposed project requires the following land use entitlement:

A **Special Development Permit** to allow for a 1,159 square foot Accessory Dwelling Unit (ADU), in the rear yard of a 4.79 acre rural parcel in the A-5 and A-5 (F) (Flood Combining) zone. The proposed ADU deviates from the maximum square footage allowed outright on a lot greater than 5,200 square feet pursuant to Section 5.4.5.F.3 of the Zoning Code.

A 16-foot wide, 4-inch compacted gravel road will be constructed on the west side of the subject parcel to provide access to the proposed ADU from Badger Valley Road. Minor finish grading is planned to pitch the driveway for drainage. The proposed ADU will be a modular home with a separate parking area. The ADU foundation will be I-beams installed on 6-inches of ¾-inch aggregate base rock tie down foundation. No slab or excavation related to the foundation is proposed. Minor finish grading is planned for the foundation work and remaining improvements associated with the project.

3. Assessor's Parcel Number: 136-0130-048-0000

4. Location of Project: The project site is located at 11517 Badger Valley Road, in the Cosumnes community.

5. Project Applicant: William Huss

6. Said project will not have a significant effect on the environment for the following reasons:

- It will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
- It will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
- It will not have impacts, which are individually limited, but cumulatively considerable.
- It will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

7. As a result thereof, the preparation of an environmental impact report pursuant to the Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.

8. The attached Initial Study has been prepared by the Sacramento County Office of Planning and Environmental Review in support of this Negative Declaration. Further information may be obtained by contacting the Office of Planning and Environmental Review at 827 Seventh Street, Room 225, Sacramento, California, 95814, or phone (916) 874-6141.

Joelle Inman
[Original Signature on File]
Environmental Coordinator
County of Sacramento, State of California

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW
INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: PLNP2020-00133

NAME: Badger Valley ADU

LOCATION: The project site is located at 11517 Badger Valley Road, in the Cosumnes community.

ASSESSOR'S PARCEL NUMBER: 136-0130-048-0000

OWNER: Kerry & Cheri Bowen
11517 Badger Valley Road
Wilton, CA 95693

APPLICANT: William Huss
11517 Badger Valley Road
Wilton, CA 95693

PROJECT DESCRIPTION

The proposed project includes the construction of an accessory dwelling unit, associated utilities and driveway. The proposed project requires the following land use entitlement:

1. A **Special Development Permit** to allow for a 1,159 square foot Accessory Dwelling Unit (ADU), in the rear yard of a 4.79 acre rural parcel in the A-5 and A-5 (F) (Flood Combining) zone. The proposed ADU deviates from the maximum square footage allowed outright on a lot greater than 5,200 square feet pursuant to Section 5.4.5.F.3 of the Zoning Code.

A 16-foot wide, 4-inch compacted gravel road will be constructed on the west side of the subject parcel to provide access to the proposed ADU from Badger Valley Road. Minor finish grading is planned to pitch the driveway for drainage. The proposed ADU will be a modular home with a separate parking area. The ADU foundation will be I-beams installed on 6-inches of ¾-inch aggregate base rock tie down foundation. No slab or excavation related to the foundation is proposed. Minor finish grading is planned for the foundation work and remaining improvements associated with the project.

ENVIRONMENTAL SETTING

The proposed project site is located within a rural agricultural-residential area in the southeast portion of unincorporated Sacramento County (Plate IS-1). The proposed project site is located on the north side of Badger Valley Road, approximately 0.9 miles from Walmort Road in the community of Wilton. An existing single-family home of approximately 1,820 square feet with a 1,750 square foot barn, a pool, and small shed structures are located on the parcel. Access to the project site is provided from an existing gravel road/driveway off of Badger Valley Road next to the single-family house and barn. The majority of the parcel is undeveloped but disturbed in nature; historically, the site had various water features but prior grading activities has generally destroyed most of the natural grade and features on-site. The site is landscaped with lawn and trees at the front and sides of the existing single-family home. Trees are also sporadically located along the eastern edge and middle portions of the property.

The property is zoned A-5 (General Agricultural – Interim) with the northern portion of the parcel located in the Flood Combining Zone (F). Surrounding land uses consist of agricultural-residential and agricultural uses. Zoning of parcels to the north are A-5, A-10 (Agricultural Holding – Interim), and AG-80 (Agricultural 80 acres). Parcels to the south and west are zoned A-5 and A-2 (General Agricultural – Interim), A-10, and AR-2 (Agricultural-Residential 2 acres). Parcels to the east are zoned A-5, A-10, and AR-5 (Agricultural-Residential 5 acres). The interim zones stated above are designated as Agricultural holding zones and are regulated as agricultural-residential properties. See Plate IS-2 and Plate IS-3 to review project location and zoning maps. See Plate IS-4 for a site plan of the proposed project site.

Plate IS-1: County Vicinity Map

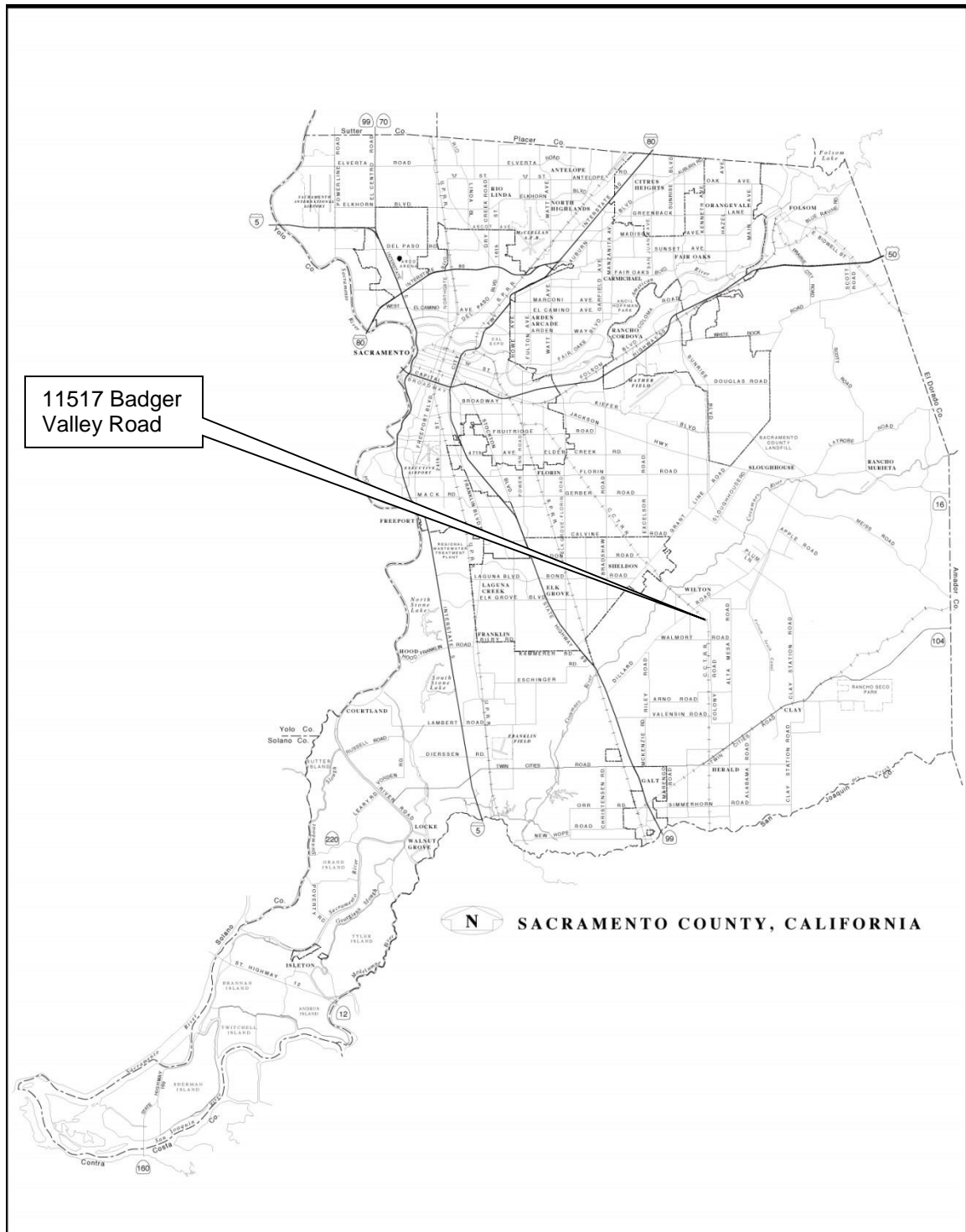


Plate IS-2: Location Map

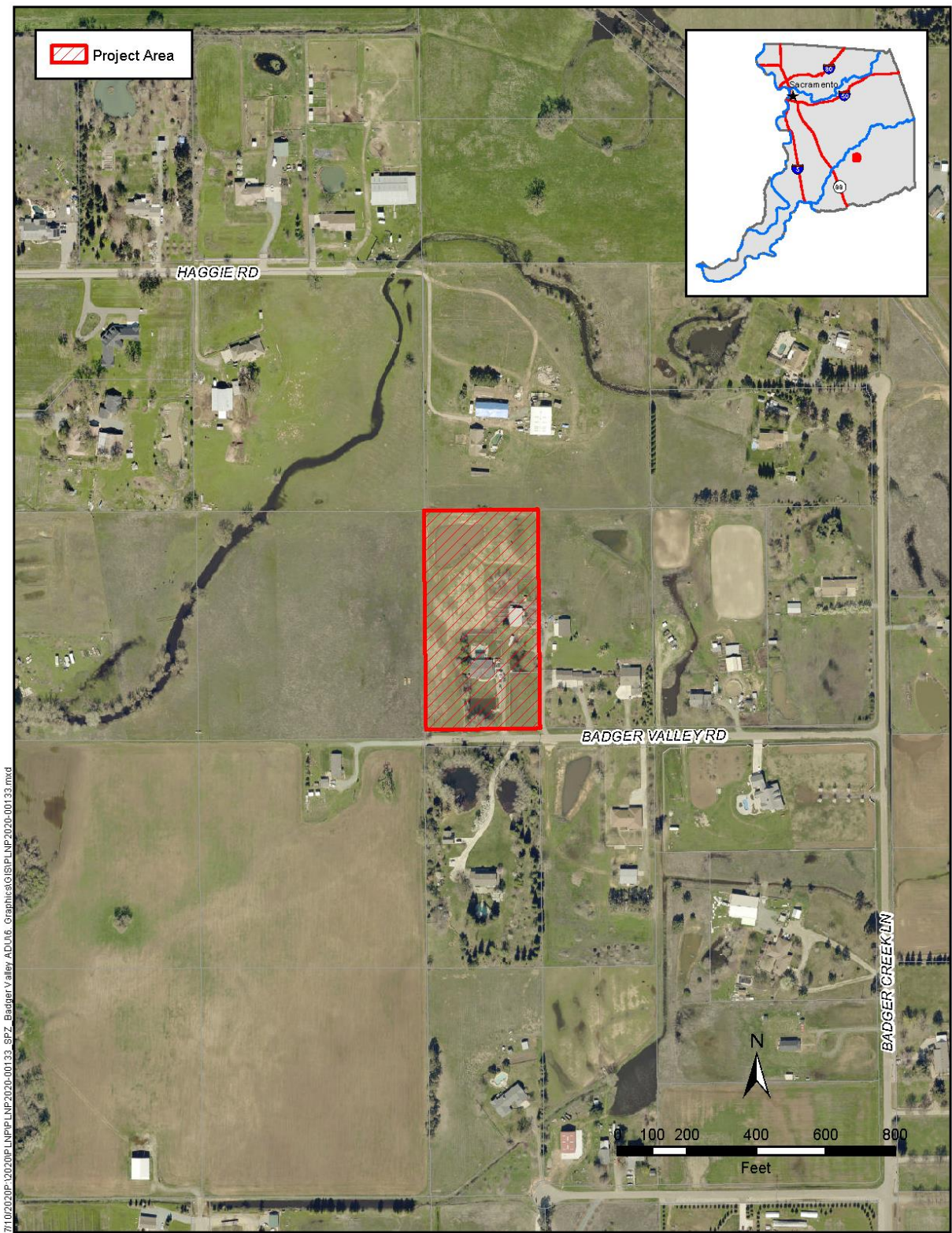
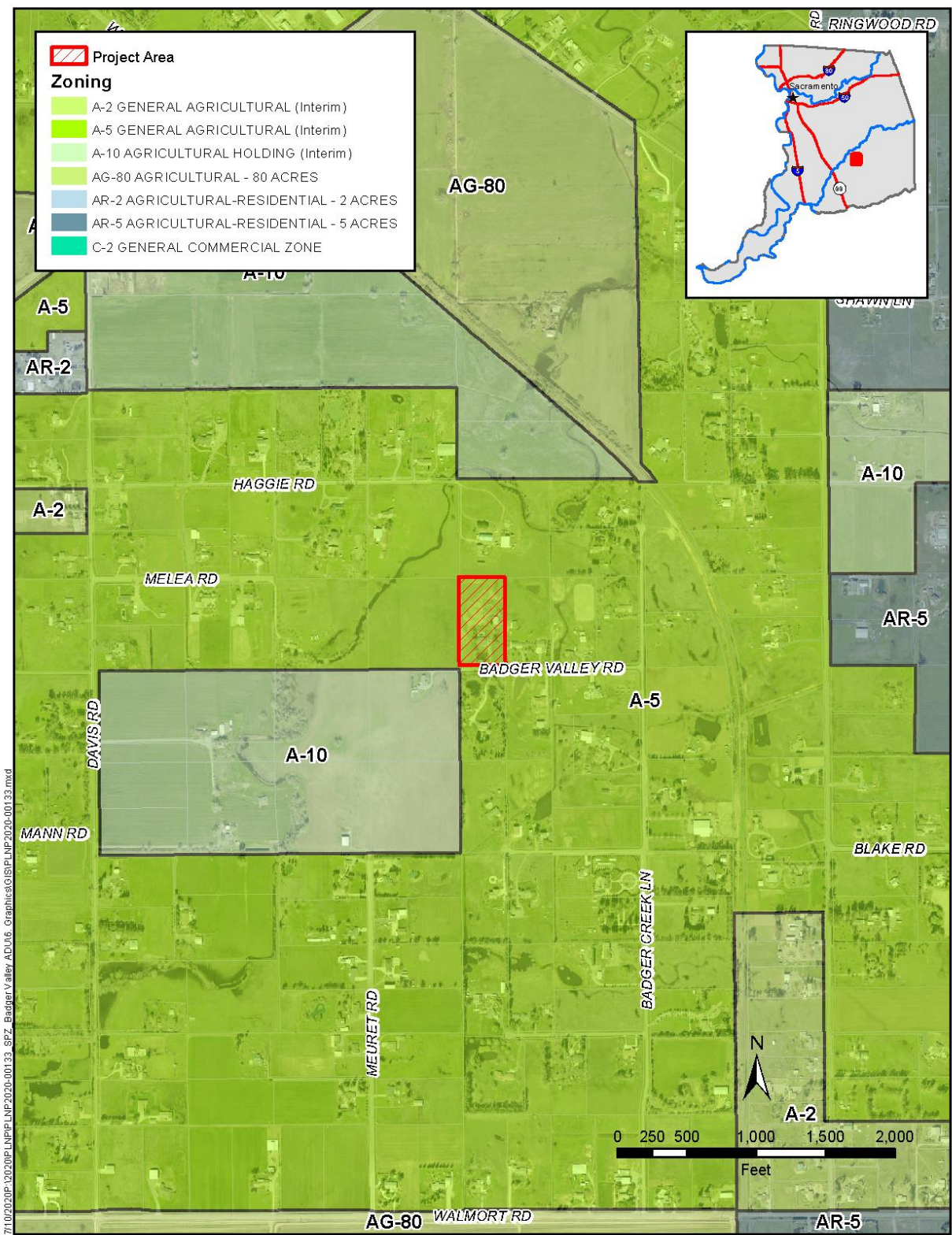
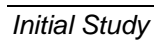


Plate IS-3: Zoning Map



IS-6



ENVIRONMENTAL EFFECTS

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed an Initial Study Checklist (located at the end of this report). The Checklist identifies a range of potential significant effects by topical area. The topical discussions that follow are provided only when additional analysis beyond the Checklist is warranted.

LAND USE

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Section 5.4.5.B. of the Sacramento County Zoning Code addresses development standards for Residential Accessory Dwelling Units. For new construction, a detached ADU with more than one bedroom has a maximum habitable square footage of 1,000 square feet. The applicant has applied for a Special Development Permit in order to propose 1,200 square feet of habitable living space.

The proposed project is not expected to significantly alter current land uses in the area or create a use that is incompatible with current designations. The project is consistent with applicable plans and regulations; specific policies are discussed in the topical analyses below. Potential land use related environmental impacts due to the project are ***less than significant***.

PUBLIC SERVICES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of services;
- If it would exceed the capacity of an existing stormwater or sewage system; or
- If there would not be sufficient water supply to serve the project.

The project site is located in the southern portion of Sacramento County outside of the County Urban Services Boundary (USB) where only some urban public facilities and services are readily available. The project site would be provided some public services for example, the provision of emergency services including fire protection and police protection, electrical services and natural gas service. The site is not currently served with a public water supply or public sanitary sewer service and none is anticipated in the

near future. Issues related to the provision of potable water through the use of private wells, and issues related to the need for individual septic systems will follow in subsections entitled “Wells” and “Septic Systems,” respectively.

No significant impacts to public services are expected as a result of project approval.

SEPTIC SYSTEMS

The project site is not currently served with municipal sewers and none are expected in the near future. Consequently any new development requiring sewerage services will require installation of septic systems.

The County Environmental Management Department (EMD), Environmental Health Division, has concluded that a minimum two acre lot size is generally adequate to accommodate a septic system and well, and allow for a 100% replacement system should the original septic system fail. The proposed project site is approximately 4.79 acres in size.

The adequacy of the proposed project site to accommodate an additional septic system will be evaluated by EMD. Any septic systems that are installed on the project site must be installed pursuant to Sacramento County Code Chapter 6.32, which is enforced by EMD. Sacramento County has established restricted areas for septic tank installation based on soil types and other factors. The project site lies within the area that requires percolation tests and/or soil boring. The design and installation of an adequate septic system on the project site is expected based on the size of the parcel.

EMD reviewed the project and submitted recommended conditions of approval for installation of a septic system in accordance with County standards. No significant sewage disposal impacts would be expected from this project. Environmental impacts associated with the installation of a septic system are ***less than significant***.

AIR QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

The proposed project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB's frequent temperature inversions result in a relatively stable atmosphere that increases the potential for pollution. Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. Project related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation (Table IS-1). Moreover, SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (Table IS-2).

Table IS-1: Air Quality Standards Attainment Status

Pollutant	Attainment with State Standards	Attainment with Federal Standards
Ozone	Non-Attainment (1 hour Standard ¹ and 8 hour standard)	Non-Attainment, Classification = Severe -15* (8 hour ³ Standards) Attainment (1 hour standard ²)
Particulate Matter 10 Micron	Non-Attainment (24 hour Standard and Annual Mean)	Attainment (24 hour standard)
Particulate Matter 2.5 Micron	Attainment (Annual Standard)	Non-Attainment (24 hour Standard) and Attainment (Annual)
Carbon Monoxide	Attainment (1 hour and 8 hour Standards)	Attainment (1 hour and 8 hour Standards)
Nitrogen Dioxide	Attainment (1 hour Standard and Annual)	Unclassified/Attainment (1 hour and Annual)
Sulfur Dioxide ⁴	Attainment (1 hour and 24 hour Standards)	Attainment/unclassifiable ⁵
Lead	Attainment (30 Day Standard)	Attainment (3-month rolling average)
Visibility Reducing Particles	Unclassified (8 hour Standard)	No Federal Standard
Sulfates	Attainment (24 hour Standard)	No Federal Standard
Hydrogen Sulfide	Unclassified (1 hour Standard)	No Federal Standard
<p>1. Per Health and Safety Code (HSC) § 40921.59(c), the classification is based on 1989-1001 data, and therefore does not change.</p> <p>2. Air Quality meets Federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. The SMAQMD attained the standard in 2009.</p> <p>3. For the 1997, 2008 and the 2015 Standard.</p> <p>4. Cannot be classified</p> <p>5. Designation was made as part of EPA's designations for the 2010 SO₂ Primary National Ambient Air Quality Standard – Round 3 Designation in December 2017</p> <p>* Designations based on information from http://www.arb.ca.gov/desig/changes.htm#reports Source: SMAQMD. "Air Quality Pollutants and Standards". Web. Accessed: December 3, 2018. http://airquality.org/air-quality-health/air-quality-pollutants-and-standards</p>		

Table IS-2: SMAQMD Significance Thresholds

	ROG ¹ (lbs/day)	NO _x (lbs/day)	CO (µg/m ³)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Construction (short-term)	None	85	CAAQS ²	80 ^{3*}	82 ^{3*}
Operational (long-term)	65	65	CAAQS	80 ^{3*}	82 ^{3*}
1. Reactive Organic Gas 2. California Ambient Air Quality Standards 3*. Only applies to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day.					

CONSTRUCTION EMISSIONS/SHORT-TERM IMPACTS

Short-term air quality impacts are mostly due to dust (PM₁₀ and PM_{2.5}) generated by construction and development activities, and emissions from equipment and vehicle engines (NO_x) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage actually involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction, and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended particulates. PM₁₀ and PM_{2.5} are considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

CONSTRUCTION PARTICULATE MATTER EMISSIONS

The SMAQMD Guide includes screening criteria for construction-related particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction PM₁₀ or PM_{2.5} thresholds of significance provided that the project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); or,
- Require import or export of soil materials that will require a considerable amount of haul truck activity.

Some PM₁₀ and PM_{2.5} emissions during project construction can be reduced through compliance with institutional requirements for dust abatement and erosion control. These institutional measures include the SMAQMD "District Rule 403-Fugitive Dust" and

measures in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)].

The project site is less than 35 acres (4.79 acres) and does not involve buildings more than 4 stories tall; demolition activities; significant trenching activities; an unusually compact construction schedule; cut-and-fill operations; or, import or export of soil materials requiring a considerable amount of haul truck activity. Therefore, the project falls below the SMAQMD Guide screening criteria for PM₁₀ and PM_{2.5}. The SMAQMD Guide includes a list of Basic Construction Emissions Control Practices that should be implemented on all projects, regardless of size. Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485; the SMAQMD Guide simply lays out the basic practices needed to comply. These requirements are already required by existing rules and regulations, and have also been included as mitigation.

CONSTRUCTION OZONE PRECURSOR EMISSIONS (NO_x)

The SMAQMD Guide currently provides screening criteria for construction-related ozone precursor emissions (NO_x) similar to those which will be implemented for particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction NO_x thresholds of significance provided that the project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills);
- Require import or export of soil materials that will require a considerable amount of haul truck activity; or,
- Require soil disturbance (i.e., grading) that exceeds 15 acres per day. Note that 15 acres is a screening level and shall not be used as a mitigation measure.

CONSTRUCTION EMISSIONS CONCLUSION

The screening criteria for construction emissions related to both particulate matter and ozone precursors are almost identical, as shown above. As noted, the Badger Valley ADU project site is less than 35 acres (4.79 acres) and does not involve buildings more than 4 stories tall; significant trenching activities; an unusually compact construction schedule; or, import or export of soil materials requiring a considerable amount of haul truck activity. Therefore, the project falls below the SMAQMD Guide screening criteria for construction emissions related to both Particulate Matter and Ozone precursors and impacts are ***less than significant***.

OPERATIONAL EMISSIONS/LONG-TERM IMPACTS

Once a project is completed, additional pollutants are emitted through the use, or operation, of the site. Land use development projects typically involve the following sources of emissions: motor vehicle trips generated by the land use; fuel combustion from landscape maintenance equipment; natural gas combustion emissions used for space and water heating; evaporative emissions of ROG associated with the use of consumer products; and, evaporative emissions of ROG resulting from the application of architectural coatings.

Typically, a project must be comprised of large acreages or intense uses in order to result in significant operational air quality impacts. For ozone precursor emissions, the screening table in the SMAQMD Guide allows users to screen out projects that include up to 485 new single family dwelling units for residential projects. For particulate matter emissions, the screening table allows users to screen out projects that include up to 1,000 new single family dwelling units for residential projects. The proposed project consists of a new accessory dwelling unit, and therefore falls below these screening thresholds. Impacts related to operational emissions are ***less than significant***.

CRITERIA POLLUTANT HEALTH RISKS

All criteria air pollutants can have human health effects at certain concentrations. Air Districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the national ambient air quality standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). The NAAQS and CAAQS are informed by a wide range of scientific evidence, which demonstrates that there are known safe concentrations of criteria air pollutants. Because the NAAQS and CAAQS are based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of these standards, the thresholds established by air districts are also protective of human health. Sacramento County is currently in nonattainment of the NAAQS and CAAQS for ozone. Projects that emit criteria air pollutants in exceedance of SMAQMD's thresholds would contribute to the regional degradation of air quality that could result in adverse human health impacts.

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and the possibility of permanent lung impairment (EPA 2016).

HEALTH EFFECTS SCREENING

In order to estimate the potential health risks that could result from the operational emissions of ROG, NO_x, and PM_{2.5}, PER staff implemented the procedures within SMAQMD's *Instructions for Sac Metro Air District Minor Project and Strategic Area Project Health Effects Screening Tools* (SMAQMD's Instructions). To date, SMAQMD has published three options for analyzing projects: small projects may use the Minor Project Health Screening Tool, while larger projects may use the Strategic Area Project Health Screening Tool, and practitioners have the option to conduct project-specific modeling.

Both the Minor Project Health Screening Tool and Strategic Area Project Health Screening Tool are based on the maximum thresholds of significance adopted within the five air district regions contemplated within SMAQMD's *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD's Friant Guidance; October 2020). The air district thresholds considered in SMAQMD's Friant Guidance included thresholds from SMAQMD as well as the El Dorado County Air Quality Management District, the Feather River Air Quality Management District, the Placer County Air Pollution Control District, and the Yolo Solano Air Quality Management District. The highest allowable emission rates of NO_x, ROG, PM₁₀, and PM_{2.5} from the five air districts is 82 pounds per day (lbs/day) for all four pollutants. Thus, the Minor Project Health Screening Tool is intended for use by projects that would result in emissions at or below 82 lbs/day, while the Strategic Area Project Health Screening Tool is intended for use by projects that would result in emissions between two and eight times greater than 82 lbs/day. The Strategic Area Project Screening Model was prepared by SMAQMD for five locations throughout the Sacramento region for two scenarios: two times and eight times the threshold of significance level (2xTOS and 8xTOS). The corresponding emissions levels included in the model for 2xTOS were 164 lb/day for ROG and NO_x, and 656 lb/day under the 8xTOS for ROG and NO_x (SMAQMD 2020).

As noted in SMAQMD's Friant Guidance, "each model generates conservative estimates of health effects, for two reasons: The tools' outputs are based on the simulation of a full year of exposure at the maximum daily average of the increases in air pollution concentration... [and] [t]he health effects are calculated for emissions levels that are very high" (SMAQMD 2020).

The model derives the estimated health risk associated with operation of the project based on increases in concentrations of ozone and PM_{2.5} that were estimated using a photochemical grid model (PGM). The concentration estimates of the PGM are then applied to the U.S. Environmental Protection Agency's Benefits Mapping and Analysis Program (BenMAP) to estimate the resulting health effects from concentration increases. PGMs and BenMAP were developed to assess air pollution and human health impacts over large areas and populations that far exceed the area of an average land use development project. These models were never designed to determine whether emissions generated by an individual development project would affect community health or the date an air basin would attain an ambient air quality standard. Rather, they are used to help inform regional planning strategies based on cumulative changes in emissions within an air basin or larger geography.

It must be cautioned that within the typical project-level scope of CEQA analyses, PGMs are unable to provide precise, spatially defined pollutant data at a local scale. In addition, as noted in SMAQMD's Friant Guidance, "BenMAP estimates potential health effects from a change in air pollutant concentrations, but does not fully account for other factors affecting health such as access to medical care, genetics, income levels, behavior choices such as diet and exercise, and underlying health conditions" (2020). Thus, the modeling conducted for the health risk analysis is based on imprecise mapping and only takes into account one of the main public health determinants (i.e., environmental influences).

DISCUSSION OF PROJECT IMPACTS: CRITERIA POLLUTANT HEALTH RISKS

Since the project was below the daily operational thresholds for criteria air pollutants, the Minor Project Health Screening Tool was used to estimate health risks. The results are shown in Table IS-3 and Table IS-4.

Table IS-3: PM_{2.5} Health Risk Estimates

PM _{2.5} Health Endpoint	Age Range ¹	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) ^{2,5}	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) ²	Percent of Background Health Incidences Across the 5-Air-District Region ³	Total Number of Health Incidences Across the 5-Air-District Region (per year) ⁴
		(Mean)	(Mean)		
Respiratory					
Emergency Room Visits, Asthma	0 - 99	0.71	0.64	0.0035%	18419
Hospital Admissions, Asthma	0 - 64	0.047	0.042	0.0023%	1846
Hospital Admissions, All Respiratory	65 - 99	0.23	0.19	0.00098%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.12	0.11	0.00045%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000057	0.000051	0.0013%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0052	0.0048	0.0016%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.013	0.012	0.0017%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.021	0.020	0.0016%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.076	0.069	0.0014%	5052
Mortality					
Mortality, All Cause	30 - 99	1.4	1.3	0.0028%	44766
Notes:					
<ol style="list-style-type: none"> Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air- 					

District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.
5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*.

Table IS-4: Ozone Health Risk Estimates

Ozone Health Endpoint	Age Range ¹	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year) ^{2,5}	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year) ²	Percent of Background Health Incidences Across the 5-Air-District Region ³	Total Number of Health Incidences Across the 5-Air-District Region (per year) ⁴
		(Mean)	(Mean)		
Respiratory					
Hospital Admissions, All Respiratory	65 - 99	0.045	0.034	0.00017%	19644
Emergency Room Visits, Asthma	0 - 17	0.20	0.16	0.0027%	5859
Emergency Room Visits, Asthma	18 - 99	0.32	0.25	0.0020%	12560
Mortality					
Mortality, Non-Accidental	0 - 99	0.028	0.022	0.00072%	30386
Notes:					
<ol style="list-style-type: none"> 1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function. 2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region. 3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP. 4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context. 5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the <i>Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District</i>. 					

Again, it is important to note that the “model outputs are derived from the numbers of people who would be affected by [the] project due to their geographic proximity and based on average population through the Five-District-Region. The models do not take into account population subgroups with greater vulnerabilities to air pollution, except for ages for certain endpoints” (SMAQMD 2020). Therefore, it would be misleading to correlate the levels of criteria air pollutant and precursor emissions associated with project implementation to specific health outcomes. While the effects noted above could manifest in individuals, actual effects depend on factors specific to each individual, including life stage (e.g., older adults are more sensitive), preexisting cardiovascular or respiratory diseases, and genetic polymorphisms. Even if this specific medical information was known about each individual, there are wide ranges of potential outcomes from exposure to ozone precursors and particulates, from no effect to the effects listed in the tables. Ultimately, the health effects associated with the project, using the SMAQMD guidance “are conservatively estimated, and the actual effects may be zero” (SMAQMD 2020).

CONCLUSION: CRITERIA POLLUTANT HEALTH RISKS

Neither SMAQMD nor the County of Sacramento have adopted thresholds of significance for the assessment of health risks related to the emission of criteria pollutants. Furthermore, an industry standard level of significance has not been adopted or proposed. Due to the lack of adopted thresholds of significance for health risks, this data is presented for informational purposes and does not represent an attempt to arrive at any level-of-significance conclusions.

HYDROLOGY AND WATER QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Alter the existing drainage patterns in such a way that it causes flooding;
- Contribute runoff that would exceed the capacity of existing or planned stormwater infrastructure;
- Place housing within the 100-year floodplain;
- Place structures in a 100-year floodplain that would cause substantial impacts as a result of impeding or redirecting flood flows;
- Develop in an area that is subject to 200 year urban levels of flood protection (ULOP), or;
- Expose people or structures to substantial loss of life, health, or property as a result of flooding.

FLOODPLAIN AND FLOODING

The subject parcel is located within an area identified on the FEMA FIRM Panel Number 06067C as “Zone X,” 500-year floodplain. Additionally, a very small portion of the site is within the 100-year floodplain. The project site is also located within the North Fork Badger Creek watershed and is approximately 460 feet east of North Fork Badger Creek. The Sacramento County Department of Water Resources (DWR) reviewed the proposed project (D. Mezentsev 7/22/2020) and indicated that the proposed accessory dwelling unit (ADU) must comply with minimum floor elevations pursuant to the Sacramento County Floodplain Management Ordinance. Compliance with DWR’s condition of approval will ensure that environmental impacts related to drainage are ***less than significant***.

WATER QUALITY**CONSTRUCTION WATER QUALITY: EROSION AND GRADING**

Construction on undeveloped land exposes bare soil, which can be mobilized by rain or wind and displaced into waterways or become an air pollutant. Construction equipment can also track mud and dirt onto roadways, where rains will wash the sediment into storm drains and thence into surface waters. After construction is complete, various other pollutants generated by site use can also be washed into local waterways. These pollutants include, but are not limited to, vehicle fluids, heavy metals deposited by vehicles, and pesticides or fertilizers used in landscaping.

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by the Regional Water Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County’s stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control (ESC) Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County’s storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

In addition to complying with the County’s ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State’s General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the

State Water Resources Control Board (State Board)
http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml
 and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on-site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a WDID# has been obtained and must submit a copy of the SWPPP. Although the County has no enforcement authority related to the CGP, the County does have the authority to ensure sediment/pollutants are not discharged and is required by its Municipal Stormwater Permit to verify that SWPPPs include the minimum components. The project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

Erosion controls should always be the *first line of defense*, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers and anchored blankets. Sediment controls are the *second line of defense*; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include, but are not limited to: filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

It is the responsibility of the project proponent to verify that the proposed BMPs for the project are appropriate for the unique site conditions, including topography, soil type and anticipated volumes of water entering and leaving the site during the construction phase. In particular, the project proponent should check for the presence of colloidal clay soils on the site. Experience has shown that these soils do not settle out with conventional sedimentation and filtration BMPs. The project proponent may wish to conduct settling column tests in addition to other soils testing on the site, to ascertain whether conventional BMPs will work for the project.

If sediment-laden or otherwise polluted runoff discharges from the construction site are found to impact the County's storm drain system and/or Waters of the State, the property owner will be subject to enforcement action and possible fines by the County and the Regional Water Board. Project compliance with requirements outlined above, as administered by the County and the Regional Water Board will ensure that project-related erosion and pollution impacts are ***less than significant***.

OPERATION: STORMWATER RUNOFF

Development and urbanization can increase pollutant loads, temperature, volume and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters. These impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Examples include “No Dumping-Drains to Creek/River” stencils/stamps on storm drain inlets to educate the public, and providing roofs over areas likely to contain pollutants, so that rainfall does not contact the pollutants. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow water down and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The project proponent should consider the use of “low impact development” techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities.

The County requires developers to utilize the *Stormwater Quality Design Manual for the Sacramento Region, 2018* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. Regardless of project type or size, developers are required to implement the minimum source control measures (Chapter 4 of the Design Manual). Low impact development measures and Treatment Control Measures are required of all projects exceeding the impervious surface threshold defined in Table 3-2 and 3-3 of the Design Manual. Further, depending on project size and location, hydromodification control measures may be required (Chapter 5 of the Design Manual).

Updates and background on the County’s requirements for post-construction stormwater quality treatment controls, along with several downloadable publications, can be found at the following websites:

<http://www.waterresources.saccounty.net/stormwater/Pages/default.aspx>

<http://www.beriverfriendly.net/Newdevelopment/>

The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources; therefore, they should be contacted as early as possible in the design process for guidance. Project compliance with requirements outlined above will ensure that project-related stormwater pollution impacts are ***less than significant***.

BIOLOGICAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have a substantial effect on a special status species, sensitive habitat, or protected wetland;
- If it would interfere substantially with the movement of wildlife; or
- If it would conflict with applicable ordinances, policies, or conservation plans.

WETLAND AND OTHER SURFACE WATERS

Federal and state regulation (Clean Water Act Sections 404 and 401) uses the term “surface water” to refer to all standing or flowing water that is present above-ground either perennially or seasonally. There are many types of surface waters, but the two major groupings are linear waterways with a bed and bank (streams, rivers, etc.) and wetlands. The Clean Water Act has defined the term wetland to mean “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions”. The term “wetlands” includes a diverse assortment of habitats such as perennial and seasonal freshwater marshes, vernal pools, and wetted swales. The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland and is therefore subject to local, State or Federal regulation of that habitat type. A delineation verification by the Army Corps will verify the size and condition of the wetlands and other waters in question, and will help determine the extent of government jurisdiction.

Wetlands are regulated by both the Federal and State government, pursuant to the Clean Water Act Section 404 (federal) and Section 401 (state). The United States Army Corps of Engineers (Army Corps) is generally the lead agency for the federal permit process, and the Regional Water Quality Control Board (Regional Water Board) is generally the lead agency for the state permit process. The Clean Water Act protects all “navigable waters”, which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Isolated wetlands, that is, those wetlands that are not hydrologically connected to other “navigable” surface waters (or their tributaries), are not considered to be subject to the Clean Water Act.

In addition to the Clean Water Act, the state also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act, which does not require that waters be “navigable”. For this reason, Federal non-jurisdictional waters – isolated wetlands – can be regulated by the State of California pursuant to Porter-Cologne.

The Clean Water Act establishes a “no net” loss” policy regarding wetlands for the state and federal governments, and General Plan Policy CO-58 establishes a “no net loss” policy for Sacramento County. Pursuant to these policies, any wetlands to be excavated

or filled require 1:1 mitigation, and construction within the wetlands cannot take place until the appropriate permit(s) have been obtained from the Army Corps, the U.S. Fish and Wildlife Service (USFWS), the Regional Water Board, the California Department of Fish and Wildlife and any other agencies with authority over surface waters. Any loss of delineated wetlands not mitigated for through the permitting process must be mitigated, pursuant to County policy. Appropriate mitigation may include establishment of a conservation easement over wetlands, purchase of mitigation banking credits, or similar measures.

There are regulatory setbacks established for vernal pools and other seasonal wetlands which may contain vernal pool crustaceans. The purpose of a setback is to buffer the wetland from the indirect impacts of development, such as polluted runoff. According to the Programmatic Consultation for vernal pool crustaceans, all construction activities must remain a minimum of 250 feet from any vernal pool in order to avoid impacts. There is no regulatory setback for other surface waters, but the County Environmental Review Section has typically required a minimum 50-foot setback¹. Maintenance of these setbacks will avoid indirect impacts to the surface water. A direct impact is the filling or excavation of a surface water. Note that if filling or excavation occurs within any portion of a vernal pool or seasonal wetland, the entire wetland should be considered directly impacted.

PROJECT IMPACTS: WETLAND AND OTHER SURFACE WATERS

A Wetland Delineation Report was prepared for the proposed project site by Marty Ecological Consulting, Inc. dated May, 28, 2021 (see Appendix A). According to the wetland delineation report, the project site was part of a complex of vernal pools associated with nearby Badger Creek, with vernal pools and a large pond located on the property at one time. With the original development of the property, drainage channels were constructed to drain water from the southern portion of the site into the large pond, which was located at the northwest corner of the property. The proposed ADU is to be located adjacent to the large pond. Fill material was dredged from the pond in 2019 to elevate the area where the ADU is proposed. A culvert was placed within a drainage channel on-site to collect run-off from the property and direct it into the pond. Soil was placed over the culvert to create vehicle access to the area and large rocks and gravel were placed at the openings of the culvert.

The wetland delineation surveyed 2.44 acres out of the 4.79 acre site. The 2.44 acres was determined to be the study area of the proposed ADU where impacts from the project could occur. The field delineation and data collection was conducted on April 10, 2021. A total of 0.36 acres of aquatic resources were mapped within the proposed project's study area. See

¹ Research suggests that some of the most common urban runoff pollutants – including sediment, nitrogen, and phosphorus – can be filtered over this distance by intervening vegetation. Source: McElfish, James M. et al. 2008. Planner's Guide to Wetland Buffers for Local Governments. Environmental Law Institute, Washington, D.C.

Plate **IS-5** for a map of the Aquatic Resources Delineation. The aquatic features included an unvegetated and recently excavated pond (0.32 acres) and a seasonal wetland swale (0.036 acres including the culverted area). Hydrophytic (wetland) vegetation was dominant within the seasonal wetland swale and included one vernal pool indicator species; however, no vernal pools were found within the project's study area. The wetland delineation did not determine whether the waters identified on the project site are jurisdictional or non-jurisdictional features.

According to the wetland delineation, the seasonal wetland swale has been altered to improve drainage off of adjacent fields but has some low areas where water ponds and wetland vegetation can develop. The culvert has been placed to allow water to drain into the existing pond. The adjacent pasture field to the south of the seasonal wetland swale is partially irrigated through runoff that drains from the project site. . Due to significant grading activities on the site previously – including dredging soils from the pond and placing them in the northeastern portion of the site to create a base for the proposed ADU – soils and vegetation in this area are disturbed and non-naturalized. Plate IS-6 illustrates the site plan for the proposed ADU overlaid with the map of the Aquatic Resources Delineation. As depicted, the proposed access drive will cross over the existing culvert connected with the identified seasonal wetland feature. According to the project applicant, rock will be added at the existing culvert inlet and outlet as velocity checks for erosion control.

The County's Department of Water Resources will review the project's improvement plans, particularly the culvert crossing, to ensure that the project complies with the County's Floodplain Management Ordinance. Construction of the access drive and the proposed drainage improvements will occur in a seasonal wetland swale. The applicant will coordinate with the United States Army Corps of Engineers and the Central Valley Regional Water Quality Control Board to determine if waters on the project site are jurisdictional. If those Federal and/or State agencies claim jurisdiction, the applicant may be required to obtain permits for their project. Mitigation has been included requiring the provision of permits prior to any work within jurisdictional waters; impacts to wetlands and other surface waters would be ***less than significant with mitigation***.

Plate IS-5: Aquatic Resources Delineation

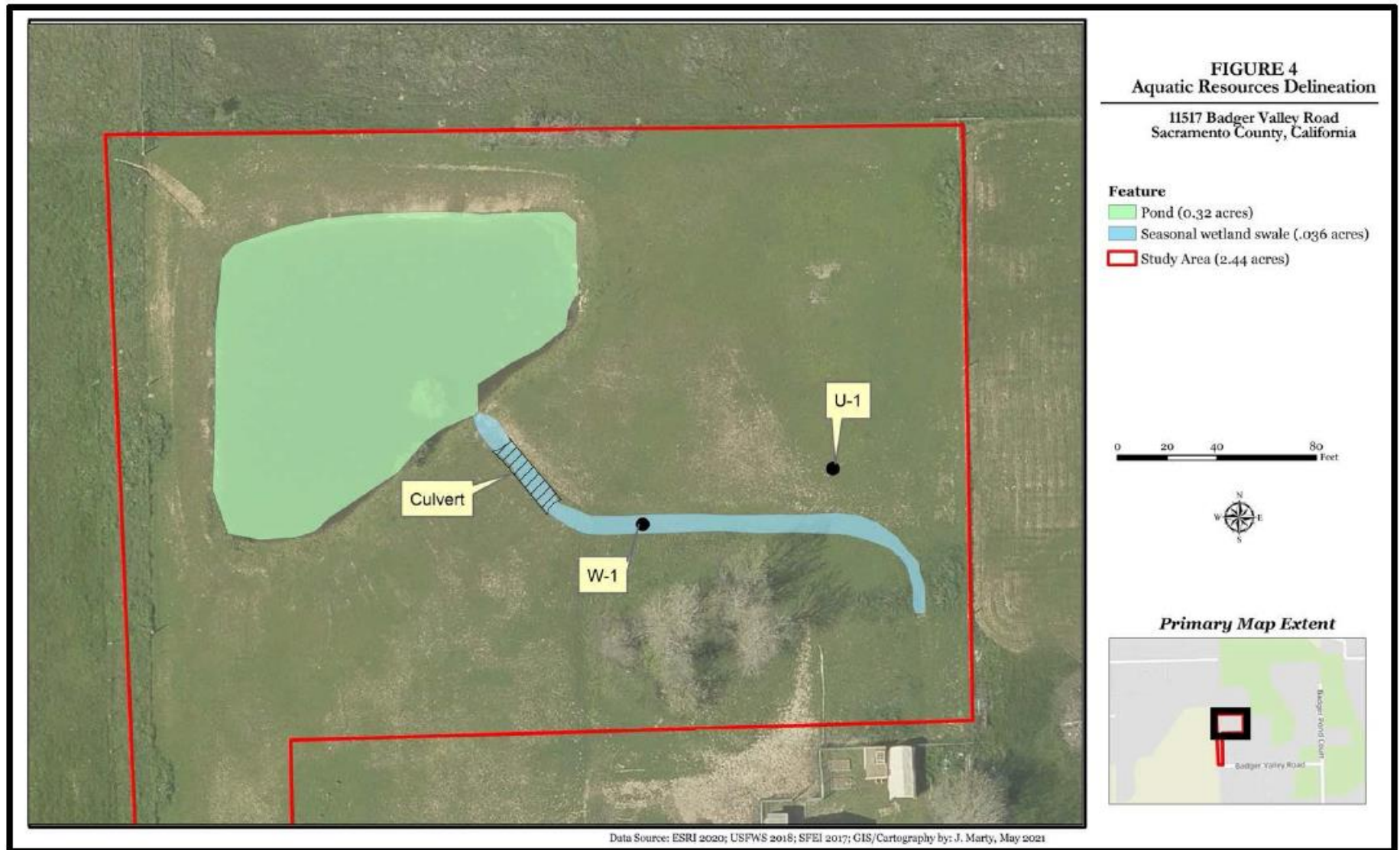
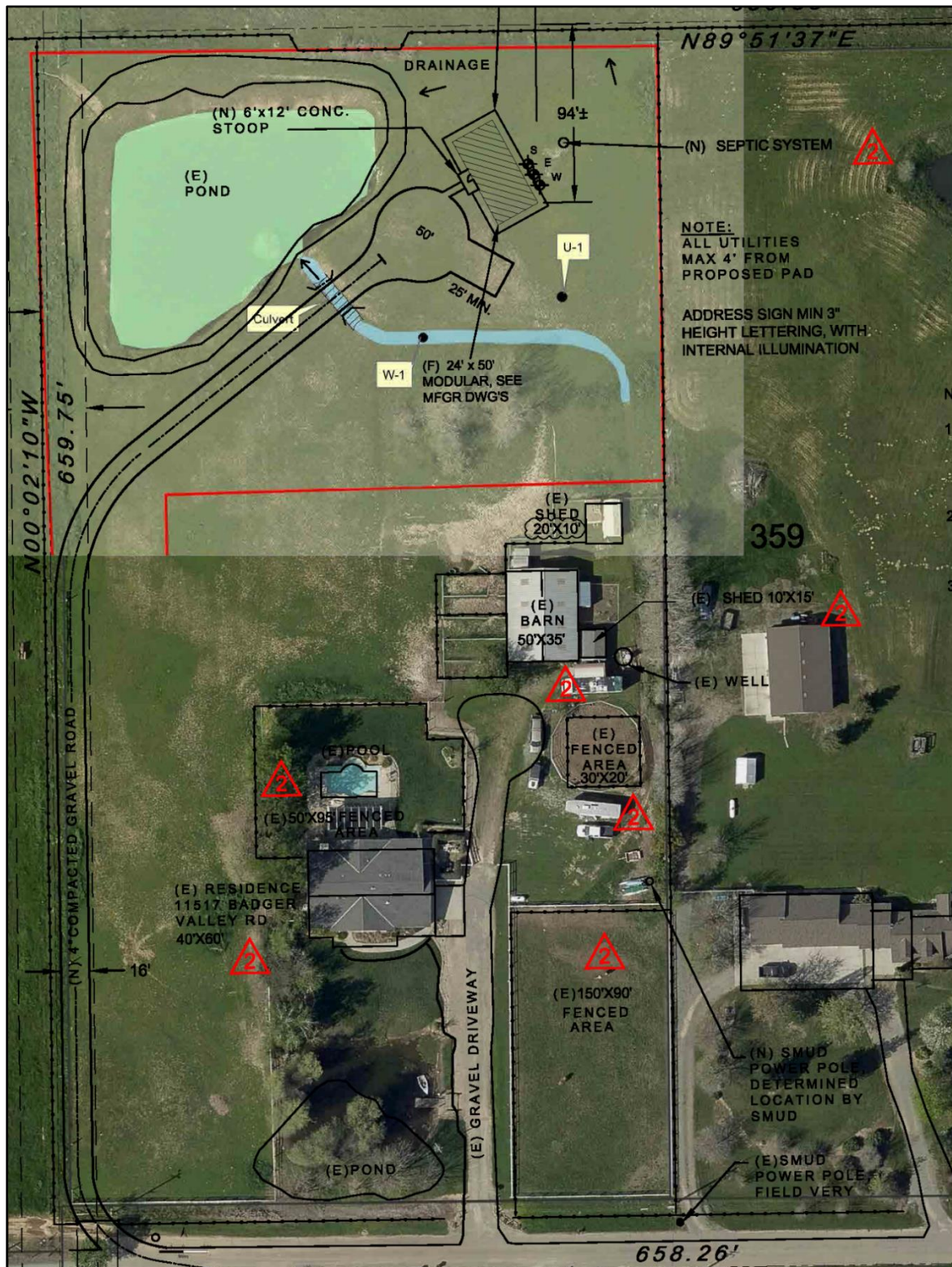


Plate IS-6: Proposed Site Plan with Aquatic Resources Delineation

Note: Both images in this exhibit were overlaid and may not accurately depict the entire project site.



CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource;
- Have a substantial adverse effect on an archaeological resource;
- Disturb any human remains, including those interred outside of formal cemeteries.

Under CEQA, lead agencies must consider the effects of projects on historical resources and archaeological resources. A “historical resource” is defined as a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a] of the Guidelines). Public Resources Code (PRC) Section 5042.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. Impacts to historical resources that materially impair those characteristics that convey its historical significance and justify its inclusion or eligibility for the NRHP or CRHR are considered a significant effect on the environment (CEQA Guidelines 15064.5)).

In addition to historically significant resources, an archeological site may meet the definition of a “unique archeological resource” as defined in PRC Section 21083.2(g). If unique archaeological resources cannot be preserved in place or left in an undisturbed state, mitigation measures shall be required (PRC Section 21083.2 (c)). CEQA Guidelines Section 15064.5 (e) outlines the steps the lead agency shall take in the event of an accidental discovery of human remains in any location other than a dedicated cemetery.

CULTURAL RESOURCES SETTING

A search of records and historical information on file at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) was conducted on July 21, 2021 for the proposed project area and within a one-quarter mile radius of the proposed project area. The records search identified no recorded indigenous-period/ethnographic-period resource or historic-period cultural resource within the proposed project area. No cultural resources study report was prepared that covered a portion of the proposed project area.

Outside of the proposed project area, but within the one-quarter mile radius, no recorded indigenous-period/ethnographic period resources, one (1) historic-period cultural resource, and one (1) cultural resources study report was prepared that cover a portion of the broader search area. The recorded historic-period cultural resource is P-34-606 (Central California Traction Company Railroad) and the cultural resources study report was surveyed along the railroad line. The records search determined that with respect to

cultural resources, the proposed project area appears to not be sensitive for these resources.

CULTURAL RESOURCES PROJECT IMPACTS

The primary single-family dwelling and associated structures on the property are less than 50 years old and have no historical features or integrity that would require further analysis or review pursuant to CEQA. The buildings will also remain on the property as part of the accessory dwelling unit (ADU) project.

The project is unlikely to impact human remains buried outside of formal cemeteries; however, if human remains are encountered during construction, mitigation is included specifying how to comply with CEQA Guidelines Section 15064.5 (e), Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code. Therefore, with mitigation, project impacts to cultural resources will be ***less than significant***.

TRIBAL CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with a cultural value to a California Native American tribe, that is:
 - a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

TRIBAL CULTURAL RESOURCE SETTING

In accordance with Assembly Bill (AB) 52, codified as Section 21080.3.1 of CEQA, tribes on the Sacramento County AB52 notification list were notified on July 27, 2021 about the proposed project. E-mail correspondence received from the United Auburn Indian Community of the Auburn Rancheria (UAIC) dated July 30, 2021 and August 23, 2021 stated that their records do not identify known tribal cultural resources within the project

area; however, there is increased cultural sensitivity within the project vicinity due to the site's location near North Fork Badger Creek. UAIC representatives deferred to Wilton Rancheria for tribal consultation on this project. No response has been received to date from Wilton Rancheria related to this project.

DISCUSSION OF PROJECT IMPACTS – TRIBAL CULTURAL RESOURCES

Through consultation under CEQA, tribes indicated that the project vicinity may be sensitive to tribal cultural resources. Mitigation is included for the inadvertent discovery of cultural resources, including tribal cultural resources. With this mitigation in place, project impacts to tribal cultural resources will be ***less than significant***.

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures A thru D are critical to ensure that identified significant impacts of the project are reduced to a level of less than significant. Pursuant to Section 15074.1(b) of the CEQA Guidelines, each of these measures must be adopted exactly as written unless both of the following occur: (1) A public hearing is held on the proposed changes; (2) The hearing body adopts a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

As the applicant, or the applicant's representative, for this project, I acknowledge that the project development creates the potential for significant environmental impact and agree to implement the mitigation measures listed below, which are intended to reduce potential impacts to a less than significant level.

Applicant _____ Date: _____

MITIGATION MEASURE A: BASIC CONSTRUCTION EMISSIONS CONTROL PRACTICES

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds. Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic.

MITIGATION MEASURE B: WETLANDS AND WATERS

To compensate for impacts to state and/or federally jurisdictional waters, the applicant shall obtain all applicable permits from the Army Corps of Engineers and the Central Valley Regional Water Quality Control Board prior to issuance of improvement plans. If waters are determined to not be jurisdictional by permitting agencies, then correspondence indicating such shall be submitted to the satisfaction of the Environmental Coordinator.

MITIGATION MEASURE C: INADVERTENT DISCOVERY OF CULTURAL RESOURCES OR TRIBAL CULTURAL RESOURCES

In the event that human remains are discovered in any location other than a dedicated cemetery, work shall be halted and the County Coroner contacted. For all other potential tribal cultural resources [TCRs], archaeological, or cultural resources discovered during project's ground disturbing activities, work shall be halted until a qualified archaeologist and/or tribal representative may evaluate the resource.

1. **Unanticipated human remains.** Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Planning and Environmental

Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

2. **Unanticipated cultural resources.** In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.
 - a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.
 - b. If a potentially-eligible resource is encountered, then the archaeologist and/or tribal monitor, Planning and Environmental Review staff, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the County Environmental Coordinator as verification that the provisions of CEQA for managing unanticipated discoveries have been met.

MITIGATION MEASURE D: GREENHOUSE GASES

The project is required to incorporate the Tier 1 Best Management Practices or propose Alternatives that demonstrate the same level of GHG reductions as BMPs 1, listed below. At a minimum, the project must mitigate natural gas emissions and provide necessary wiring for an all-electric retrofit to accommodate future installation of electric space heating, water heating, drying, and cooking appliances.

Tier 1: Best Management Practices (BMP) Required for all Projects

- **BMP 1: No natural gas:** Projects shall be designed and constructed without natural gas infrastructure. A propane tank is allowed with pre-wiring of receptacles and breakers installed at the locations of furnace, water heater, dryer, and cooking appliance locations.

MITIGATION MEASURE COMPLIANCE

Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:

1. The proponent shall comply with the MMRP for this project, including the payment of a fee to cover the Planning and Environmental Review staff costs incurred during implementation of the MMRP. The MMRP fee for this project is \$1,676.00. This fee includes administrative costs of \$948.00.
2. Until the MMRP has been recorded and the administrative portion of the MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved. Until the balance of the MMRP fee has been paid, no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.

INITIAL STUDY CHECKLIST

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed the following Initial Study Checklist. The Checklist identifies a range of potential significant effects by topical area. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act as follows:

- 1 Potentially Significant indicates there is substantial evidence that an effect MAY be significant. If there are one or more "Potentially Significant" entries an Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.
- 2 Less than Significant with Mitigation applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.
- 3 Less than Significant or No Impact indicates that either a project will have an impact but the impact is considered minor or that a project does not impact the particular resource.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
1. LAND USE - Would the project:					
a. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X		The project is consistent with the environmental policies of the Sacramento County General Plan, Southeast Area Community Plan, and Sacramento County Zoning Code.
b. Physically disrupt or divide an established community?			X		The project will not create physical barriers that substantially limit movement within or through the community.
2. POPULATION/HOUSING - Would the project:					
a. Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of infrastructure)?			X		The project will neither directly nor indirectly induce substantial unplanned population growth.
b. Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	The project will not result in the removal of existing housing, and thus will not displace substantial amounts of existing housing.
3. AGRICULTURAL RESOURCES - Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production?			X		The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the current Sacramento County Important Farmland Map published by the California Department of Conservation. The site does not contain prime soils. A less than significant impact will result.
b. Conflict with any existing Williamson Act contract?				X	No Williamson Act contracts apply to the project site. No impact will occur.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Introduce incompatible uses in the vicinity of existing agricultural uses?			X		Though in an area where agricultural uses occur, the project will not substantially interfere with agricultural operations. A less than significant impact will result.
4. AESTHETICS - Would the project:					
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?			X		The project does not occur in the vicinity of any scenic highways, corridors, or vistas. A less than significant impact will result.
b. In non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings?			X		Construction will not substantially degrade the visual character or quality of the project site. A less than significant impact will result.
c. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X	The project is not located in an urbanized area. No impact will occur.
d. Create a new source of substantial light, glare, or shadow that would result in safety hazards or adversely affect day or nighttime views in the area?			X		The project will not result in a new source of substantial light, glare or shadow that would result in safety hazards or adversely affect day or nighttime views in the area. A less than significant impact will result.
5. AIRPORTS - Would the project:					
a. Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?				X	The project occurs outside of any identified public or private airport/airstrip safety zones. No impact will occur.
b. Expose people residing or working in the project area to aircraft noise levels in excess of applicable standards?				X	The project occurs outside of any identified public or private airport/airstrip noise zones or contours. No impact will occur.
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?				X	The project does not affect navigable airspace. No impact will occur.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X	The project does not involve or affect air traffic movement. No impact will occur.
6. PUBLIC SERVICES - Would the project:					
a. Have an adequate water supply for full buildout of the project?			X		Private wells would be required to provide potable water to future development. The introduction of private wells would add incrementally to a documented decline in the groundwater table in the County but it would not in itself constitute a significant environmental impact. A less than significant impact will result.
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?			X		Septic systems would be required. Refer to the Public Services discussion in the Environmental Effects section above.
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X		The Kiefer Landfill has capacity to accommodate solid waste until the year 2050. A less than significant impact will result.
d. Result in substantial adverse physical impacts associated with the construction of new water supply or wastewater treatment and disposal facilities or expansion of existing facilities?				X	The project will not require construction or expansion of new water supply, wastewater treatment, or wastewater disposal facilities. No impact will occur.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?			X		Minor extension of infrastructure would be necessary to serve the proposed project. Existing stormwater drainage facilities are located within existing roadways and other developed areas, and the extension of facilities would take place within areas already proposed for development as part of the project. No significant new impacts would result from stormwater facility extension.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			X		Minor extension of utility lines would be necessary to serve the proposed project. Existing utility lines are located along existing roadways and other developed areas, and the extension of lines would take place within areas already proposed for development as part of the project. No significant new impacts would result from utility extension.
g. Result in substantial adverse physical impacts associated with the provision of emergency services?			X		The project would incrementally increase demand for emergency services, but would not cause substantial adverse physical impacts as a result of providing adequate service. A less than significant impact will result.
h. Result in substantial adverse physical impacts associated with the provision of public school services?			X		The project would result in minor increases to student population; however, the increase would not require the construction/expansion of new unplanned school facilities. Established case law, <i>Goleta Union School District v. The Regents of the University of California</i> (36 Cal-App. 4 th 1121, 1995), indicates that school overcrowding, standing alone, is not a change in the physical conditions, and cannot be treated as an impact on the environment. A less than significant impact will result.
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?			X		The project will result in increased demand for park and recreation services, but meeting this demand will not result in any substantial physical impacts. A less than significant impact will result.
7. TRANSPORTATION - Would the project:					
a. Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) – measuring transportation impacts individually or cumulatively, using a vehicles miles traveled standard established by the County?			X		The project does not conflict with or is inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b). The vehicles miles traveled associated with one accessory dwelling unit has minimal transportation impacts. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Result in a substantial adverse impact to access and/or circulation?			X		The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
c. Result in a substantial adverse impact to public safety on area roadways?			X		The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
d. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X		The project does not conflict with alternative transportation policies of the Sacramento County General Plan, with the Sacramento Regional Transit Master Plan, or other adopted policies, plans or programs supporting alternative transportation. A less than significant impact will result.
8. AIR QUALITY - Would the project:					
a. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			X		The project does not exceed the screening thresholds established by the Sacramento Metropolitan Air Quality Management District and will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. A less than significant impact will result.
b. Expose sensitive receptors to pollutant concentrations in excess of standards?			X		There are no sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) adjacent to the project site. See Response 8.a.
c. Create objectionable odors affecting a substantial number of people?			X		The project will not generate objectionable odors. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
9. NOISE - Would the project:					
a. Result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies?			X		The project is not in the vicinity of any uses that generate substantial noise, nor will the completed project generate substantial noise. The project will not result in exposure of persons to, or generation of, noise levels in excess of applicable standards. A less than significant impact will result.
b. Result in a substantial temporary increase in ambient noise levels in the project vicinity?			X		Project construction will result in a temporary increase in ambient noise levels in the project vicinity. This impact is less than significant due to the temporary nature of the these activities, limits on the duration of noise, and evening and nighttime restrictions imposed by the County Noise Ordinance (Chapter 6.68 of the County Code).
c. Generate excessive groundborne vibration or groundborne noise levels.			X		The project will not involve the use of pile driving or other methods that would produce excessive groundborne vibration or noise levels at the property boundary. A less than significant impact will result.
10. HYDROLOGY AND WATER QUALITY - Would the project:					
a. Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?			X		The project will incrementally add to groundwater consumption; however, the singular and cumulative impacts of the proposed project upon the groundwater decline in the project area are minor. A less than significant impact will result.
b. Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X		Compliance with applicable requirements of the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards will ensure that impacts are less than significant.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?			X		A small portion of the subject parcel is within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map. The project is not within a local flood hazard area. Adjacent properties to the north and west of the project are within a 100-year floodplain and within the local flood hazard area. Compliance with the County Floodplain Management Ordinance, County Drainage Ordinance, and Improvement Standards will assure less than significant impacts. Refer to the Hydrology discussion in the Environmental Effects section above.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?			X		A small portion of the subject parcel is within a 100-year floodplain. Refer to the Hydrology discussion in the Environmental Effects section above.
e. Develop in an area that is subject to 200 year urban levels of flood protection (ULOP)?				X	The project is not located in an area subject to 200-year urban levels of flood protection (ULOP). No impact will occur.
f. Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X		The project will not expose people or structures to a substantial risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. A less than significant impact will result.
g. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?			X		Adequate on- and/or off-site drainage improvements will be required pursuant to the Sacramento County Floodplain Management Ordinance and Improvement Standards. A less than significant impact will result.
h. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X		Sacramento County Code Chapters 6.28 and 6.32 provide rules and regulations for water wells and septic systems that are designed to protect water quality. The Environmental Health Division of the County Environmental Management Department has permit approval authority for any new water wells and septic systems on the site. Compliance with existing regulations will ensure that impacts are less than significant.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
11. GEOLOGY AND SOILS - Would the project:					
a. Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X		Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone. Although there are no known active earthquake faults in the project area, the site could be subject to some ground shaking from regional faults. The Uniform Building Code contains applicable construction regulations for earthquake safety that will ensure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X		Compliance with the County's Land Grading and Erosion Control Ordinance will reduce the amount of construction site erosion and minimize water quality degradation by providing stabilization and protection of disturbed areas, and by controlling the runoff of sediment and other pollutants during the course of construction. A less than significant impact will result.
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, soil expansion, liquefaction or collapse?			X		The project is not located on an unstable geologic or soil unit. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?			X		Site soils are classified as San Joaquin silt Loam. The <u>Soil Survey of Sacramento County</u> , prepared by the USDA Soil Conservation Service, Table 14 (pages 313 through 325) indicates that these soils are “severe” for septic tank absorption fields. “Severe” is defined as “soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possible increased maintenance are required”. Typically this rating is due to the presence of a hardpan layer. To overcome this difficulty, septic systems in this area are generally required to utilize a seepage pit design that disposes of the effluent below the hardpan layer. The seepage pits are generally 35 feet deep and 3 feet in diameter. All septic systems must comply with the requirements of the County Environmental Management Department, Environmental Health Division, as set forth in Chapter 6.32 of the County Code. Compliance with County standards should insure impacts are less than significant.
e. Result in a substantial loss of an important mineral resource?			X		The project is not located within an Aggregate Resource Area as identified by the Sacramento County General Plan Land Use Diagram, nor are any important mineral resources known to be located on the project site. A less than significant impact will result.
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X		No known paleontological resources (e.g. fossil remains) or sites occur at the project location. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
12. BIOLOGICAL RESOURCES - Would the project:					
a. Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community?		X			The project site contains suitable habitat for species associated with wetlands and vernal pools. Mitigation is included to reduce impacts to less than significant levels. Refer to the Biological Resources discussion in the Environmental Effects section above.
b. Have a substantial adverse effect on riparian habitat or other sensitive natural communities?			X		No sensitive riparian or natural communities occur on the project site, nor is the project expected to affect natural communities off-site. A less than significant impact will result.
c. Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies?		X			The project may occur within jurisdictional waters. Refer to the Biological Resources discussion in the Environmental Effects section above.
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X		The project site is already developed. Project implementation would not affect native resident or migratory species. A less than significant impact will result.
e. Adversely affect or result in the removal of native or landmark trees?				X	Trees occur on the project site; however, the project site is large enough to where project construction will not impact these trees. No impact will occur.
f. Conflict with any local policies or ordinances protecting biological resources?			X		The project is consistent with local policies/ordinances protecting biological resources.
g. Conflict with the provisions of an adopted Habitat Conservation Plan or other approved local, regional, state or federal plan for the conservation of habitat?			X		The project site is located within the boundaries of the South Sacramento Habitat Conservation Plan (SSHCP) but is outside of the Urban Development Area (UDA). Thus, the SSHCP does not apply to the project. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
13. CULTURAL RESOURCES - Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource?			X		No historical resources would be affected by the proposed project. A less than significant impact will result.
b. Have a substantial adverse effect on an archaeological resource?			X		The Northern California Information Center was contacted regarding the proposed project. A record search indicated that the project site is not considered sensitive for archaeological resources. Refer to the Cultural Resources discussion in the Environmental Effects section above.
c. Disturb any human remains, including those interred outside of formal cemeteries?		X			No known human remains exist on the project site. Nonetheless, mitigation has been recommended to ensure appropriate treatment should remains be uncovered during project implementation. A less than significant impact will result.
14. TRIBAL CULTURAL RESOURCES - Would the project:					
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?		X			Notification pursuant to Public Resources Code 21080.3.1(b) was provided to the tribes and request for consultation was not received. Tribal cultural resources have not identified in the project area. Refer to the Cultural Resources discussion in the Environmental Effects section above.
15. HAZARDS AND HAZARDOUS MATERIALS - Would the project:					
a. Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		The project does not involve the transport, use, and/or disposal of hazardous material. A less than significant impact will result.
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?			X		The project does not involve the transport, use, and/or disposal of hazardous material. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?			X		The project does not involve the use or handling of hazardous material. A less than significant impact will result.
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a substantial hazard to the public or the environment?			X		The project is not located on a known hazardous materials site. A less than significant impact will result.
e. Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			X		The project would not interfere with any known emergency response or evacuation plan. A less than significant impact will result.
f. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to or intermixed with urbanized areas?			X		The project site is within an urbanizing area of the unincorporated County and is located within the State Responsibility Area/Local Responsibility Area according to the CalFire Fire Hazard Severity Zones Map (2007). Compliance with local Fire District standards and requirements ensures impacts are less than significant.
16. ENERGY – Would the project:					
a. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction?			X		While the project will introduce a new accessory dwelling unit and increase energy consumption, compliance with Title 24, Green Building Code, will ensure that all project energy efficiency requirements are net resulting in less than significant impacts.
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		The project will comply with Title 24, Green Building Code, for all project efficiency requirements. A less than significant impact will result.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
17. GREENHOUSE GAS EMISSIONS – Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		X			The project is within the screening criteria for construction related impacts to air quality. The operational emissions associated with the project are less than 1,100 MT of CO ₂ e per year. The project will fully comply with the SMAQMD GHG Tier 1 BMPs by pre-wiring, with receptacles and breakers installed at the locations of furnace, water heater, dryer, and cooking appliances. The use of a propane tank would be allowed based upon these pre-wiring conditions. As such, the project screens out of further analysis and impacts are less than significant.
b. Conflict with an applicable plan, policy or regulation for the purpose of reducing the emission of greenhouse gases?			X		The project is consistent with County policies adopted for the purpose of reducing the emission of greenhouse gases. A less than significant impact will result.

SUPPLEMENTAL INFORMATION

LAND USE CONSISTENCY	Current Land Use Designation	Consistent	Not Consistent	Comments
General Plan	Ag-Res (Agricultural-Residential)	X		
Community Plan	AR-5 (Agricultural-Residential 5 acres)	X		
Land Use Zone	A-5 (General Agriculture - Interim) & A-5 (F) (General Agriculture – Interim and Flood Combining Zone)	X		

INITIAL STUDY PREPARERS

Environmental Coordinator: Joelle Inman
Section Manager: Meg De Courcy/Julie Newton
Project Manager: Desirae Fox/Gemma Tierney
Environmental Analyst: Carol Gregory
Office Manager: Belinda Wekesa-Batts
Administrative Support: Justin Maulit

TECHNICAL REPORT

To: Kerry Bowen
11517 Badger Valley Rd.
Wilton, CA 95693

Date: 5/28/2021

From: Jaymee Marty

Subject: 11517 Badger Valley Road Wetland Delineation

1 Introduction

This report details findings from an evaluation conducted in 2021 to delineate wetland features on a portion of the property located at 11517 Badger Valley Road in the City of Wilton, Sacramento County, California (Figure 1). The property is privately owned and has existing residential and agricultural structures. The proposed project includes construction of a 1200 sf modular home including a graveled access road and parking area. The project site is situated in Section 7 of Township 6 North and Range 7 East of the Elk Grove, California, United States Geological Survey (USGS) 7.5-minute quadrangle map (Figure 1).

1.1 Site Description and Background

The study area as shown in Figure 2 consists of the maximum limits of disturbance for the proposed project. Land uses in and adjacent to the study area is agricultural residential. The climate is classified as Mediterranean (i.e., semi-arid climate with hot, dry summers and moderately mild, wet winters). The average annual precipitation is approximately 20 inches. Rainfall was low for the 2020-2021 winter season with approximately 7.5 inches of rainfall between October 2020 and May 2021. The study area is in the Lower Cosumnes River watershed which drains to the Sacramento-San Joaquin River Delta.

The California Aquatic Resource Inventory (CARI; San Francisco Estuary Institute [SFEI] 2017) is a statewide map of surface waters and related habitats combining multiple national and regional datasets, including the National Wetlands Inventory and the National Hydrography Dataset. CARI includes aquatic resource features mapped using a variety of remote sensing and modeling techniques. As such, these aquatic features may or may not exist as represented. In addition, CARI data varies in detail, accuracy, and age, and is meant to be used as a tool to assist with an aquatic resource delineation but not as the only source of information (SFEI 2017).

The CARI data (SFEI 2017) show vernal pools and a pond with associated vegetation within the study area (Figure 2). This data was based on 2010 aerial imagery created for the South

Sacramento Habitat Conservation Plan. The vernal pool signature appears to be absent from more recent (2018) aerial photos of the study area and prior to the most recent sale of the property (July 2019).

There are no existing structures within the study area; however, the modular home construction site had been elevated using fill material dredged from the adjacent pond in 2019. A culvert had been placed in a drainage channel to collect run-off from the property and direct it into the existing pond. Soil had been placed over the culvert to create vehicle access to the home site and large rocks and gravel were placed at the openings of the culvert.

The site was historically part of a complex of vernal pools associated with Badger Creek based on aerial imagery from 1981 (UCSB 2021). As part of the original development of the property in the late 1990s/early 2000s, drainage channels were constructed to drain water from the southern portion of the property into the large pond in the northwest corner which is visible on 1993 aerial imagery (GoogleEarth 2021).

2 Methods

This aquatic resource delineation was conducted in accordance with the methods described in the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Arid West Supplement (USACE 2008). The boundaries of aquatic resources were delineated through standard field methods (e.g., paired sample set analyses). Field data were recorded on Wetland Determination Data Forms - Arid West Region (Attachment 1). *Munsell Soil Color Charts* (Munsell Color 2009) and the Web Soil Survey (NRCS 2021) were used to aid in identifying hydric soils in the field. *The Jepson Manual, 2nd Edition* (Baldwin et al. 2012) was used for plant nomenclature and identification with updated taxonomy provided by Jepson eFlora (Jepson eFlora 2021).

The field delineation and data collection were conducted on 1- April 10 2021. The entire 2.44-acre Study Area was walked to determine the extent of aquatic resources within the Study Area. Vegetation and soils data were collected from one point within a potential wetland feature (Point W-1) and at one point outside the feature (Point U-1; Figure 4). Pictures of inundated features within the Study Area were taken by the property owner after a storm event on 2 February 2021 (See Photos in Attachment 2). Since no vegetation was present in the pond feature, no data form was prepared. The feature was mapped following the ordinary high water mark.

The soil in the project area is mapped as San Joaquin silt loam, 0-3% slopes (Figure 3) which is not on the list of hydric soils of California (USDA 2019). The study area is periodically irrigated to maintain green forage in the pasture.

The boundaries of the aquatic features were mapped in the field using an Apple iPhone running iGIS (v. 8.4.1) connected via Bluetooth to a GPS receiver (Eos Arrow Lite) with submeter accuracy using vegetation and topography to determine the feature boundaries. All field data are presented in the attached datasheets (Attachment 1).

2.1 Routine Determinations for Wetlands

To be determined a wetland, an aquatic feature must meet the following criteria:

- a majority of dominant vegetation species are wetland-associated species;
- hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and
- hydric soils are present.

Hydrophytic vegetation is plant life that grows and is typically adapted for life in permanently or periodically saturated soils. Dominant plant species observed at each sampling point were classified according to their indicator status using the North American Digital Flora: National Wetland Plant List (Lichvar et al. 2016). If the majority (more than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), the site was considered to be dominated by hydrophytic vegetation.

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, redox depressions, and vernal pools. At each sampling point, a soil pit was excavated to the depth needed to document an indicator to confirm the absence of indicators, or until refusal at each sampling point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the *Munsell Soil Color Charts* (Munsell 2009). Hydric soils are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment. These processes and the features in the soil that develop can be identified by looking at the color, texture and other indicators within the soils.

Wetland hydrology includes features that are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Indicators of wetland hydrology can include

visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks, drift lines and sediment deposits. The occurrence of one of these indicators is sufficient to conclude that wetland hydrology is present.

3 Results and Discussion

A total of 0.36 acres of aquatic resources were mapped within the Study Area. The wetland determination data forms are included in Attachment 1. Photographs of the Study Area are included in Attachment 2. A discussion of the aquatic resources is presented below, and the aquatic resources delineation map is presented in Figure 4.

The aquatic features include an unvegetated and recently excavated pond (0.32 acres) and a seasonal wetland swale (0.036 acres including the culverted area). The winter of 2020-2021 was very dry throughout Northern California resulting in many wetlands and ponds holding water for no longer than a few weeks. Despite the dry conditions, water was present in both features after a storm in February 2021. Hydrophytic vegetation was dominant within the seasonal wetland swale and included one vernal pool indicator species (*Plagiobothrys stipitatus* var. *micranthus*). Soils had been recently disturbed, but manganese concretions were found mixed within the soil matrix at depths up to 12 inches. In addition, a portion of the swale was covered with gravel (approximately 40 sf) near the mouth of the culvert (see photos in Attachment 2).

No vernal pools were found in the areas indicated by the CARI mapping (Figure 3). While it remains unclear when these features were removed, the best available imagery indicates it was prior to the most recent land ownership change in 2019. As indicated above, this area was covered by fill material by the time this assessment was performed, making it impossible to assess whether the wetlands were extant.

Please let me know if you have any questions.

Sincerely,



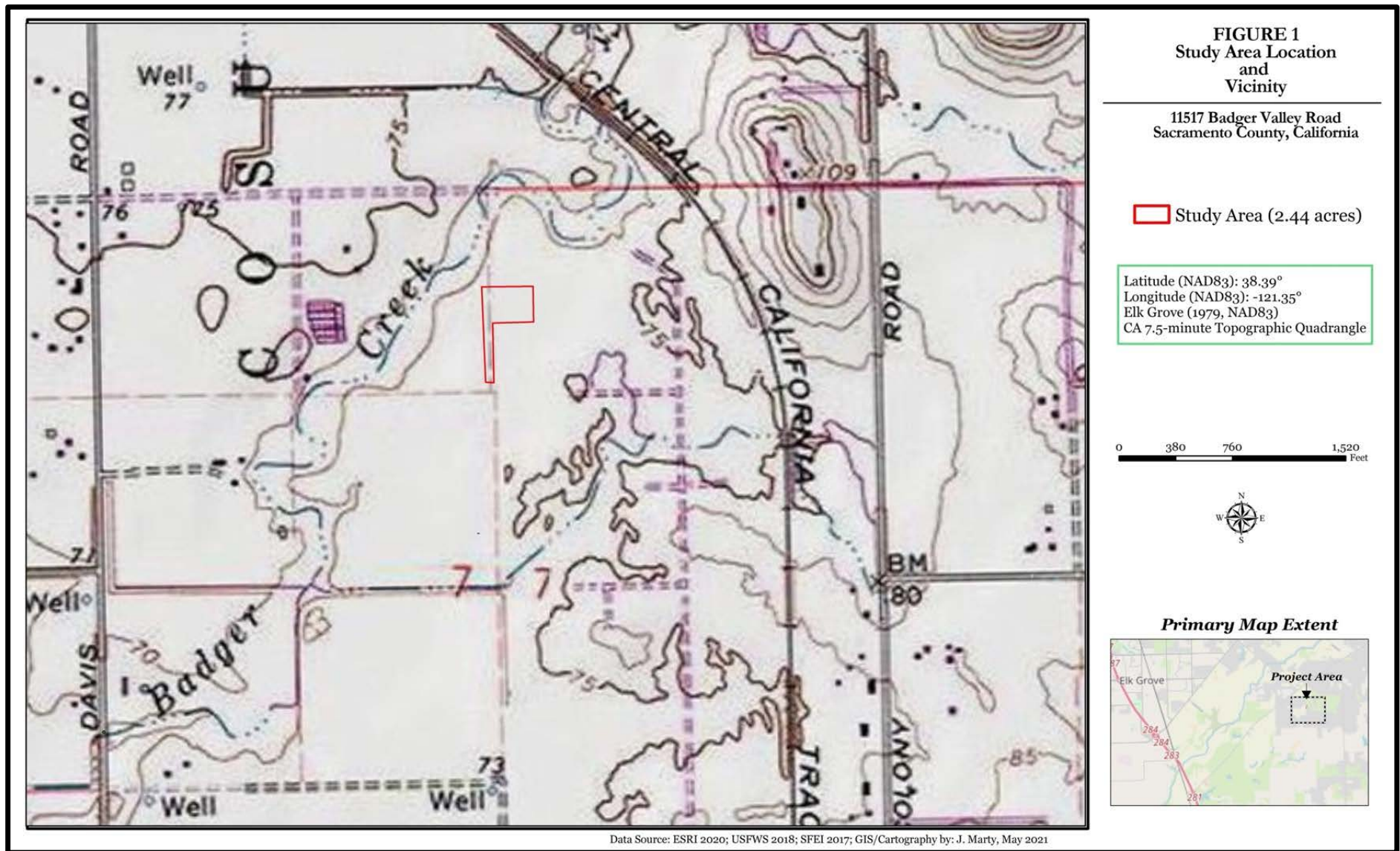
Jaymee T. Marty, Ph.D.
Ecologist

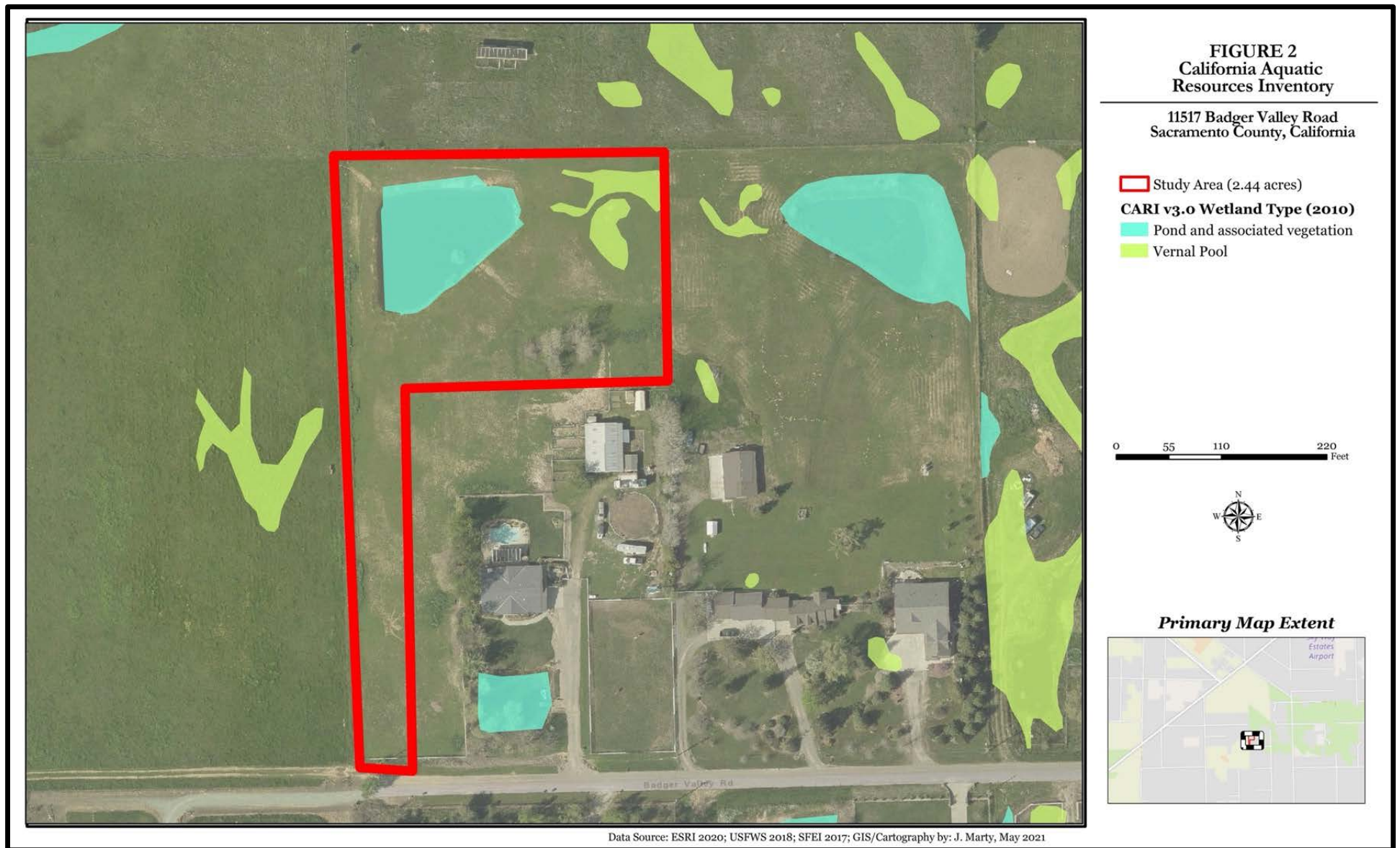
4 References

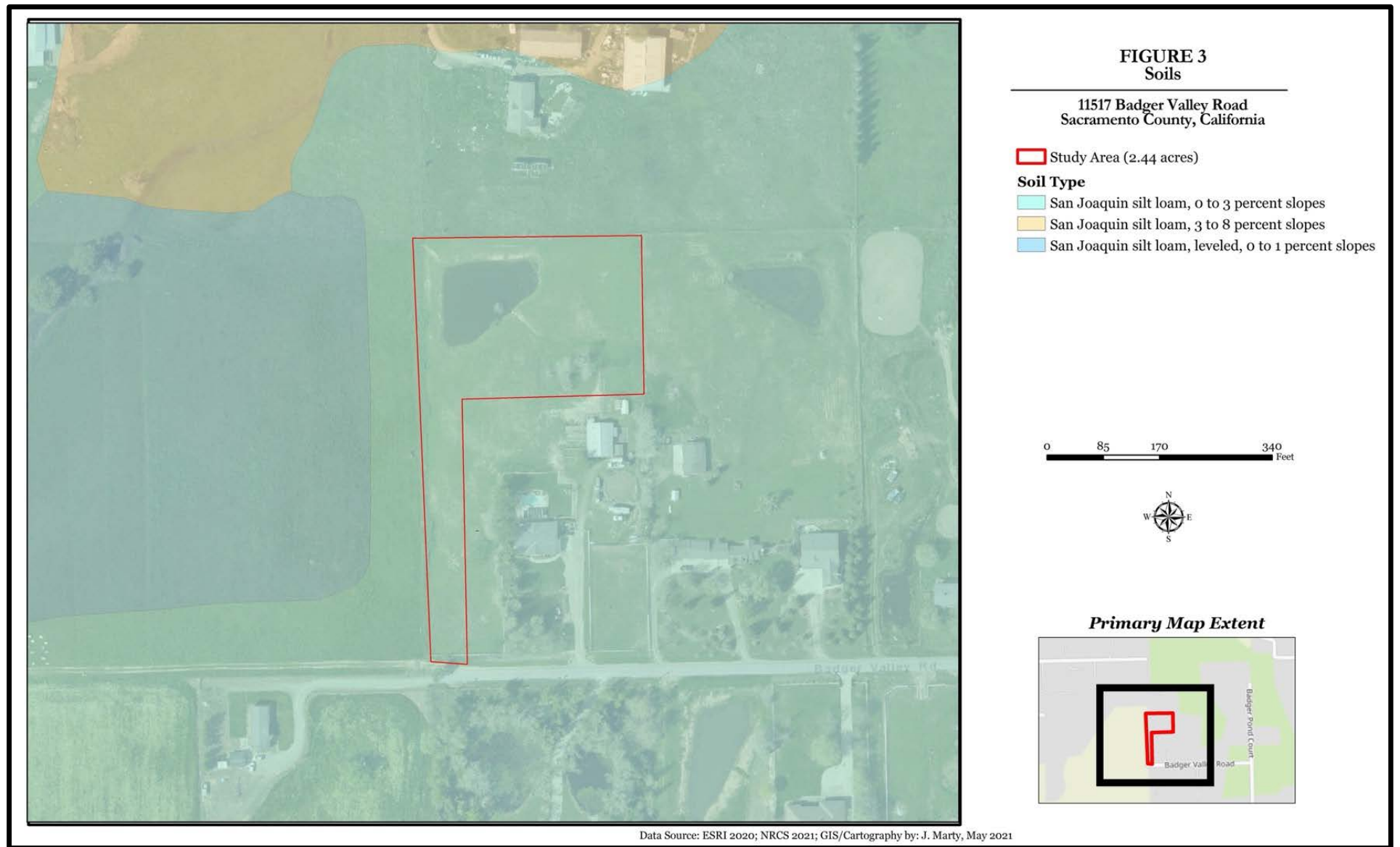
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<https://www.nrcs.usda.gov/wps/portal/nrcs/>

Attachments:

1. Wetland Delineation datasheets
2. Photographs







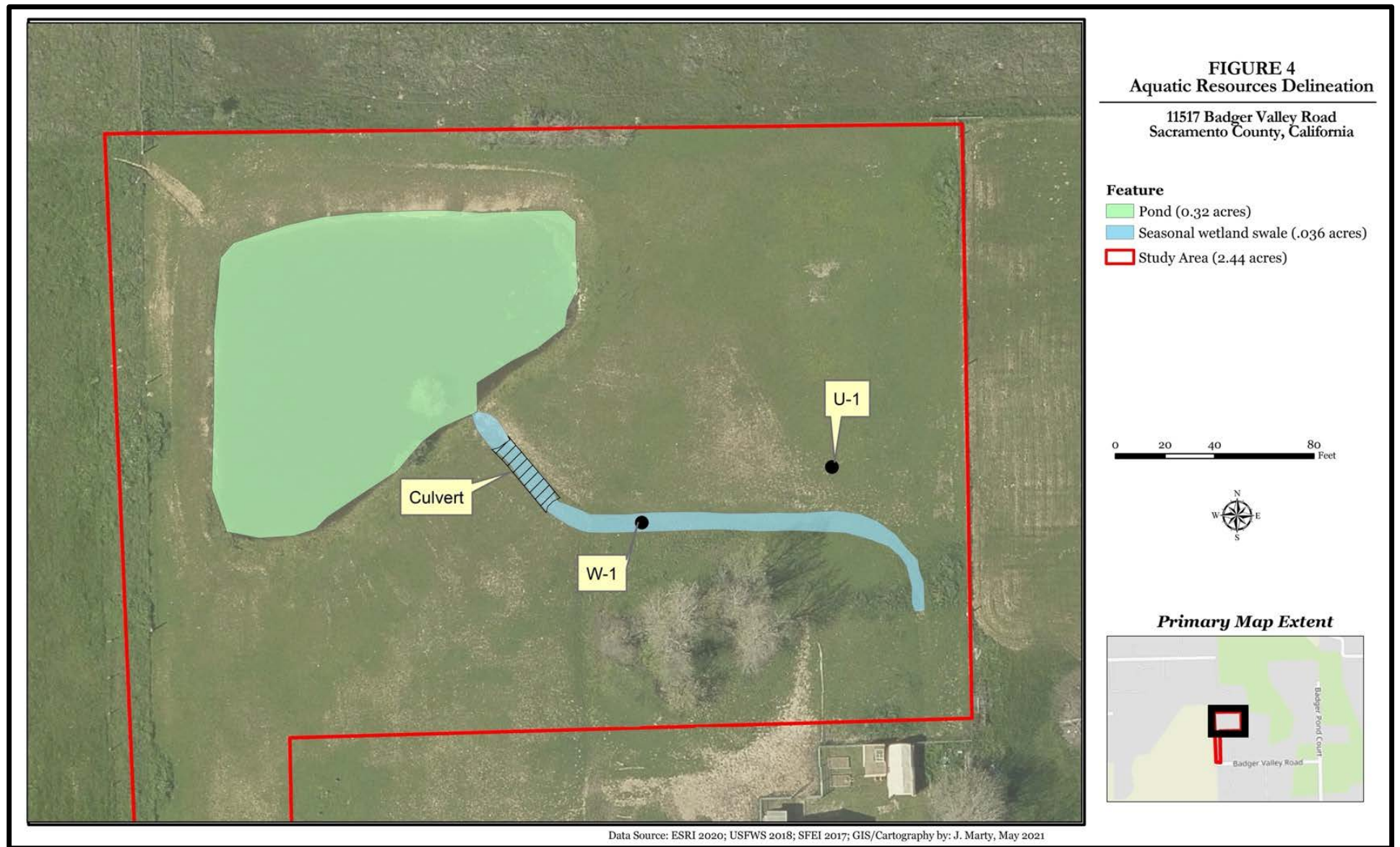




Figure 5. Aerial Image of Project Site from April 1981 (UCSB 2021).

Attachment 1

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 11517 Badger Valley Road City/County: Wilton/Sacramento Sampling Date: 4/10/2021
 Applicant/Owner: Kerry Bowen State: CA Sampling Point: W-1
 Investigator(s): Jaymee Marty Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): valley Local relief (concave, convex, none): slightly concave Slope (%): 0-3
 Subregion (LRR): Mediterranean California Lat: 38° 23' 30.882" N Long: 121° 15' 1.428" W Datum: NAD 1983
 Soil Map Unit Name: San Joaquin silt loam, 0-3% slope 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 <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____	
Remarks: Data point is a wetland sample point (W-1) that was paired with an upland point (U-1; Figure 1). Feature is a culverted drainage located in a disturbed area that has been graded in the past.		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <u>35</u> x 2 = <u>70</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species _____ x 5 = _____ Column Totals: <u>65</u> (A) <u>180</u> (B) Prevalence Index = B/A = <u>3</u>
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: <u>1m x 3m</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> 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.
1. <u>Plagiobothrys stipitatus</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Leontodon saxitilis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
3. <u>Festuca bromoides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Erodium moschatum</u>	<u>5</u>	<u>No</u>	<u>NL</u>	
5. <u>Ranunculus muricatus</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	
6. <u>Centromadia fitchii</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	
7. <u>Poa annua</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
8. <u>Festuca perennis</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>25</u> % Cover of Biotic Crust <u>0</u>				
Remarks: Feature has been altered to improve drainage off of adjacent fields but has some low areas where water ponds and wetland vegetation can develop. A culvert had been placed to allow water to drain into pond (see photos). The adjacent pasture to the south is irrigated and runoff enters the drainage. Species composition in this south pasture overlaps with that of feature W-1 due to the irrigation. The paired upland plot was located in an area to the north that does not appear to be receiving irrigation.				

APPENDIX A

SOIL

Sampling Point: W-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	7.5YR 4/3	98	10YR 3/1	2	C	M	clay	
2-12	7.5YR 4/4	98	10YR 3/1	2	C	M	loam	

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

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Depressions (F8)	³ Indicators of hydrophytic vegetation and
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Vernal Pools (F9)	wetland hydrology must be present,
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		unless disturbed or problematic.

Restrictive Layer (if present):

Type: Duripan
Depth (inches): 24-29" below surface

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Soils have been disturbed in the past.

HYDROLOGY

Wetland Hydrology Indicators:

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

Secondary Indicators (2 or more required)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 2-4" -2 Feb

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? Yes ☒ No ☐ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Remarks:

Ponding water observed in this feature on 2 February (see photos). It was an extremely dry year and many wetlands in the area did not hold any water.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 11517 Badger Valley Road City/County: Wilton/Sacramento Sampling Date: 4/10/2021
 Applicant/Owner: Kerry Bowen State: CA Sampling Point: U-1
 Investigator(s): Jaymee Marty Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): valley Local relief (concave, convex, none): slightly convex Slope (%): 0-3
 Subregion (LRR): Mediterranean California Lat: 38° 23' 31.212" N Long: 121° 15' 1.68" W Datum: NAD 1983
 Soil Map Unit Name: San Joaquin silt loam, 0-3% slope 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 <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: Data point is an upland sample point (U-1) that was paired with a wetland point (W-1; Figure 1). Area is annual grassland adjacent to project footprint and drainage feature W-1.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: <u>1m x 3m</u>) 1. <u>Soliva sessilis</u> <u>5</u> <u>No</u> <u>FACU</u> 2. <u>Leontodon saxatilis</u> <u>10</u> <u>Yes</u> <u>FACU</u> 3. <u>Erodium cicutarium</u> <u>10</u> <u>Yes</u> <u>NL</u> 4. <u>Erodium botrys</u> <u>30</u> <u>Yes</u> <u>FACU</u> 5. <u>ranunculus muricatus</u> <u>10</u> <u>Yes</u> <u>FACW</u> 6. <u>Festuca bromoides</u> <u>20</u> <u>Yes</u> <u>FACU</u> 7. <u>Holocarpa virgata</u> <u>5</u> <u>No</u> <u>NL</u> 8. <u>Festuca perennis</u> <u>5</u> <u>No</u> <u>FAC</u> _____ 95% = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u>0</u>				
Remarks: Surface soil within study area has been altered by placement of material dredged from adjacent pond into the project footprint to create a base for the structure that will be placed there. The paired upland plot was located in an area to the north that does not appear to be receiving irrigation but may have received some of the excavated soil.				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 <input checked="" type="checkbox"/>

APPENDIX A

SOIL

Sampling Point: U-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5YR 5/4	100					silty loam	

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

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present):

Type: Duripan
Depth (inches): 24-29" below surface

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Soils have been disturbed in the past.

HYDROLOGY

Wetland Hydrology Indicators:

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

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____
Water Table Present? Yes ☐ No ☒ Depth (inches): _____
Saturation Present? Yes ☐ No ☒ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

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

Remarks:

This area was dry in February when water was observed ponding in feature W-1. It was an extremely dry year and many wetlands in the area did not hold any water.

Attachment 2

Photographs



Photo 1. Ponding water in the seasonal wetland swale (Point W-1, Figure 4) on 2 Feb 2021.



Photo 2. Water level in the seasonal pond on 2 Feb 2021.



Photo 3. Seasonal wetland swale (W-1) on 10 April 2021.



Photo 4. Gravel and rock at culvert within seasonal wetland swale (W-1) on 10 April 2021.



Photo 5. Upland adjacent to seasonal wetland swale (Point U-1) on 10 April 2021.



Photo 6. Seasonal Pond on 10 April 2021.

RECORDING REQUESTED BY AND WHEN
RECORDED MAIL TO:

Sacramento County
Department of Community Development
Planning and Environmental Review

COUNTY MAIL CODE: 01-225
No Fee – For the Benefit of Sacramento
County (Code 6103)

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW
MITIGATION MONITORING AND REPORTING PROGRAM

CONTROL NUMBER: PLNP2020-00133

NAME: Badger Valley ADU

LOCATION: The project site is located at 11517 Badger Valley Road, in the Cosumnes community.

ASSESSOR'S PARCEL NUMBER: 136-0130-048-0000

OWNER: Kerry & Cheri Bowen
11517 Badger Valley Road
Wilton, CA 95693

APPLICANT: William Huss
11517 Badger Valley Road
Wilton, CA 95693

PROJECT DESCRIPTION:

The proposed project includes the construction of an accessory dwelling unit, associated utilities and driveway. The proposed project requires the following land use entitlement:

1. A **Special Development Permit** to allow for a 1,159 square foot Accessory Dwelling Unit (ADU), in the rear yard of a 4.79 acre rural parcel in the A-5 and A-5 (F) (Flood Combining) zone. The proposed ADU deviates from the maximum square footage allowed outright on a lot greater than 5,200 square feet pursuant to Section 5.4.5.F.3 of the Zoning Code.

A 16-foot wide, 4-inch compacted gravel road will be constructed on the west side of the subject parcel to provide access to the proposed ADU from Badger Valley Road. Minor finish grading is planned to pitch the driveway for drainage. The proposed ADU

will be a modular home with a separate parking area. The ADU foundation will be I-beams installed on 6-inches of ¾-inch aggregate base rock tie down foundation. No slab or excavation related to the foundation is proposed. Minor finish grading is planned for the foundation work and remaining improvements associated with the project.

TYPE OF ENVIRONMENTAL DOCUMENT: Mitigated Negative Declaration

PREPARED BY: Sacramento County
Planning and Environmental Review
827 7th Street, Room 225
Sacramento, CA 95814

PHONE: (916) 874-6141

DECLARATION OF AGREEMENT

This Mitigation Monitoring and Reporting Program applies to certain real property, a Legal Description of which is attached as Exhibit A. I (We) the undersigned agree that this Mitigation Monitoring and Reporting Program applies to the real property described in Exhibit A. I (We) the undersigned am (are) the legal owner(s) of that property, and agree to comply with the requirements of this Mitigation Monitoring and Reporting Program (Summary and Mitigation Measures attached).

IN WITNESS WHEREOF, this declaration is hereby executed by the undersigned named legal owner(s) of the subject property on this ____ day of _____, 20____.

OWNER(S): _____
(Print name above) (title above)

Title: _____
(Print company, corporation, trust or organization name above, if applicable)

Signature: _____
(Signature above)

California All-Purpose Acknowledgment

Pursuant to SB 1050 (Chapter 197, Statutes of 2014), Civil Code section 1189 has been amended to provide that any certificate of acknowledgment taken within the State of California shall be in the following form:

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
)
 County of _____)

On _____ before me, _____, Notary Public,
(Insert name and title of officer)
 personally appeared _____ who proved to me on
 the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within
 instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized
 capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon
 behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

 (Signature) (Seal)

TABLE OF MEASURES

☐ **MITIGATION MEASURE A: BASIC CONSTRUCTION EMISSIONS CONTROL PRACTICES 9**

☐ **MITIGATION MEASURE B: WETLANDS AND WATERS 12**

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TRIBAL CULTURAL RESOURCES..... 13**

☐ **MITIGATION MEASURE D: GREENHOUSE GASES 15**

PURPOSE AND PROCEDURES

Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program has been established for the project entitled Badger Valley ADU (Control Number: PLNP2020-00133).

PURPOSE

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

NOTIFICATION AND COMPLIANCE

It shall be the responsibility of the project applicant/owner to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Environmental Coordinator will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). Any non-compliance will be reported to the project applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant/owner in accordance with Chapter 20.02 of the Sacramento County Code.

PAYMENT

1. The proponent shall comply with the MMRP for this project, including the payment of a flat fee to cover the Planning and Environmental Review staff costs incurred during implementation of the MMRP. The MMRP fee for this project is \$4,000.00. If the project is not expected to go to construction within the next two years, an administrative fee of \$948.00 may be paid. The administrative fee will be deducted from the total MMRP fee when construction plans are submitted.
2. Until the MMRP has been recorded and the administrative portion of the MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved. Until the balance of the MMRP fee has been paid, no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.

RECORDATION

In order to record the adopted Mitigation Monitoring and Reporting Program with the County Recorder as required by Section 20.02.050(b)(2) of the Sacramento County

Code, the project applicant/owner shall provide to Planning and Environmental Review a Legal Description for the real property that is the subject of the project.

COMPLETION

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved Mitigation Monitoring and Reporting Program has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

PROPERTY TRANSFER

The requirements of this adopted Program run with the real property that is the subject of the project, as described in Exhibit A. Successive owners, heirs and assigns of this real property are bound to comply with all of the requirements of the adopted Program.

Prior to any lease, sale, transfer or conveyance of any portion of the real property that is the subject of the project, the record owner(s) at the time of the application for the project, or his or her successor's in interest, shall provide a copy of the adopted Program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

PENALTIES

Chapter 20.02 of the Sacramento County Code permits civil remedies and criminal penalties to be imposed in the event of non-compliance with an adopted Mitigation Monitoring and Reporting Program. The civil remedies, which are found in Section 20.02.090 of the Sacramento County Code, include injunctive relief, stop work orders, revocation of any special permit granted concurrently with the approval of a Program, and the abatement of any resulting nuisance. The criminal penalties, which are found in Section 20.02.080 of the Sacramento County Code, include a fine not to exceed five hundred dollars or imprisonment in the County jail not to exceed six months, or both.

Plans that are inconsistent with the adopted Mitigation Measures will not be approved.

In the event of an ongoing, serious non-compliance issue, the Environmental Coordinator may call for a "stop work order" on the project.

STANDARD PROVISIONS

Page one of all Project Plans must include the following statement in a conspicuous location:

"All Plans associated with this project are subject to the conditions of Mitigation Monitoring and Reporting Program PLNP2020-00133. For any

questions regarding compliance with the MMRP document, contact MMRP staff at (916) 874-6141."

All Project Plans and any revisions to those Plans shall be in full compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). The project applicant/owner shall submit one copy of all such Plans and any revisions to the Environmental Coordinator prior to final approval by the Sacramento County Building Permits and Inspection Division (BPID) or Site Improvement and Permit Section (SIPS). If the Environmental Coordinator determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant/owner with a letter specifying the items of non-compliance, and instructing the applicant/owner to revise the Plans, and then resubmit one copy of the revised Plans to the Environmental Coordinator, for determination of compliance, prior to final approval by BPID or SIPS.

Additionally, the project applicant/owner shall notify the Environmental Coordinator no later than 48 hours prior to the start of construction and no later than 24 hours after its completion. The applicant/owner shall notify the Environmental Coordinator no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

☐ **MITIGATION MEASURE A: BASIC CONSTRUCTION EMISSIONS CONTROL PRACTICES**

The following Basic Construction Emissions Control Practices are considered feasible for controlling fugitive dust from a construction site. The practices also serve as best management practices (BMPs), allowing the use of the non-zero particulate matter significance thresholds. Control of fugitive dust is required by District Rule 403 and enforced by District staff.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board (CARB) enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Signature: _____ **Date:** _____

☐ **MITIGATION MEASURE B: WETLANDS AND WATERS**

To compensate for impacts to state and/or federally jurisdictional waters, the applicant shall obtain all applicable permits from the Army Corps of Engineers and the Central Valley Regional Water Quality Control Board prior to issuance of improvement plans. If waters are determined to not be jurisdictional by permitting agencies, then correspondence indicating such shall be submitted to the satisfaction of the Environmental Coordinator.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ MITIGATION MEASURE C: INADVERTENT DISCOVERY OF CULTURAL RESOURCES OR TRIBAL CULTURAL RESOURCES

1. If subsurface deposits believed to be cultural or human in origin are discovered during ground disturbance, site preparation, or construction activities, then all work must halt within a 100-foot radius of the discovery. A qualified professional archeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.
2. Work shall not continue within the 100-foot radius of the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.
 - a) If a potentially-eligible resource is encountered, then the archeologist, and the project proponent shall coordinate with the Sacramento County Planning and Environmental Review (PER), and arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to PER as verification that the provisions of CEQA for managing unanticipated discoveries have been met.
 - b) Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work must stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE D: GREENHOUSE GASES**

The project is required to incorporate the Tier 1 Best Management Practices or propose Alternatives that demonstrate the same level of GHG reductions as BMPs 1, listed below. At a minimum, the project must mitigate natural gas emissions and provide necessary wiring for an all-electric retrofit to accommodate future installation of electric space heating, water heating, drying, and cooking appliances.

Tier 1: Best Management Practices (BMP) Required for all Projects

- BMP 1: No natural gas: Projects shall be designed and constructed without natural gas infrastructure. A propane tank is allowed with pre-wiring of receptacles and breakers installed at the locations of furnace, water heater, dryer, and cooking appliance locations.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

EXHIBIT A: LEGAL DESCRIPTION
