Negative Declaration & Notice Of Determination

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

ENVIRONMENTAL DETERMINATION NO. ED17-217 **DATE:** September 20, 2018

PROJECT/ENTITLEMENT: Brodiaea Inc. Grading Permit; PMT2017-01859

APPLICANT NAME: Brodiaea Inc. (Matt Turrentine) **Email:** matt@grapevinecap.com
ADDRESS: 444 Higuera St. Suite 202, San Luis Obispo
CONTACT PERSON: Francisco Vargas **Telephone:** (805) 461-5765

PROPOSED USES/INTENT: Request by Brodiaea Inc. for a major grading permit to construct a high-density polyethylene (HDPE) lined agricultural reservoir within the existing Truesdale Vineyard to provide frost protection and irrigation. The reservoir would be supplied by PVC waterlines from two existing wells located on the subject property. Connection to the southeast well would require installation of a 12-inch underground pipe in an 18-inch wide, 4-feet deep trench, along the southeast access road for approximately 1,159 feet. The reservoir would be approximately 207 feet wide, 457 feet long, and 28 feet deep, with a maximum capacity of 40.1 acre-feet. The project would result in the disturbance of approximately 4.48 acres (195,149 square feet), including approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill, on a 44-acre parcel. The applicant proposes to balance the material on-site with no required import or export of soils.

LOCATION: The proposed project is within the Agriculture land use category and is located approximately 2,000 feet west of Shell Creek Road, approximately 3,000 feet south of Truesdale Road, 4.75 miles south of the community of Shandon. The site is in the Shandon-Carrizo Sub Area (North) of the North County planning area.

LEAD AGENCY: **County of San Luis Obispo**
Dept of Planning & Building
976 Osos Street, Rm. 200
San Luis Obispo, CA 93408-2040
Website: http://www.sloplanning.org

STATE CLEARINGHOUSE REVIEW: YES ☒ **NO** ☐

OTHER POTENTIAL PERMITTING AGENCIES: California Department of Fish and Wildlife
Regional Water Quality Control Board

ADDITIONAL INFORMATION: Additional information pertaining to this Environmental Determination may be obtained by contacting the above Lead Agency address or (805)781-5600.
COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT .....4:30 p.m. (2 wks from above DATE)

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. _____

This is to advise that the San Luis Obispo County_____ as ☐ *Lead Agency* ☐ *Responsible Agency* approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures and monitoring were made a condition of approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the 'Lead Agency' address above.

	Holly Phipps (hphipps@co.slo.ca.us)		County of San Luis Obispo
Signature	**Project Manager Name**	**Date**	**Public Agency**

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Planning Department, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: Request by Brodiaea Inc. for a major grading permit to construct a high-density polyethylene (HDPE) lined agricultural reservoir within the existing Truesdale Vineyard to provide frost protection and irrigation. The reservoir would be supplied by PVC waterlines from two existing wells located on the subject property. Connection to the southeast well would require installation of a 12-inch underground pipe in an 18-inch wide, 4-feet deep trench, along the southeast access road for approximately 1,159 feet. The reservoir would be approximately 207 feet wide, 457 feet long, and 28 feet deep, with a maximum capacity of 40.1 acre-feet. The project would result in the disturbance of approximately 4.48 acres (195,149 square feet), including approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill, on a 44-acre parcel. The applicant proposes to balance the material on-site with no required import or export of soils.

The proposed project is within the Agriculture land use category and is located approximately 2,000 feet west of Shell Creek Road, approximately 3,000 feet south of Truesdale Road, 4.75 miles south of the community of Shandon. The site is in the Shandon-Carrizo Sub Area (North) of the North County planning area.

Access to the project would be provided by existing farm roads and no new driveways or roads would be constructed.

The project is located in the Paso Robles Groundwater Basin. The project includes management strategies to reduce evaporative water losses. Water would be maintained in the reservoir as follows:

- November 16th through February 28th – the reservoir will be emptied of well supplied water.
- March 1st through May 31st – the reservoir will be maintained at a full condition for potential frost protection.
- June 1st through November 15th – the reservoir will be maintained at 25% full condition for irrigation operations.

Filling would occur at a rate of 910 gallons per minute (gpm) from the two wells (455 gpm per well) over a 10-day period. When full, the surface area of the pond would be approximately 2.4 acres and 1 acres when maintained at 25% of its capacity.

ASSESSOR PARCEL NUMBER(S): 037-291-038

Latitude: 35° 35' 23.1" N Longitude: 120° 20' 41.4" W **SUPERVISORIAL DISTRICT** # 1

B. EXISTING SETTING

PLAN AREA: North County **SUB**: Shandon-Carrizo(North) **COMM:** Rural

LAND USE CATEGORY: Agriculture

COMB. DESIGNATION: Flood Hazard

PARCEL SIZE: 44 acres

TOPOGRAPHY: Nearly level to gently sloping

VEGETATION: , Agriculture, disturbed, grasses

EXISTING USES: Agricultural uses, undeveloped

SURROUNDING LAND USE CATEGORIES AND USES:

North: Agriculture; undeveloped	*East:* Agriculture; vineyards
South: Agriculture; agricultural accessory buildings	*West:* Agriculture; undeveloped

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, at least one issue was identified as having a potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST

1. AESTHETICS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Create an aesthetically incompatible site open to public view?	☐	☐	☒	☐
b) Introduce a use within a scenic view open to public view?	☐	☐	☒	☐
c) Change the visual character of an area?	☐	☐	☒	☐
d) Create glare or night lighting, which may affect surrounding areas?	☐	☐	☒	☐
e) Impact unique geological or physical features?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

Aesthetics

Setting. The proposed reservoir is located approximately 5.1 miles south of Highway 46 and the rural community of Shandon, within a predominantly agricultural area. The visual setting includes vast agricultural views (predominantly vineyards), open hillsides, a few scattered rural residences, and other appurtenant agricultural infrastructure and development. There are approximately 25 to 30 existing agricultural reservoirs within 5 miles of the project site. Highway 46 has been identified as an eligible state scenic highway by the California Department of Transportation's (Caltrans) California Scenic Highway Mapping System, though it has not been officially designated as a state scenic highway.

Impact. The project would not be visible from Highway 46, Highway 41, or any other major public roadways due to distance and intervening topography. The project would not silhouette against any ridgelines as viewed from public roadways. The project would be compatible with adjacent uses and the surrounding visual character, which includes vineyards and agricultural reservoirs. The site does not include unique geological or physical features and no new lighting would be installed at the site. Therefore, no significant visual impacts would occur.

Mitigation/Conclusion. No significant impacts related to aesthetics or visual resources would occur. No mitigation measures are necessary.

2. AGRICULTURAL RESOURCES *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?	☐	☐	☒	☐
b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	☐	☐	☒	☐
c) Impair agricultural use of other property or result in conversion to other uses?	☐	☒	☐	☐
d) Conflict with existing zoning for agricultural use, or Williamson Act program?	☐	☐	☒	☐
e) Other: _____	☐	☐	☐	☒

Agricultural Resources

Setting. Project Elements. The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Agriculture

State Classification: Farmland of Statewide Importance; Prime Farmland if irrigated

Historic/Existing Commercial Crops: None

In Agricultural Preserve? Yes, Shandon AG Preserve Area

Under Williamson Act contract? Yes

Based on the California Department of Conservation, the Natural Resources Agency, Farmland Mapping and Monitoring Program (FMMP), and San Luis Obispo County Important Farmland Map (FMMP 2016), the project site contains Farmland of Local Importance. The soil type(s) and characteristics on the subject property include:

The soil type(s) and characteristics on the subject property include:

150-San Emigdio sandy loam (2 to 9% slopes). San Emigdio is typically found in alluvial fans and flood plains at an elevation of 1,095 to 2,000 feet. Typical vegetation includes annual grasses and forbs and typical uses are vineyards and orchards, irrigated crops, dry-farmed crops, and livestock grazing. This gently sloping coarse loamy soil is considered moderately drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to seepage in bottom layer. The soil is considered Class IV without irrigation and Class II when irrigated. Per NRCS classifications, this soil is farmland of statewide importance.

159-Sorrento loam (0 to 2% slopes). Sorrento is typically found in alluvial fans at an elevation of 1,800 to 2,095 feet. Typical vegetation includes annual grasses and forbs and typical uses are vineyards and orchards, irrigated crops, dry-farmed crops, and livestock grazing. Runoff potential is low, permeability is moderately slow, and this soil is well drained. It has a wind erodibility rating of 4 (moderate susceptibility). The soil is considered Class IV(c) without irrigation and Class I when irrigated. Per NRCS classifications, this soil is prime farmland if irrigated.

Impact. The proposed reservoir would be located on land designated as Farmland of Statewide Importance per NRCS soil classifications. Pipeline connections to nearby wells would be within Prime Farmland (if irrigated). The proposed agricultural pond is considered an agricultural use and would support the production of existing vineyards. Therefore, the project would not result in the conversion of agricultural or prime farmland to non-agricultural use, or conflict with the existing Williamson Act contract that the property is currently enrolled in. Construction and operation of the reservoir would not adversely affect the existing vineyards onsite (it would support them), and the storage of water would not adversely affect proximate agricultural uses.

The proposed project would result in additional pumping from the groundwater basin during initial filling of the reservoir and to compensate for evaporation loss from the surface of the proposed reservoir. This additional pumping would reduce agricultural water supplies available to adjacent parcels. A hydrogeological analysis was prepared to determine if additional pumping would substantially impact agricultural water supplies to nearby, off-site wells. The analysis determined that the project would result in drawdown between 0.7 to 6.6 feet during the initial filling of the reservoir, and less than 0.07 foot drawdown during all other operational scenarios evaluated (Monsoon Consultants 2017). This information was peer reviewed by the County and it was determined that the information was accurate and that this amount of drawdown would not substantially affect well operations, would be limited in duration, and would be less than significant (GSI Water Solutions, Inc. 2018).

The project applicant would be required to offset any increased water demands resulting from the project, including water loss through evaporation (refer to Section 14, Water and Hydrology). Offsets would be required to be achieved from within the existing Truesdale Vineyards that the reservoir would benefit and could include fallowing of other existing agricultural areas or using existing water credits. An amended Agricultural Offset Clearance letter from Cheryl Ku, a San Luis Obispo County Planner, dated October 16, 2016, allows for an additional 148.6 acres of vineyard to be planted on site. The water duty factor for the vineyard is 1.25 acre-feet per acre per year. With an average annual net evaporative loss estimated at 5.40 acre-feet, 4.23 acres of vineyard would require fallowing (or not be planted) to achieve a 1:1 net evaporative water loss offset. Fallowing (not planting) agricultural areas to achieve the required offset would not result in indirect significant impacts, as this is a normal part of agricultural operations within the vineyard (fallowing certain areas, planting new areas). In addition, the stored water would only be used as stated by the applicant for onsite agricultural uses, and cannot be sold or used off-site.

Mitigation/Conclusion. The reservoir would have a generally beneficial effect on agricultural resources and would not substantially deplete groundwater supplies in proximate wells to an extent that would adversely affect adjacent uses. Additionally, the project would be required to offset any increased water demands from the project, including water loss through evaporation (discussed further in Section 14 Water and Hydrology). Proof of the offset is required in Mitigation Measure WR-1. Mitigation has also been identified that requires project plans to be revised to state that the purpose of the proposed reservoir is for on-site frost protection and irrigation only and off-site transfer of reservoir water and/or other uses of the reservoir are prohibited. Implementation of these mitigation measures would reduce potential indirect impacts to agricultural resources; therefore, potential direct and indirect impacts to agricultural resources would be less than significant.

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?	☐	☒	☐	☐

3. AIR QUALITY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) Expose any sensitive receptor to substantial air pollutant concentrations?	☐	☐	☒	☐
c) Create or subject individuals to objectionable odors?	☐	☐	☒	☐
d) Be inconsistent with the District's Clean Air Plan?	☐	☐	☒	☐
e) Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?	☐	☐	☒	☐
GREENHOUSE GASES				
f) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*	☐	☐	☒	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
h) Other: _____	☐	☐	☐	☒

Air Quality

Setting. The San Luis Obispo County Air Pollution Control District (APCD) has developed and updated their CEQA Air Quality Handbook (2012) to evaluate project-specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

Greenhouse Gas (GHG) Emissions are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

The passage of AB32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the greenhouse gas emissions reduction goal for the State of California into law. The law required that by 2020, State emissions must be reduced to 1990 levels. This is to be accomplished by reducing greenhouse gas emissions from significant sources via regulation, market mechanisms, and other actions. Subsequent legislation (e.g., SB97-Greenhouse Gas Emissions bill) directed the California Air Resources Board (CARB) to develop statewide thresholds.

In March 2012, the San Luis Obispo County Air Pollution Control District (APCD) approved thresholds for GHG emission impacts, and these thresholds have been incorporated the APCD's CEQA Air Quality Handbook. APCD determined that a tiered process for residential / commercial land use projects was the most appropriate and effective approach for assessing the GHG emission impacts. The tiered approach includes three methods, any of which can be used for any given project:

1. Qualitative GHG Reduction Strategies (e.g. Climate Action Plans): A qualitative threshold that is consistent with AB 32 Scoping Plan measures and goals; or,
2. Bright-Line Threshold: Numerical value to determine the significance of a project's annual GHG emissions; or,
3. Efficiency-Based Threshold: Assesses the GHG impacts of a project on an emissions per capita basis.

For most projects the Bright-Line Threshold of 1,150 Metric Tons CO2/year (MT CO2e/yr) will be the most applicable threshold. In addition to the residential/commercial threshold options proposed above, a bright-line numerical value threshold of 10,000 MT CO2e/yr was adopted for stationary source (industrial) projects.

It should be noted that projects that generate less than the above-mentioned thresholds will also participate in emission reductions because air emissions, including GHGs, are under the purview of the California Air Resources Board (or other regulatory agencies) and will be "regulated" either by CARB, the Federal Government, or other entities. For example, new vehicles will be subject to increased fuel economy standards and emission reductions, large and small appliances will be subject to more strict emissions standards, and energy delivered to consumers will increasingly come from renewable sources. Other programs that are intended to reduce the overall GHG emissions include Low Carbon Fuel Standards, Renewable Portfolio standards and the Clean Car standards. As a result, even the emissions that result from projects that produce fewer emissions than the threshold will be subject to emission reductions.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation.

Impact. As proposed, the project would result in the disturbance of approximately 4.48 acres (195,149 square feet), including 44,000 cubic yards of cut and 44,000 cubic yards of fill. This would result in the creation of construction dust as well as short-term vehicle emissions from construction.

Based on Table 2-2 of the APCD's CEQA Air Quality Handbook, estimated construction-related emissions are shown in Table 1.

Table 1. Estimated Construction Emissions

Pollutant	Total Estimated Emissions	APCD Quarterly Threshold	Within Threshold?
ROG + NOx (combined)	2.5 tons	2.5 tons	No
Diesel Particulate Matter (DPM)	0.1 tons	0.13 tons	Yes
Fugitive Particulate Matter (PM_{10})	4.17 tons	2.5 tons	No

Based on air quality estimates provided in Table 1, the project would result in construction emissions that exceed the APCD's thresholds of significance for ROG + NOx (combined) and fugitive particulate matter (PM10). The nearest sensitive receptors are located approximately 2,000 feet from the proposed

project site; therefore, the project is not in close proximity to sensitive receptors that are likely to result in nuisance complaints. The project site is not located in an APCD-designated naturally occurring asbestos (NOA) zone (San Luis Obispo County APCD 2018).

The project would be subject to the primary and expanded fugitive dust control measures pursuant to Land Use Ordinance (LUO) Section 22.52.160.C (Construction Procedures, Air Quality Controls):

a. *Primary Measures. All projects involving grading or site disturbance shall implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:*
    1. *Reduce the amount of the disturbed area where possible;*
    2. *Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency shall be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water shall be used whenever possible;*
    3. *All dirt stock-pile areas shall be sprayed daily as needed; and*
    4. *All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible, and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.*
b. *Expanded Measures. Projects with site disturbance that exceeds four acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:*
    1. *All [standard] measures identified in Subsection C.1.a;*
    2. *Permanent dust control measures identified in the approved project plans shall be implemented as soon as possible following completion of any soil disturbing activities;*
    3. *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;*
    4. *All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;*
    5. *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;*
    6. *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;*
    7. *Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and*
    8. *Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.*

These measures shall be shown on all grading and building plans in accordance with LUO Section 22.53.160C. Compliance with these measures would ensure fugitive dust emissions are adequately controlled to below a 20% opacity limit as identified in the APCD's 401 Visible Emissions rule and that dust is not emitted offsite. Because construction of the proposed project would emit ROG + NOx (combined) and fugitive dust (PM_{10}) beyond that of the thresholds established by the APCD, additional measures have been recommended to further reduce construction-related air quality impacts to less than significant.

From an operational standpoint, the project would have negligible long-term operational emissions and based on Table 1-1 of the CEQA Air Quality Handbook (2012), the project would not exceed operational thresholds triggering mitigation. The reservoir would be connected to the existing irrigation system and would not result in a long-term increase in haul trips to deliver water. Routine maintenance would generate operational trips; however, these trips would not vary substantially from existing vineyard maintenance activities. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant operational air quality impacts would occur.

Using the GHG threshold information described in the Setting discussion, the project is expected to generate less than the Bright-Line Threshold of 1,150 metric tons of GHG emissions due to the negligible long-term operational emissions. Therefore, the project's potential direct and cumulative GHG emissions would be less than significant and less than a cumulatively considerable contribution to GHG emissions. Section 15064(h)(2) of the CEQA Guidelines provide guidance on how to evaluate cumulative impacts. If it is shown that an incremental contribution to a cumulative impact, such as global climate change, is not "cumulatively considerable," no mitigation is required. Because this project's emissions fall under the threshold, no mitigation is required.

Mitigation/Conclusion. The project would result in limited short-term air quality impacts that would be minimized through compliance with County Land Use Ordinance requirements and standard APCD mitigation measures described in Exhibit B – Mitigation Summary Table. Upon implementation of identified mitigation measures and compliance with County requirements, potential impacts on Air Quality and GHG emissions would be less than significant.

4. BIOLOGICAL RESOURCES *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Result in a loss of unique or special status species* or their habitats?	☐	☒	☐	☐
b) Reduce the extent, diversity or quality of native or other important vegetation?	☐	☐	☒	☐
c) Impact wetland or riparian habitat?	☐	☐	☒	☐
d) Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?	☐	☐	☒	☐
e) Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish & Wildlife or U.S. Fish & Wildlife Service?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

* **Species – as defined in Section15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.**

Biological Resources

Setting. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Barren soils, ruderal vegetation

Name and distance from blue line creek(s): San Juan Creek is located approximately 0.80 miles northeast from the project site.

Habitat(s): Disturbed

The following information is based on the Kit Fox Evaluation prepared for the project (Kevin Merk Associates 2017):

The proposed reservoir would be located in an area formerly used as a cattle feedlot and currently consists of bare soils and non-native grasses predominantly surrounded by active agriculture. The site is generally flat surrounded by gentle rolling hills with extensive existing vineyards to the east, north, and south, and associated farm buildings and infrastructure in the immediate area. Grasslands are also present on the steeper hills to the west. There are no trees on the project site. Other than agriculture, dominant habitat types within a 10-mile radius of the project site primarily consist of annual grassland interspersed with coyote brush (*Baccharis pilularis*) and blue oak (*Quercus douglasii*).

The California Natural Diversity Database was queried for San Joaquin Kit Fox (*Vulpes macrotis mutica*; SJKF) occurrences within ten miles of the site. Other special status species occurring within one mile were also queried but have been dismissed and are not expected to occur on site due to the lack of suitable habitat.

San Joaquin Kit Fox

The California Natural Diversity Database identified this area as important habitat for the San Joaquin Kit Fox, a federally listed endangered species and a state listed threatened species. The kit fox is uncommon to rare. They reside in arid regions of the southern half of the state. A usually nocturnal mammal, kit fox live in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub. Kit foxes primarily are carnivorous, subsisting on black-tailed jackrabbits and desert cottontails, rodents (especially kangaroo rats and ground squirrels), insects, reptiles, and some birds, bird eggs, and vegetation. Their cover is provided by dens they dig in open, level areas with loose-textured, sandy and loamy soils. Pups are born in these dens in February through April. Pups are weaned at about 4-5 months. Some agricultural areas may support these foxes. Potential predators are coyotes, large hawks and owls, eagles, and bobcats. Cultivation has eliminated much of the kit fox habitat in the project vicinity. Kit foxes are vulnerable to many human activities, such as hunting, use of rodenticides and other poisons, off-road vehicles, and trapping

Impact. The project site consists of predominantly bare soils devoid of vegetation and does not support suitable denning habitat for the SJKF due to the regular cycles of disturbance associated with disking and farming practices. Active ground squirrel abatement practices in concert with ongoing agricultural operations have reduced the availability of small mammal and other potential SJKF prey at the site. A site visit conducted by Kevin Merk Associates, Inc. biologist, Julie Thomas, confirmed that there is no evidence of small mammal activity and historical records show that there are no recorded kit fox sightings within three miles of the site since 1975.

A San Joaquin Kit Fox Habitat Evaluation Form was prepared by Kevin Merk Associates, Inc. on October 1, 2015. The Evaluation assessed the proposed reservoir site and was reviewed by the California Department of Fish and Wildlife (Brandon Sanderson, CDFW, January 12, 2018). CDFW requires that all impacts to kit fox habitat be mitigated at a ratio of 3 acres conserved for each acre impacted (3:1). Although the project would result in 4.48 acres of site disturbance during grading and construction, it would result in the permanent removal of approximately 2.8 acres of kit fox habitat for the open water surface of the reservoir. Mitigation has been identified to mitigate for the permanent loss of kit fox habitat per CDFW requirements.

During construction of the reservoir, there is a potential for wildlife to enter and become trapped in the reservoir. Once trapped, there is a risk of mortality due to dehydration or starvation. Use of a wildlife

ladder or similar feature inside the reservoir would enable wildlife to exit, which would mitigate this potential impact. The project includes the construction of a 6-foot-tall chain-link fence around the reservoir, which would prevent most wildlife from entering the reservoir after construction; however, small mammals and reptiles may still be able to enter the area and become trapped in the reservoir. A permanent wildlife ladder or an exclusionary feature, such as a smaller gauge mesh fencing or material around the bottom of the perimeter fence would be installed to mitigate potential impacts of small wildlife becoming trapped in the pond area during project operation.

Grading, ground disturbance, and constructed earthen slopes could cause erosion and sedimentation affecting localized areas surrounding the site. Temporary ground disturbance would also occur along the southeast access road, where a 12-inch pipeline would be placed in an 18-inch wide, 4-feet deep trench, for approximately 1,159 feet. Impacts to adjacent areas from erosion and sedimentation could occur if construction activities are conducted without proper control measures in place. There are no sensitive areas in close proximity to the proposed area of disturbance and implementation of erosion control measures identified on the project site plan would reduce impacts related to sedimentation to less than significant.

Mitigation/Conclusion. The applicant would be required to mitigate the loss of 2.8 acres of San Joaquin kit fox habitat by one of the following ways:

- Deposit of funds to an approved in-lieu fee program;
- provide for the protection of kit foxes in perpetuity through acquisition of fee or conservation easement of suitable habitat in the kit fox corridor area; or
- purchase credits in an approved conservation bank.

To prevent inadvertent harm to kit fox, the applicant has agreed to retain a biologist for a pre-construction survey, a pre-construction briefing for contractors, and monitoring activities in addition to implementing cautionary construction measures. These mitigation measures are listed in detail in Exhibit B Mitigation Summary Table.

Projects involving more than one acre of disturbance are typically required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion however, enrollment in the stormwater permit and SWPPP requirements do not apply to construction projects solely for agricultural purposes such as frost protection and irrigation reservoirs. There are no sensitive biological resources in close proximity to the project site and potential impacts to adjacent areas would be reduced to less than significant by implementation of the standard erosion control measures detailed on the project site plans.

Implementation of identified mitigation measures would mitigate potential impacts to biological resources to less than significant.

5. CULTURAL RESOURCES *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Disturb archaeological resources?	☐	☐	☒	☐
b) Disturb historical resources?	☐	☐	☒	☐
c) Disturb paleontological resources?	☐	☐	☒	☐
d) Cause a substantial adverse change to a Tribal Cultural Resource?	☐	☐	☒	☐

5. CULTURAL RESOURCES *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Other: _____	☐	☐	☐	☒

Cultural Resources

Setting. The project is located in an area historically occupied by the Obispeno Chumash and Salinan. THese Native Americans established a sophisticated system of horticulture, using seed scattering, harrowing, selective harvesting, coppicing and spot burning to produce crops of acorns, grass, wildflower seeds. They also hunted wildlife and foraged for juncus, willow, redbud, and elderberry for basket making. The founding of Mission Asistencia at Santa Margarita in the 1780s and Mission San Miguel in 1797 led to the gradual depopulation of native communities in this area. The Highway 41/46 corridor has historically served as a traveling route between the coastal areas and the Central Valley. These same routes were previously used by Native Americans for the movement of people and goods as well.

Impact A Phase 1 Archaeological Surface Survey was prepared by Heritage Discoveries, Inc. in February 2018, and concluded that prehistoric or historic cultural resources were not present within the proposed project area. A literature search and records search further confirmed the absence of archaeological sites near the study area.

Per Assembly Bill 52 (AB 52), notices regarding the opportunity for tribal consultation were sent on January 9, 2018 to four Native American tribes affiliated with the project area (Northern Salinan, Xolon Salinan, Yak Tityu Tityu Northern Chumash, and the Northern Chumash Tribal Council). One response was received from the Xolon Salinan Tribe on February 12, 2018, confirming that there are no known sensitive sites within project area. Therefore, the potential for archaeological resources to exist at the site is considered very low.

In the unlikely event resources are uncovered during grading activities, implementation of Land Use Ordinance Section 22.10.040 (Archeological Resources) would be required:

> *In the event archeological resources are unearthed or discovered during any construction activities, the following standards apply:*
>
> *A. Construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.*
>
> *B. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner shall be notified in addition to the Department so proper disposition may be accomplished.*

There are no historic structures within the project area. Subsurface geologic formations (Qa – Quaternary Alluvium) of Holocene age underlie the project area. Holocene deposits are generally considered too young to contain fossilized remains but may shallowly overlie older Pleistocene deposits that have the potential to yield paleontological resources. No impacts to historical resources would occur and the potential for impacts to paleontological resources is considered low given the limited extent and depth of excavation proposed.

Mitigation/Conclusion. No significant impacts on cultural resource would occur. In the event of an unanticipated discovery of archeological resources during earth-moving activities, compliance with

compliance with the Land Use Ordinance would ensure potential impacts would be reduced to less than significant. Therefore, no additional mitigation is necessary.

6. GEOLOGY AND SOILS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?	☐	☐	☒	☐
b) Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?	☐	☐	☒	☐
c) Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?	☐	☐	☒	☐
d) Include structures located on expansive soils?	☐	☐	☒	☐
e) Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?	☐	☐	☒	☐
f) Preclude the future extraction of valuable mineral resources?	☐	☐	☒	☐
g) Other: _____	☐	☐	☐	☒

* **Per Division of Mines and Geology Special Publication #42**

Geology and Soils

Setting. The following relates to the project's geologic aspects or conditions:

Topography: Nearly level to gently sloping

Within County's Geologic Study Area?: No

Landslide Risk Potential: Low to high

Liquefaction Potential: Low

Nearby potentially active faults?: Yes Distance? Approximately 6 miles

Area known to contain serpentine or ultramafic rock or soils?: No

Shrink/Swell potential of soil: Low to moderate

Other notable geologic features? None

Impact. The following analysis is based on the Geotechnical Engineering Report for the proposed project (Mid-Coast Geotechnical 2015).

The proposed project would result in the disturbance of approximately 4.48 acres (195,149 square feet) including approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill. Additionally, a 12-inch pipeline would be placed in an 18-inch trench, 4-feet deep, for approximately 1,159 feet along the existing access road. During grading activities, there is a potential for erosion and down-gradient sedimentation to occur. The applicant has included standard grading and erosion control measures to be implemented during construction on the project site. These measures include protection of slopes, stockpiles, disturbed areas, and access areas, and site inspections and maintenance of all erosion control measures. A sedimentation and erosion plan is required for all construction and grading projects (LUO Sec. 22.52.120) to minimize potential impacts related to erosion control, necessary creek setbacks, and siltation. The plan must be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Typically, projects involving more than one acre of disturbance are subject to Regional Water Quality Control Board (RWQCB) requirements for preparation of a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. However, SWPPP requirements do not apply to agricultural reservoirs.

Based on the findings of the Geotechnical Engineering Report prepared for this project, no significant geologic hazards would occur. The applicant is required to comply with existing Land Use Ordinance standards, including Sections 22.52.100 (Grading Plan Requirements) and 22.52.150 (Standards). The project would conform to the County Public Improvement Standards for material and construction specifications and incorporate specific geotechnical design recommendations. Compliance with these practices and other applicable standards would typically indicate that risks to people and /or structures, including those related to unstable earth conditions, were properly safeguarded against.

The San Juan Fault is the nearest active fault, located approximately 6 miles east of the project site. Based on the quality and conditions of the in-place soils and the absence of a high water table, it was determined that the potential for liquefaction and/or lateral spreading is low at the proposed project site (Mid-Coast Geotechnical 2015). The County's Land Use View mapping database identifies a moderate liquefaction potential at the site. The Geotechnical Engineering Report prepared for the project site found that the site is suitable for the proposed development provided that the recommendations contained in the report are properly implemented into the project.

Mitigation/Conclusion. Based on compliance with existing regulations and recommendations in the Geotechnical Engineering Report, implementation of the sedimentation and erosion control measures as specified in project plans, and compliance with the measures outlined in the County's Land Use ordinances and codes, no significant geologic or soil impacts would occur. No other mitigation measures are necessary.

7. HAZARDS & HAZARDOUS MATERIALS - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

7. HAZARDS & HAZARDOUS MATERIALS - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?	☐	☐	☒	☐
e) Impair implementation or physically interfere with an adopted emergency response or evacuation plan?	☐	☐	☒	☐
f) If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?	☐	☐	☒	☐
h) Be within a 'very high' fire hazard severity zone?	☐	☐	☒	☐
i) Be within an area classified as a 'state responsibility' area as defined by CalFire?	☐	☐	☒	☐
j) Other: _____	☐	☐	☐	☐

Hazards and Hazardous Materials

Setting. The project is not located in an area of known hazardous material contamination and is not on a site listed on the "Cortese List" (which is a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5) (SWRCB 2018; DTSC 2018). The project is located within a high fire hazard severity zone and based on the County's response time map, it will take approximately 10 to 15 minutes to respond to a call regarding fire or life safety. The project is not located within an Airport Review Area and there are no active private landing strips within the vicinity (although one of the

adjacent agricultural roads was formerly used as an agricultural landing strip; the landing strip is no longer in use).

Impact. The project proposes construction of an agricultural reservoir to support an existing vineyard. The reservoir would be constructed in accordance with industry standards and consistent with applicable codes. The project would not include the construction of buildings for human habitation and therefore would not expose people to a substantial new hazard. The project does not propose the use of hazardous materials or the generation of hazardous wastes. The use of standard materials, oils, and fuels to operate and maintain construction equipment would be handled pursuant to existing regulations. The project does not present a significant fire safety risk and the project is would not conflict with any regional emergency response or evacuation plan.

Mitigation/Conclusion. No significant impacts related to hazards or hazardous materials would occur, and no mitigation measures are necessary.

8. NOISE *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Expose people to noise levels that exceed the County Noise Element thresholds?	☐	☐	☒	☐
b) Generate permanent increases in the ambient noise levels in the project vicinity?	☐	☐	☒	☐
c) Cause a temporary or periodic increase in ambient noise in the project vicinity?	☐	☐	☒	☐
d) Expose people to severe noise or vibration?	☐	☐	☒	☐
e) If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

Noise

Setting. The project is not considered a “noise sensitive land use” and is not within close proximity of loud noise sources. The project is located within an agricultural area and based on the Noise Element’s projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area. The nearest sensitive receptors are approximately 2,000 feet away. The project is not located within an Airport Review Area and there are no active private landing strips within the vicinity.

Impact. The project is not expected to generate loud noises, nor conflict with the surrounding uses. Short-term construction noise would be limited in nature and duration and operation of the reservoir

would not generate loud noise levels. The project would not expose people to existing or increased noise levels.

Mitigation/Conclusion. No significant noise impacts would occur, and no mitigation measures are necessary.

9. POPULATION/HOUSING *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?	☐	☐	☒	☐
b) Displace existing housing or people, requiring construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Create the need for substantial new housing in the area?	☐	☐	☒	☐
d) Other: _____	☐	☐	☐	☒

Population/Housing

Setting In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County's Inclusionary Housing Ordinance requires provision of new affordable housing in conjunction with both residential and nonresidential development and subdivisions.

Impact. The proposed project proposed construction of an agricultural reservoir to serve existing agricultural uses. The proposed project does not include any residential uses or structures for human habitation. The project would not result in a need for a significant amount of new housing, and would not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts would occur. No mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES *Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Fire protection?	☐	☐	☒	☐
b) Police protection (e.g., Sheriff, CHP)?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Roads?	☐	☐	☒	☐

10. PUBLIC SERVICES/UTILITIES *Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Solid Wastes?	☐	☐	☒	☐
f) Other public facilities?	☐	☐	☒	☐
g) Other: _____	☐	☐	☐	☒

Public Services

Setting. The project area is served by the following public services/facilities:

Police: County Sheriff	Location: Templeton (Approximately 20 miles to the west)	
Fire: Cal Fire (formerly CDF)	Hazard Severity: High	Response Time: 10-15
Location: Shandon Station (Approximately 4.75 miles to the northwest)		
School District: Shandon Joint Unified School District.		

Impact. The project proposes construction of an agricultural reservoir to serve existing agricultural uses and would not generate substantial long-term increases in demand for fire protection, police protection, emergency services, schools, roads, solid waste, or other public services or utilities. Electrical demands of the project would be negligible and electrical service is available immediately adjacent to the project site. The proposed project site would be accessed by existing local and farm roads and would not generate substantial long-term operational trips. Cut and fill material would be balanced on-site and the project would not generate substantial amounts of solid waste requiring disposal. Therefore, potential impacts on public services or utilities would be less than significant.

Mitigation/Conclusion. No significant impacts to public services or utilities would occur. No mitigation measures are necessary.

11. RECREATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase the use or demand for parks or other recreation opportunities?	☐	☐	☒	☐
b) Affect the access to trails, parks or other recreation opportunities?	☐	☐	☒	☐
c) Other _____	☐	☐	☐	☒

Recreation

Setting. The project would be located within privately-owned operational agricultural parcels that primarily support existing vineyards.

Impact. Construction and operation of the proposed reservoir would not have any adverse effects on existing or planned recreational opportunities in the County. The proposed project would not create a significant need for additional park, Natural Area, and/or recreational resources.

Mitigation/Conclusion. No significant impacts to recreational resources would occur, and no mitigation measures are necessary.

12. TRANSPORTATION/CIRCULATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase vehicle trips to local or areawide circulation system?	☐	☐	☒	☐
b) Reduce existing "Level of Service" on public roadway(s)?	☐	☐	☒	☐
c) Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?	☐	☐	☒	☐
d) Provide for adequate emergency access?	☐	☐	☒	☐
e) Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?	☐	☐	☒	☐
f) Conflict with an applicable congestion management program?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐
h) Result in a change in air traffic patterns that may result in substantial safety risks?	☐	☐	☒	☐
i) Other: _____	☐	☐	☐	☒

Transportation

Setting. The County has established the acceptable Level of Service on roads for this rural area as "C" or better. The existing road network in the area, including Truesdale Road and Shell Creek Road, are operating at acceptable levels. Based on existing road speeds and configuration (vertical and horizontal road curves), sight distance is considered acceptable.

Impact. The proposed project includes construction of an agricultural reservoir to serve an existing agricultural operation. Short-term construction related trips would be minimal and area roadways are operating and acceptable levels and would be able to accommodate construction related traffic. Long-term maintenance and operational trips would not substantially differ from existing onsite vineyard operations. As a result, the proposed project would have no long-term impact on existing road service or traffic safety levels. The project does not conflict with adopted policies, plans and programs related

to transportation, and would not affect air traffic patterns or policies related to public transit, bicycle, or pedestrian facilities.

Mitigation/Conclusion. No significant traffic impacts would occur, and no mitigation measures are necessary.

13. WASTEWATER *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	☐	☐	☐	☒
b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?	☐	☐	☐	☒
c) Adversely affect community wastewater service provider?	☐	☐	☐	☒
d) Other: _____	☐	☐	☐	☒

Wastewater

Setting/Impacts. The proposed project would not generate wastewater or require wastewater disposal. Short-term construction activities would be served by onsite portable restroom and handwashing stations, which would be disposed of at a licensed facility.

Mitigation/Conclusion. No significant impacts related to wastewater would occur, and no mitigation measures are necessary.

14. WATER & HYDROLOGY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
QUALITY				
a) Violate any water quality standards?	☐	☐	☒	☐
b) Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?	☐	☐	☒	☐
c) Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?	☐	☐	☒	☐

14. WATER & HYDROLOGY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?	☐	☐	☒	☐
e) Change rates of soil absorption, or amount or direction of surface runoff?	☐	☐	☒	☐
f) Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?	☐	☐	☒	☐
g) Involve activities within the 100-year flood zone?	☐	☐	☒	☐
QUANTITY				
h) Change the quantity or movement of available surface or ground water?	☐	☒	☐	☐
i) Adversely affect community water service provider?	☐	☐	☒	☐
j) Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure,etc.), or inundation by seiche, tsunami or mudflow?	☐	☐	☒	☐
k) Other: _____	☐	☐	☐	☒

Water

Setting. The project proposes to utilize existing wells within the Truesdale Vineyard to fill the reservoir. The project site is within the San Juan sub-area of the Paso Robles Groundwater Basin (the basin). Encompassing an area of approximately 505,000 acres (760 square miles), the basin extends from the Garden Farms area south of Atascadero to San Ardo in Monterey County, and from the Highway 101 corridor to east of Shandon. It is the primary, and in many places the only, source of water available to property owners throughout the North County.

In 2015, the State legislature approved a new groundwater management law known as the Sustainable Groundwater Management Act (SGMA). SGMA requires that high and medium priority basins comply with the new law. DWR designated the Paso Robles Groundwater Basin as a high priority basin and designated the basin to be in a "condition of critical overdraft."

In January 2007 the Board of Supervisors directed the preparation of a Resource Capacity Study (RCS) for the Paso Robles Groundwater Basin in accordance with the County's Resource Management System (RMS). The RMS describes a resource in terms of its "level of severity" (LOS) based on the rate of depletion and an estimate of the remaining capacity, if any.

Table 2. Water Resource Levels of Severity

Level of Severity	Description
LOS I	Level I is reached for a water resource when increasing water demand projected over 9 years equals or exceeds the estimated dependable supply.
LOS II	Level II for a water resource occurs when water demand projected over 7 years (or other lead time determined by a resource capacity study) equals or exceeds the estimated dependable supply.
LOS III	A Level of Severity III exists when water demand equals the available resource; the amount of consumption has reached the dependable supply of the resource.

The RCS established an LOS III for the main basin and a separate LOS I for the Atascadero sub-basin, which is hydrogeologically distinct from the main basin.

The Countywide Water Conservation Program and Water-Related General Plan and County Code Amendments

On October 27, 2015 the Board of Supervisors adopted the Countywide Water Conservation Program to address ongoing water scarcity concerns. The objectives of the Countywide Water Conservation Program are to halt increase in groundwater extraction in areas that have been certified LOS III; provide a mechanism to allow new development and new or altered irrigated agriculture to proceed in certified LOS III areas, subject to the requirements of the County General Plan and County Code, in a manner that fully offsets projected water use; and to reduce the wasteful use of water in the county. The amendments were effective on November 26, 2015 and affect the following areas:

- Paso Robles Groundwater Basin:
    - New buildings and new irrigated agriculture must offset new water use. (Building and Construction Ordinance and The County Land Use Ordinance)
    - New construction and new irrigated agriculture in the Paso Robles Groundwater Basin must be water neutral.
- Countywide:
    - Water waste prevention measures apply to all unincorporated areas where a similar program is not already operated by a water purveyor. (Health and Sanitation Ordinance)
    - Agricultural best management practices are encouraged in all unincorporated areas (The County Land Use Ordinance)

The adopted Countywide Water Conservation Program and ordinances included amendments to the County Health and Sanitation Ordinance, Building and Construction Ordinance, County Land Use Ordinance, and County Fee Schedule.

Drainage Characteristics

The topography of the project is nearly level to gently sloping to. The closest creek is San Juan Creek, approximately 0.80 miles away. As described in the NRCS Soil Survey, the soil surface is considered to have moderate erodibility.

Projects involving more than one acre of disturbance are typically required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion however, enrollment in the stormwater permit and SWPPP requirements do not apply to construction projects solely for agricultural purposes such as frost protection and irrigation reservoirs. When work is done in the rainy

season, the County's Land Use Ordinance requires that temporary erosion and sedimentation measures to be installed.

DRAINAGE – The following relates to the project's drainage aspects:

Within the 100-year Flood Hazard designation? Yes

Closest creek? San Juan Creek Distance? Approximately 0.80 miles

Soil drainage characteristics: Moderately drained to well drained

For areas where drainage is identified as a potential issue, the Land Use Ordinance (LUO Sec. 22.52.110 or CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

SEDIMENTATION AND EROSION – Soil type, area of disturbance, and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project's soil types and descriptions are listed in the previous Agriculture section under "Setting". As described in the NRCS Soil Survey, the project's soil erodibility is as follows:

Soil erodibility: Moderate

A sedimentation and erosion control plan is required for all construction and grading projects (LUO Sec. 22.52.120, CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. .

Impact

Water Quality

The reservoir would be constructed on nearly flat topography and is not within a 100-year Flood Hazard designation; however, construction of the well connection pipeline would partially extend into the 100-year Flood Hazard designation. The project would be located approximately 0.80 miles from San Juan Creek. Underlying soils have moderate erodibility. The applicant has proposed erosion control measures to be implemented during construction, including protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of access roads and perimeter containment measures.

With regards to project impacts on water quality the following conditions apply:

- Approximately 195,149 square feet of site disturbance is proposed and the movement of approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill material;
- The project will be subject to standard County requirements for drainage, sedimentation and erosion control for construction and permanent use;
- The project is not on highly erodible soils, nor on moderate to steep slopes;
- The project is more than 100 feet from the closest creek or surface water body;
- Stockpiles will be properly managed during construction to avoid material loss due to erosion; and
- All hazardous materials and/or wastes will be properly stored on-site, which include secondary containment should spills or leaks occur.

To provide protection from downward migration of stored water within the reservoir, the proposed earthen irrigation reservoir would be lined with 40-mil high density polyethylene (HDPE) plastic. This

HDPE liner would provide protection from leakage into the subsurface; therefore, no water quality related impacts to groundwater would occur. With this liner in place, no potentially adverse impacts to the Paso Robles Groundwater Basin would occur and impacts associated with subsurface leakage would be less than significant.

Water Quantity

Water used to fill the reservoir would be sourced from two existing wells. The applicant intends to increase water-use efficiency during the peak frost period by constructing the reservoir and reducing the cumulative amount of water simultaneously pumped from the basin during frost events. The proposed reservoir would therefore increase water-use efficiency by enabling better water management during frost events. However, it would also result in water loss through evaporation from the water surface to the atmosphere and increased pumping from the basin to compensate for reservoir evaporation. To reduce evaporative water losses, the applicant proposes to fill the reservoir for frost protection purposes during the typical peak frost period (March through May). At the end of the frost season, the reservoir would be maintained at 25 percent capacity for irrigation operations from June 1st through November 15th. The reservoir would remain empty between November 16th and February 28th.

Evaporative Loss

The proposed project would result in long-term evaporative water losses through surface evaporation of stored water in the reservoir. To estimate evaporative losses, Monsoon Consultants (2017) prepared a hydrogeologic analysis for the project. The findings of the report indicate that the project would result in an annual evaporative loss of 5.4 acre-feet. This information was peer reviewed and confirmed by the County's consultant (GSI 2018). Due to the level of existing groundwater pumping from the basin, and requirements of the County's Countywide Water Conservation Program, the project must offset the 5.4 acre-feet of new water use to account for evaporative losses and avoid significant water quantity impacts. Water offsets could be achieved by fallowing other existing agricultural uses within the vineyard or using any "banked" water offset credits available to the applicant under the existing offset clearance determination (dated October 18, 2016). An Agricultural Offset Clearance has been granted by the County of San Luis Obispo, allowing for an additional 148.6 acres of vineyards to be planted. The water duty factor for the vineyard is 1.25 acre-feet per acre per year. A 1:1 net evaporative water loss would be obtained by committing to not plant 4.23 acres of new vineyards. Mitigation requiring evidence that a 5.4 acre-foot per year offset has been achieved by the project applicant, subject to the approval of the County and verification by an independent hydrogeologist would be required before permit issuance. Offsets would be required to be achieved from within the existing Truesdale Vineyards that the reservoir would benefit. Fallowing of agricultural areas to achieve the required offset would not result in indirect significant impacts, as this is a normal part of agricultural operations within the vineyard (fallowing certain areas, planting new areas). Mitigation has been identified to reduce potential water quantity impacts to less than significant.

Well Interference

The applicant's consultant, Monsoon Consultants, performed a well interference analysis of the impact to the groundwater level at the four nearest offsite wells from the withdrawal of the water required for the initial filling of the reservoir and the net evaporative losses from the reservoir. The analysis determined that after the initial filling, the estimated pump rate at the supply well to account for evaporative loss of water (when the reservoir contains water) would average 1.68 gallons per minute, depending on various climatic condition scenarios. The anticipated drawdown, as measured at the property lines nearest to the well, resulting from the increased pumping to account for evaporative losses would were estimated to range from approximately 0.7 to 6.6 feet during the initial filling and 0.014 to 0.69 feet during operation. This information was peer reviewed and confirmed by the County's consultant (GSI 2018). Well interference impacts of this magnitude would not substantially affect well operations and are not considered significant (GSI 2018).

Drainage and Flood Hazard

As noted above, the proposed reservoir site it nearly level. Stormwater would be diverted around the reservoir via a drainage swale that would discharge into rock energy dissipaters.

As proposed, the reservoir is designed to withstand storm and flood events and would not be located in an area that would substantially impede floodwaters or otherwise create a public health and safety issue. Flood waters would continue to flow downslope across the project area and surrounding vineyards. Based on the incorporation of standard engineered design standards and compliance with existing regulations, no significant drainage or flood hazard impacts would occur.

Mitigation/Conclusion. Compliance with existing regulations and/or required plans would adequately address the potential for surface water quality impacts during construction and permanent use of the project. No change in groundwater quality would occur. Therefore, no additional mitigation is required.

Increased water demand resulting from evaporative losses would be mitigated through a mandatory 1:1 offset requirement. Mitigation requiring evidence that a 5.4 acre-foot per year offset has been achieved by the project applicant, subject to the approval of the County and verification by an independent hydrogeologist would be required before permit issuance, reducing potential water quantity impacts to less than significant.

The project would result in negligible water level drawdown at neighboring properties due to increased pumping activities. Potential impacts related to water level drawdown would be less than significant. Therefore, no additional mitigation measures are necessary.

15. LAND USE *Will the project:*	**Inconsistent**	**Potentially Inconsistent**	**Consistent**	**Not Applicable**
a) Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	☐	☐	☒	☐
b) Be potentially inconsistent with any habitat or community conservation plan?	☐	☐	☐	☒
c) Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	☐	☐	☒	☐
d) Be potentially incompatible with surrounding land uses?	☐	☐	☒	☐
e) Other: _____	☐	☐	☐	☒

Land Use

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, etc.). Identified mitigation would require new water use offsets at a 1:1 ratio consistent with County plans and ordinances aimed at addressing water

shortages within the Paso Robles Groundwater Basin. The project was found to be consistent with applicable planning documents (refer also to Exhibit A on reference documents used).

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Mitigation/Conclusion. No land use or planning related policy inconsistencies were identified. Potential impacts would be less than significant and no mitigation is necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable

a) ***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 pre-history?***

☐ ☐ ☒ ☐

b) ***Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects*** **of probable future projects)**

☐ ☐ ☒ ☐

c) ***Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*** ☐ ☐ ☒ ☐

For further information on CEQA or the County's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://resources.ca.gov/ceqa/ for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning Department has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
☐	County Public Works Department	**Not Applicable**
☐	County Environmental Health Services	**Not Applicable**
☐	County Agricultural Commissioner's Office	**Not Applicable**
☐	County Airport Manager	**Not Applicable**
☐	Airport Land Use Commission	**Not Applicable**
☐	Air Pollution Control District	**Not Applicable**
☐	County Sheriff's Department	**Not Applicable**
☐	Regional Water Quality Control Board	**Not Applicable**
☐	CA Coastal Commission	**Not Applicable**
☒	CA Department of Fish and Wildlife	**None**
☐	CA Department of Forestry (Cal Fire)	**Not Applicable**
☐	CA Department of Transportation	**Not Applicable**
☐	Community Services District	**Not Applicable**
☐	Other _____	**Not Applicable**
☐	Other _____	**Not Applicable**

*** "No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File for the Subject Application

County documents

- ☐ Coastal Plan Policies
- ☒ Framework for Planning (Coastal/Inland)
- ☒ General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:
  - ☒ Agriculture Element
  - ☒ Conservation & Open Space Element
  - ☐ Economic Element
  - ☐ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element/Project List
  - ☒ Safety Element
- ☒ Land Use Ordinance (Inland/Coastal)
- ☐ Building and Construction Ordinance
- ☒ Public Facilities Fee Ordinance
- ☐ Real Property Division Ordinance
- ☐ Affordable Housing Fund
- ☐ Airport Land Use Plan
- ☐ Energy Wise Plan
- ☒ North County Area Plan/Shandon-Carrizo SA and Update EIR
- ☐ Design Plan
- ☐ Specific Plan
- ☒ Annual Resource Summary Report
- ☐ Circulation Study

Other documents

- ☒ Clean Air Plan/APCD Handbook
- ☐ Regional Transportation Plan
- ☐ Uniform Fire Code
- ☒ Water Quality Control Plan (Central Coast Basin – Region 3)
- ☒ Archaeological Resources Map
- ☒ Area of Critical Concerns Map
- ☒ Special Biological Importance Map
- ☒ CA Natural Species Diversity Database
- ☒ Fire Hazard Severity Map
- ☒ Flood Hazard Maps
- ☒ Natural Resources Conservation Service Soil Survey for SLO County
- ☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
- ☐ Other

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

1. California Department of Conservation. 2016. Farmland Mapping and Monitoring Program. <http://maps.conservation.ca.gov/dlrp/ciftimeseries/> Accessed on: April 12, 2018.
2. California Department of Toxic Substance Control (DTSC). 2018. Envirostor. <https://www.envirostor.dtsc.ca.gov/public/> Accessed on: April 1, 2018.
3. California Department of Transportation (Caltrans). 2018. California Scenic Highway Mapping System. <http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/>. Accessed on: April 1, 2018.
4. California Environmental Protection Agency (CalEPA). 2018. Cortese List Data Resources. <https://calepa.ca.gov/sitecleanup/corteselist/> Accessed on: April 18, 2018.
5. California State Water Resources Control Board (SWRCB). 2018. GeoTracker. <https://geotracker.waterboards.ca.gov/> Accessed on: April 1, 2018.
6. County of San Luis Obispo (County). 2018. Land Use View: Agricultural-Williamson Act <https://gis.slocounty.ca.gov/sites/luview.htm> Accessed on: April 1, 2018
7. County of San Luis Obispo (County). 2015. General Plan: Framework for Planning (Inland).
8. County of San Luis Obispo (County). 2016. *Agricultural Offset Clearance (memo*). October 2016.
9. GSI Water Solutions, Inc. 2018. *Review of Feedlot Agricultural Reservoir Hydrogeologic Analysis*. November 2018.
10. Heritage Discoveries Inc. 2018. An Archaeological Surface Survey of the Feedlot Reservoir at Truesdale Road. February 2018.
11. Kevin Merk Associates, LLC. 2015. San Joaquin Kit Fox Habitat Evaluation for the Truesdale Feedlot Reservoir Site at Mesa Vineyards. October 2015.
12. Mid-Coast Geotechnical Inc. 2015. *Geotechnical Engineering Report for Proposed Agricultural Pond for Feedlot North Reservoir.* August 2015.
13. Monsoon Consultants. 2017. *Hydrogeologic Analysis for the Proposed "Truesdale Feedlot" Agricultural Irrigation and Frost Protection Storage Reservoir to be Constructed at the Truesdale Ranch Vineyards.* November 2017.
14. Natural Resource Conservation Service (NRCS). 2018. Web Soil Survey. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> Accessed on: April 1, 2018
15. San Luis Obispo County Air Pollution District (APCD). 2012. *CEQA Air Quality Handbook*.
16. San Luis Obispo County Air Pollution District (APCD). 2017. *Clarification Memorandum for the CEQA Air Quality Handbook*.

Exhibit B - Mitigation Summary Table

Per Public Resources Code Section 21081.6, the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, are responsible to verify compliance with these COAs.

Agricultural Resources

AG-1 **Prior to issuance of grading and/or construction permits,** the project plans shall clearly state the purpose of the reservoir for on-site frost control and irrigation purposes and that off-site transfer of reservoir water and/or other uses of the reservoir are prohibited.

Air Quality

AQ-1 **Fugitive PM10 Mitigation Measures. Upon application for construction permits,** all required PM_{10} measures shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Reduce the amount of the disturbed area where possible;

b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible;

c. All dirt stock pile areas should be sprayed daily or covered with tarps or other dust barriers, as needed;

d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil-disturbing activities;

e. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;

f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County APCD;

g. All roadways, driveways, sidewalks, etc. 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;

h. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;

i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;

j. Install wheel washers or other devices to control tracking of mud and dirt onto adjacent roadways where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;

k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible. Roads shall be pre-wetted prior to sweeping when feasible;

l. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the San Luis Obispo County APCD Engineering & Compliance Division prior to the start of any grading, earthwork, or demolition.

AQ-2 **Standard Mitigation Measures for Construction Equipment. Upon application for construction permits,** all standard mitigation measures for construction equipment shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Maintain all construction equipment in proper tune according to manufacturer's specifications;

b. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

c. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;

d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;

e. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;

f. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;

g. Diesel idling within 1,000 feet of sensitive receptors is not permitted;

h. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;

i. Electrify equipment when feasible;

j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,

k. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Biological Resources

San Joaquin Kit Fox

The Kit Fox Evaluation, which was completed for the Truesdale Feedlot Site by Kevin Merk Associates, LLC, indicates the project will impact **2.8** acres of San Joaquin kit fox habitat. CDFW reviewed the evaluation and requires that all impacts to kit fox habitat be mitigated at a ratio of 3 acres conserved for each acre impacted **(3:1**). Compensatory mitigation required for the proposed reservoir is **8.4 acres**, based on **3** times **2.8** acres impacted.

Note that the required mitigation ratio is subject to change upon the completion of the California Department of Fish and Wildlife's review of the habitat evaluation. The mitigation options identified in BR-1 through BR-11 apply **to the proposed project only**; should the project change, the mitigation obligation may also change, and a reevaluation of the mitigation measures would be required.

BR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall submit evidence to the County of San Luis Obispo, Department of Planning and Building, Environmental and Resource Management Division (County) (see contact information below) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:

a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **8.4 acres** of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) (see contact information below) and the County.

This mitigation alternative (a.) requires that all aspects of this program must be in place before County permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy" (see contact information below), would total **$21,000.00** based on **$2,500 per acre**. This fee is calculated based on the current cost-per-unit of $2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County, and mitigation ratios are under review by Fish and Wildlife; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification identifying your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.

c. Purchase **8.4** credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total $21,000.00. This fee is calculated based on the current cost-per-credit of $2,500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to County permit issuance and initiation of any ground disturbing activities.

BR-2 **Prior to issuance of grading and/or construction permits**, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the County Division of Environmental and Resource Management. The retained biologist shall perform the following monitoring activities:

a. **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction**, the biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the County reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.

b. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-3 through BR11. Site-disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-2-c). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the County.

c. **Prior to or during project activities**, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact the U.S. Fish and Wildlife Service and the Department for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the U.S. Fish and Wildlife Service/Department determine it is appropriate to resume work.

   If incidental take of kit fox during project activities is possible, **before project activities commence**, the applicant must consult with the U.S. Fish and Wildlife Service and the Department (see contact information below). The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

In addition, the qualified biologist shall implement the following measures:

d. **Within 30 days prior to initiation of site disturbance and/or construction**, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

    1. Potential kit fox den: 50 feet
    2. Known or active kit fox den: 100 feet
    3. Kit fox pupping den: 150 feet

e. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.

f. If kit foxes or known or potential kit fox dens are found on site, daily monitoring during ground disturbing activities shall be required by a qualified biologist.

BR-3 **Prior to issuance of grading and/or construction permits,** the applicant shall clearly delineate as a note on the project plans, that: "*Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox".* Speed limit signs shall be installed on the project site **within 30 days prior to initiation of site disturbance and/or construction**.

In addition, **prior to permit issuance and initiation of any ground disturbing activities**, conditions BR-3 through BR-11 of the Developer's Statement/Conditions of Approval shall be clearly delineated on project plans.

BR-4 **During the site disturbance and/or construction phase**, grading and construction activities after dusk shall be prohibited unless coordinated through the County, during which additional kit fox mitigation measures may be required.

BR-5 **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction,** all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the county, as well as any related biological report(s) prepared for the project. The applicant shall notify the County shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.

BR-6 **During the site-disturbance and/or construction phase,** to prevent entrapment of the San Joaquin kit fox, all excavation, steep-walled holes or trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BR-7 **During the site-disturbance and/or construction phase**, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary, be moved only once to remove it from the path of activity, until the kit fox has escaped.

BR-8 **During the site-disturbance and/or construction phase,** all food-related trash items such as wrappers, cans, bottles, and food scraps generated shall be disposed of in closed containers only and regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

BR-9 **Prior to, during and after the site-disturbance and/or construction phase,** use of pesticides or herbicides shall be in compliance with all local, state and federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.

BR-10 **During the site-disturbance and/or construction phase,** any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and County. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the U.S. Fish and Wildlife Service and the Department by telephone (see contact information below). In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to the Department for care, analysis, or disposition.

BR-11 **During the site-disturbance and/or construction phase,** the applicant shall install a temporary wildlife ladder or similar feature approved by the County within the reservoir that would enable wildlife species to exit the reservoir. The ladder or similar feature shall remain in place until the permanent perimeter fence is constructed and no wildlife species is present within the reservoir. Once the pond has been constructed, a permanent wildlife ladder or similar feature, or an exclusionary feature such as smaller gauge mesh material or fencing around the bottom of the perimeter fence, shall be installed to prevent small wildlife from entering and/or getting trapped in the pond area. This measure shall be shown on all applicable grading and construction plans.

Water Resources

WR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall provide evidence to the County Planning and Building Department that a water offset equivalent to 5.4 acre feet per year has been achieved. The offset shall be acquired from existing or approved uses within the Truesdale Vineyards. The future offset plan shall be subject to independent review and verification by a hydrogeologist **prior to issuance of construction/grading permits**.

Initial Study Summary – Environmental Checklist

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

(ver 5.10) Using Form

Project Title & No. Brodiaea Inc. / Truesdale Feedlot / Major Grading Permit / ED17-217 (PMT2017-01859)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

☐ Aesthetics	☐ Geology and Soils	☐ Recreation
☒ Agricultural Resources	☐ Hazards/Hazardous Materials	☐ Transportation/Circulation
☒ Air Quality	☐ Noise	☐ Wastewater
☒ Biological Resources	☐ Population/Housing	☒ Water /Hydrology
☐ Cultural Resources	☐ Public Services/Utilities	☐ Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Holly Phipps — Signature — September 14, 2018
Prepared by (Print) — Date

Steven McMasters — Signature — Ellen Carroll, Environmental Coordinator (for) — 9/17/2018
Reviewed by (Print) — Date

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Planning Department, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: Request by Brodiaea Inc. for a major grading permit to construct a high-density polyethylene (HDPE) lined agricultural reservoir within the existing Truesdale Vineyard to provide frost protection and irrigation. The reservoir would be supplied by PVC waterlines from two existing wells located on the subject property. Connection to the southeast well would require installation of a 12-inch underground pipe in an 18-inch wide, 4-feet deep trench, along the southeast access road for approximately 1,159 feet. The reservoir would be approximately 207 feet wide, 457 feet long, and 28 feet deep, with a maximum capacity of 40.1 acre-feet. The project would result in the disturbance of approximately 4.48 acres (195,149 square feet), including approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill, on a 44-acre parcel. The applicant proposes to balance the material on-site with no required import or export of soils.

The proposed project is within the Agriculture land use category and is located approximately 2,000 feet west of Shell Creek Road, approximately 3,000 feet south of Truesdale Road, 4.75 miles south of the community of Shandon. The site is in the Shandon-Carrizo Sub Area (North) of the North County planning area.

Access to the project would be provided by existing farm roads and no new driveways or roads would be constructed.

The project is located in the Paso Robles Groundwater Basin. The project includes management strategies to reduce evaporative water losses. Water would be maintained in the reservoir as follows:

- November 16th through February 28th – the reservoir will be emptied of well supplied water.
- March 1st through May 31st – the reservoir will be maintained at a full condition for potential frost protection.
- June 1st through November 15th – the reservoir will be maintained at 25% full condition for irrigation operations.

Filling would occur at a rate of 910 gallons per minute (gpm) from the two wells (455 gpm per well) over a 10-day period. When full, the surface area of the pond would be approximately 2.4 acres and 1 acres when maintained at 25% of its capacity.

ASSESSOR PARCEL NUMBER(S): 037-291-038

Latitude: 35° 35' 23.1" N Longitude: 120° 20' 41.4" W **SUPERVISORIAL DISTRICT** # 1

B. EXISTING SETTING

PLAN AREA: North County **SUB**: Shandon-Carrizo(North) **COMM:** Rural

LAND USE CATEGORY: Agriculture

COMB. DESIGNATION: Flood Hazard

PARCEL SIZE: 44 acres

TOPOGRAPHY: Nearly level to gently sloping

VEGETATION: , Agriculture, disturbed, grasses

EXISTING USES: Agricultural uses, undeveloped

SURROUNDING LAND USE CATEGORIES AND USES:

North: Agriculture; undeveloped	*East:* Agriculture; vineyards
South: Agriculture; agricultural accessory buildings	*West:* Agriculture; undeveloped

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, at least one issue was identified as having a potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.

COUNTY OF SAN LUIS OBISPO
INITIAL STUDY CHECKLIST

1. AESTHETICS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Create an aesthetically incompatible site open to public view?	☐	☐	☒	☐
b) Introduce a use within a scenic view open to public view?	☐	☐	☒	☐
c) Change the visual character of an area?	☐	☐	☒	☐
d) Create glare or night lighting, which may affect surrounding areas?	☐	☐	☒	☐
e) Impact unique geological or physical features?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

Aesthetics

Setting. The proposed reservoir is located approximately 5.1 miles south of Highway 46 and the rural community of Shandon, within a predominantly agricultural area. The visual setting includes vast agricultural views (predominantly vineyards), open hillsides, a few scattered rural residences, and other appurtenant agricultural infrastructure and development. There are approximately 25 to 30 existing agricultural reservoirs within 5 miles of the project site. Highway 46 has been identified as an eligible state scenic highway by the California Department of Transportation's (Caltrans) California Scenic Highway Mapping System, though it has not been officially designated as a state scenic highway.

Impact. The project would not be visible from Highway 46, Highway 41, or any other major public roadways due to distance and intervening topography. The project would not silhouette against any ridgelines as viewed from public roadways. The project would be compatible with adjacent uses and the surrounding visual character, which includes vineyards and agricultural reservoirs. The site does not include unique geological or physical features and no new lighting would be installed at the site. Therefore, no significant visual impacts would occur.

Mitigation/Conclusion. No significant impacts related to aesthetics or visual resources would occur. No mitigation measures are necessary.

2. AGRICULTURAL RESOURCES *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?	☐	☐	☒	☐
b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	☐	☐	☒	☐
c) Impair agricultural use of other property or result in conversion to other uses?	☐	☒	☐	☐
d) Conflict with existing zoning for agricultural use, or Williamson Act program?	☐	☐	☒	☐
e) Other: _____	☐	☐	☐	☒

Agricultural Resources

Setting. Project Elements. The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Agriculture

State Classification: Farmland of Statewide Importance; Prime Farmland if irrigated

Historic/Existing Commercial Crops: None

In Agricultural Preserve? Yes, Shandon AG Preserve Area

Under Williamson Act contract? Yes

Based on the California Department of Conservation, the Natural Resources Agency, Farmland Mapping and Monitoring Program (FMMP), and San Luis Obispo County Important Farmland Map (FMMP 2016), the project site contains Farmland of Local Importance. The soil type(s) and characteristics on the subject property include:

The soil type(s) and characteristics on the subject property include:

150-San Emigdio sandy loam (2 to 9% slopes). San Emigdio is typically found in alluvial fans and flood plains at an elevation of 1,095 to 2,000 feet. Typical vegetation includes annual grasses and forbs and typical uses are vineyards and orchards, irrigated crops, dry-farmed crops, and livestock grazing. This gently sloping coarse loamy soil is considered moderately drained. The soil has moderate erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to seepage in bottom layer. The soil is considered Class IV without irrigation and Class II when irrigated. Per NRCS classifications, this soil is farmland of statewide importance.

159-Sorrento loam (0 to 2% slopes). Sorrento is typically found in alluvial fans at an elevation of 1,800 to 2,095 feet. Typical vegetation includes annual grasses and forbs and typical uses are vineyards and orchards, irrigated crops, dry-farmed crops, and livestock grazing. Runoff potential is low, permeability is moderately slow, and this soil is well drained. It has a wind erodibility rating of 4 (moderate susceptibility). The soil is considered Class IV(c) without irrigation and Class I when irrigated. Per NRCS classifications, this soil is prime farmland if irrigated.

Impact. The proposed reservoir would be located on land designated as Farmland of Statewide Importance per NRCS soil classifications. Pipeline connections to nearby wells would be within Prime Farmland (if irrigated). The proposed agricultural pond is considered an agricultural use and would support the production of existing vineyards. Therefore, the project would not result in the conversion of agricultural or prime farmland to non-agricultural use, or conflict with the existing Williamson Act contract that the property is currently enrolled in. Construction and operation of the reservoir would not adversely affect the existing vineyards onsite (it would support them), and the storage of water would not adversely affect proximate agricultural uses.

The proposed project would result in additional pumping from the groundwater basin during initial filling of the reservoir and to compensate for evaporation loss from the surface of the proposed reservoir. This additional pumping would reduce agricultural water supplies available to adjacent parcels. A hydrogeological analysis was prepared to determine if additional pumping would substantially impact agricultural water supplies to nearby, off-site wells. The analysis determined that the project would result in drawdown between 0.7 to 6.6 feet during the initial filling of the reservoir, and less than 0.07 foot drawdown during all other operational scenarios evaluated (Monsoon Consultants 2017). This information was peer reviewed by the County and it was determined that the information was accurate and that this amount of drawdown would not substantially affect well operations, would be limited in duration, and would be less than significant (GSI Water Solutions, Inc. 2018).

The project applicant would be required to offset any increased water demands resulting from the project, including water loss through evaporation (refer to Section 14, Water and Hydrology). Offsets would be required to be achieved from within the existing Truesdale Vineyards that the reservoir would benefit and could include fallowing of other existing agricultural areas or using existing water credits. An amended Agricultural Offset Clearance letter from Cheryl Ku, a San Luis Obispo County Planner, dated October 16, 2016, allows for an additional 148.6 acres of vineyard to be planted on site. The water duty factor for the vineyard is 1.25 acre-feet per acre per year. With an average annual net evaporative loss estimated at 5.40 acre-feet, 4.23 acres of vineyard would require fallowing (or not be planted) to achieve a 1:1 net evaporative water loss offset. Fallowing (not planting) agricultural areas to achieve the required offset would not result in indirect significant impacts, as this is a normal part of agricultural operations within the vineyard (fallowing certain areas, planting new areas). In addition, the stored water would only be used as stated by the applicant for onsite agricultural uses, and cannot be sold or used off-site.

Mitigation/Conclusion. The reservoir would have a generally beneficial effect on agricultural resources and would not substantially deplete groundwater supplies in proximate wells to an extent that would adversely affect adjacent uses. Additionally, the project would be required to offset any increased water demands from the project, including water loss through evaporation (discussed further in Section 14 Water and Hydrology). Proof of the offset is required in Mitigation Measure WR-1. Mitigation has also been identified that requires project plans to be revised to state that the purpose of the proposed reservoir is for on-site frost protection and irrigation only and off-site transfer of reservoir water and/or other uses of the reservoir are prohibited. Implementation of these mitigation measures would reduce potential indirect impacts to agricultural resources; therefore, potential direct and indirect impacts to agricultural resources would be less than significant.

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?	☐	☒	☐	☐

3. AIR QUALITY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) Expose any sensitive receptor to substantial air pollutant concentrations?	☐	☐	☒	☐
c) Create or subject individuals to objectionable odors?	☐	☐	☒	☐
d) Be inconsistent with the District's Clean Air Plan?	☐	☐	☒	☐
e) Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?	☐	☐	☒	☐
GREENHOUSE GASES				
f) ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***	☐	☐	☒	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
h) Other: _____	☐	☐	☐	☒

Air Quality

Setting. The San Luis Obispo County Air Pollution Control District (APCD) has developed and updated their CEQA Air Quality Handbook (2012) to evaluate project-specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

Greenhouse Gas (GHG) Emissions are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

The passage of AB32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the greenhouse gas emissions reduction goal for the State of California into law. The law required that by 2020, State emissions must be reduced to 1990 levels. This is to be accomplished by reducing greenhouse gas emissions from significant sources via regulation, market mechanisms, and other actions. Subsequent legislation (e.g., SB97-Greenhouse Gas Emissions bill) directed the California Air Resources Board (CARB) to develop statewide thresholds.

In March 2012, the San Luis Obispo County Air Pollution Control District (APCD) approved thresholds for GHG emission impacts, and these thresholds have been incorporated the APCD's CEQA Air Quality Handbook. APCD determined that a tiered process for residential / commercial land use projects was the most appropriate and effective approach for assessing the GHG emission impacts. The tiered approach includes three methods, any of which can be used for any given project:

1. Qualitative GHG Reduction Strategies (e.g. Climate Action Plans): A qualitative threshold that is consistent with AB 32 Scoping Plan measures and goals; or,
2. Bright-Line Threshold: Numerical value to determine the significance of a project's annual GHG emissions; or,
3. Efficiency-Based Threshold: Assesses the GHG impacts of a project on an emissions per capita basis.

For most projects the Bright-Line Threshold of 1,150 Metric Tons CO2/year (MT CO2e/yr) will be the most applicable threshold. In addition to the residential/commercial threshold options proposed above, a bright-line numerical value threshold of 10,000 MT CO2e/yr was adopted for stationary source (industrial) projects.

It should be noted that projects that generate less than the above-mentioned thresholds will also participate in emission reductions because air emissions, including GHGs, are under the purview of the California Air Resources Board (or other regulatory agencies) and will be "regulated" either by CARB, the Federal Government, or other entities. For example, new vehicles will be subject to increased fuel economy standards and emission reductions, large and small appliances will be subject to more strict emissions standards, and energy delivered to consumers will increasingly come from renewable sources. Other programs that are intended to reduce the overall GHG emissions include Low Carbon Fuel Standards, Renewable Portfolio standards and the Clean Car standards. As a result, even the emissions that result from projects that produce fewer emissions than the threshold will be subject to emission reductions.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation.

Impact. As proposed, the project would result in the disturbance of approximately 4.48 acres (195,149 square feet), including 44,000 cubic yards of cut and 44,000 cubic yards of fill. This would result in the creation of construction dust as well as short-term vehicle emissions from construction.

Based on Table 2-2 of the APCD's CEQA Air Quality Handbook, estimated construction-related emissions are shown in Table 1.

Table 1. Estimated Construction Emissions

Pollutant	Total Estimated Emissions	APCD Quarterly Threshold	Within Threshold?
ROG + NOx (combined)	2.5 tons	2.5 tons	No
Diesel Particulate Matter (DPM)	0.1 tons	0.13 tons	Yes
Fugitive Particulate Matter (PM_{10})	4.17 tons	2.5 tons	No

Based on air quality estimates provided in Table 1, the project would result in construction emissions that exceed the APCD's thresholds of significance for ROG + NOx (combined) and fugitive particulate matter (PM10). The nearest sensitive receptors are located approximately 2,000 feet from the proposed

project site; therefore, the project is not in close proximity to sensitive receptors that are likely to result in nuisance complaints. The project site is not located in an APCD-designated naturally occurring asbestos (NOA) zone (San Luis Obispo County APCD 2018).

The project would be subject to the primary and expanded fugitive dust control measures pursuant to Land Use Ordinance (LUO) Section 22.52.160.C (Construction Procedures, Air Quality Controls):

a. *Primary Measures. All projects involving grading or site disturbance shall implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:*
    1. *Reduce the amount of the disturbed area where possible;*
    2. *Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency shall be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water shall be used whenever possible;*
    3. *All dirt stock-pile areas shall be sprayed daily as needed; and*
    4. *All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible, and building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.*
b. *Expanded Measures. Projects with site disturbance that exceeds four acres or are within 1,000 feet of any sensitive receptor shall implement the following mitigation measures to minimize nuisance impacts and to significantly reduce fugitive dust emissions:*
    1. *All [standard] measures identified in Subsection C.1.a;*
    2. *Permanent dust control measures identified in the approved project plans shall be implemented as soon as possible following completion of any soil disturbing activities;*
    3. *Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating native grass seed and watered until vegetation is established;*
    4. *All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;*
    5. *Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;*
    6. *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;*
    7. *Install wheel washers where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site; and*
    8. *Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water shall be used where feasible.*

These measures shall be shown on all grading and building plans in accordance with LUO Section 22.53.160C. Compliance with these measures would ensure fugitive dust emissions are adequately controlled to below a 20% opacity limit as identified in the APCD's 401 Visible Emissions rule and that dust is not emitted offsite. Because construction of the proposed project would emit ROG + NOx (combined) and fugitive dust (PM_{10}) beyond that of the thresholds established by the APCD, additional measures have been recommended to further reduce construction-related air quality impacts to less than significant.

From an operational standpoint, the project would have negligible long-term operational emissions and based on Table 1-1 of the CEQA Air Quality Handbook (2012), the project would not exceed operational thresholds triggering mitigation. The reservoir would be connected to the existing irrigation system and would not result in a long-term increase in haul trips to deliver water. Routine maintenance would generate operational trips; however, these trips would not vary substantially from existing vineyard maintenance activities. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant operational air quality impacts would occur.

Using the GHG threshold information described in the Setting discussion, the project is expected to generate less than the Bright-Line Threshold of 1,150 metric tons of GHG emissions due to the negligible long-term operational emissions. Therefore, the project's potential direct and cumulative GHG emissions would be less than significant and less than a cumulatively considerable contribution to GHG emissions. Section 15064(h)(2) of the CEQA Guidelines provide guidance on how to evaluate cumulative impacts. If it is shown that an incremental contribution to a cumulative impact, such as global climate change, is not "cumulatively considerable," no mitigation is required. Because this project's emissions fall under the threshold, no mitigation is required.

Mitigation/Conclusion. The project would result in limited short-term air quality impacts that would be minimized through compliance with County Land Use Ordinance requirements and standard APCD mitigation measures described in Exhibit B – Mitigation Summary Table. Upon implementation of identified mitigation measures and compliance with County requirements, potential impacts on Air Quality and GHG emissions would be less than significant.

4. BIOLOGICAL RESOURCES *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Result in a loss of unique or special status species* or their habitats?	☐	☒	☐	☐
b) Reduce the extent, diversity or quality of native or other important vegetation?	☐	☐	☒	☐
c) Impact wetland or riparian habitat?	☐	☐	☒	☐
d) Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?	☐	☐	☒	☐
e) Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish & Wildlife or U.S. Fish & Wildlife Service?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

* **Species – as defined in Section15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.**

Biological Resources

Setting. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Barren soils, ruderal vegetation

Name and distance from blue line creek(s): San Juan Creek is located approximately 0.80 miles northeast from the project site.

Habitat(s): Disturbed

The following information is based on the Kit Fox Evaluation prepared for the project (Kevin Merk Associates 2017):

The proposed reservoir would be located in an area formerly used as a cattle feedlot and currently consists of bare soils and non-native grasses predominantly surrounded by active agriculture. The site is generally flat surrounded by gentle rolling hills with extensive existing vineyards to the east, north, and south, and associated farm buildings and infrastructure in the immediate area. Grasslands are also present on the steeper hills to the west. There are no trees on the project site. Other than agriculture, dominant habitat types within a 10-mile radius of the project site primarily consist of annual grassland interspersed with coyote brush (*Baccharis pilularis*) and blue oak (*Quercus douglasii*).

The California Natural Diversity Database was queried for San Joaquin Kit Fox (*Vulpes macrotis mutica*; SJKF) occurrences within ten miles of the site. Other special status species occurring within one mile were also queried but have been dismissed and are not expected to occur on site due to the lack of suitable habitat.

San Joaquin Kit Fox

The California Natural Diversity Database identified this area as important habitat for the San Joaquin Kit Fox, a federally listed endangered species and a state listed threatened species. The kit fox is uncommon to rare. They reside in arid regions of the southern half of the state. A usually nocturnal mammal, kit fox live in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub. Kit foxes primarily are carnivorous, subsisting on black-tailed jackrabbits and desert cottontails, rodents (especially kangaroo rats and ground squirrels), insects, reptiles, and some birds, bird eggs, and vegetation. Their cover is provided by dens they dig in open, level areas with loose-textured, sandy and loamy soils. Pups are born in these dens in February through April. Pups are weaned at about 4-5 months. Some agricultural areas may support these foxes. Potential predators are coyotes, large hawks and owls, eagles, and bobcats. Cultivation has eliminated much of the kit fox habitat in the project vicinity. Kit foxes are vulnerable to many human activities, such as hunting, use of rodenticides and other poisons, off-road vehicles, and trapping

Impact. The project site consists of predominantly bare soils devoid of vegetation and does not support suitable denning habitat for the SJKF due to the regular cycles of disturbance associated with disking and farming practices. Active ground squirrel abatement practices in concert with ongoing agricultural operations have reduced the availability of small mammal and other potential SJKF prey at the site. A site visit conducted by Kevin Merk Associates, Inc. biologist, Julie Thomas, confirmed that there is no evidence of small mammal activity and historical records show that there are no recorded kit fox sightings within three miles of the site since 1975.

A San Joaquin Kit Fox Habitat Evaluation Form was prepared by Kevin Merk Associates, Inc. on October 1, 2015. The Evaluation assessed the proposed reservoir site and was reviewed by the California Department of Fish and Wildlife (Brandon Sanderson, CDFW, January 12, 2018). CDFW requires that all impacts to kit fox habitat be mitigated at a ratio of 3 acres conserved for each acre impacted (3:1). Although the project would result in 4.48 acres of site disturbance during grading and construction, it would result in the permanent removal of approximately 2.8 acres of kit fox habitat for the open water surface of the reservoir. Mitigation has been identified to mitigate for the permanent loss of kit fox habitat per CDFW requirements.

During construction of the reservoir, there is a potential for wildlife to enter and become trapped in the reservoir. Once trapped, there is a risk of mortality due to dehydration or starvation. Use of a wildlife

ladder or similar feature inside the reservoir would enable wildlife to exit, which would mitigate this potential impact. The project includes the construction of a 6-foot-tall chain-link fence around the reservoir, which would prevent most wildlife from entering the reservoir after construction; however, small mammals and reptiles may still be able to enter the area and become trapped in the reservoir. A permanent wildlife ladder or an exclusionary feature, such as a smaller gauge mesh fencing or material around the bottom of the perimeter fence would be installed to mitigate potential impacts of small wildlife becoming trapped in the pond area during project operation.

Grading, ground disturbance, and constructed earthen slopes could cause erosion and sedimentation affecting localized areas surrounding the site. Temporary ground disturbance would also occur along the southeast access road, where a 12-inch pipeline would be placed in an 18-inch wide, 4-feet deep trench, for approximately 1,159 feet. Impacts to adjacent areas from erosion and sedimentation could occur if construction activities are conducted without proper control measures in place. There are no sensitive areas in close proximity to the proposed area of disturbance and implementation of erosion control measures identified on the project site plan would reduce impacts related to sedimentation to less than significant.

Mitigation/Conclusion. Compensatory mitigation required for the proposed reservoir is **8.4 acres**, based on **3** times **2.8** acres impacted. The applicant would be required to mitigate the loss of 2.8 acres of San Joaquin kit fox habitat by one of the following ways:

- Deposit of funds to an approved in-lieu fee program;
- provide for the protection of kit foxes in perpetuity through acquisition of fee or conservation easement of suitable habitat in the kit fox corridor area; or
- purchase credits in an approved conservation bank.

To prevent inadvertent harm to kit fox, the applicant has agreed to retain a biologist for a pre-construction survey, a pre-construction briefing for contractors, and monitoring activities in addition to implementing cautionary construction measures. These mitigation measures are listed in detail in Exhibit B Mitigation Summary Table.

Projects involving more than one acre of disturbance are typically required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion however, enrollment in the stormwater permit and SWPPP requirements do not apply to construction projects solely for agricultural purposes such as frost protection and irrigation reservoirs. There are no sensitive biological resources in close proximity to the project site and potential impacts to adjacent areas would be reduced to less than significant by implementation of the standard erosion control measures detailed on the project site plans.

Implementation of identified mitigation measures would mitigate potential impacts to biological resources to less than significant.

5. CULTURAL RESOURCES *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Disturb archaeological resources?	☐	☐	☒	☐
b) Disturb historical resources?	☐	☐	☒	☐
c) Disturb paleontological resources?	☐	☐	☒	☐
d) Cause a substantial adverse change to a Tribal Cultural Resource?	☐	☐	☒	☐

5. CULTURAL RESOURCES *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Other: _____	☐	☐	☐	☒

Cultural Resources

Setting. The project is located in an area historically occupied by the Obispeno Chumash and Salinan. THese Native Americans established a sophisticated system of horticulture, using seed scattering, harrowing, selective harvesting, coppicing and spot burning to produce crops of acorns, grass, wildflower seeds. They also hunted wildlife and foraged for juncus, willow, redbud, and elderberry for basket making. The founding of Mission Asistencia at Santa Margarita in the 1780s and Mission San Miguel in 1797 led to the gradual depopulation of native communities in this area. The Highway 41/46 corridor has historically served as a traveling route between the coastal areas and the Central Valley. These same routes were previously used by Native Americans for the movement of people and goods as well.

Impact A Phase 1 Archaeological Surface Survey was prepared by Heritage Discoveries, Inc. in February 2018, and concluded that prehistoric or historic cultural resources were not present within the proposed project area. A literature search and records search further confirmed the absence of archaeological sites near the study area.

Per Assembly Bill 52 (AB 52), notices regarding the opportunity for tribal consultation were sent on January 9, 2018 to four Native American tribes affiliated with the project area (Northern Salinan, Xolon Salinan, Yak Tityu Tityu Northern Chumash, and the Northern Chumash Tribal Council). One response was received from the Xolon Salinan Tribe on February 12, 2018, confirming that there are no known sensitive sites within project area. Therefore, the potential for archaeological resources to exist at the site is considered very low.

In the unlikely event resources are uncovered during grading activities, implementation of Land Use Ordinance Section 22.10.040 (Archeological Resources) would be required:

> *In the event archeological resources are unearthed or discovered during any construction activities, the following standards apply:*
>
> *A. Construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.*
>
> *B. In the event archeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner shall be notified in addition to the Department so proper disposition may be accomplished.*

There are no historic structures within the project area. Subsurface geologic formations (Qa – Quaternary Alluvium) of Holocene age underlie the project area. Holocene deposits are generally considered too young to contain fossilized remains but may shallowly overlie older Pleistocene deposits that have the potential to yield paleontological resources. No impacts to historical resources would occur and the potential for impacts to paleontological resources is considered low given the limited extent and depth of excavation proposed.

Mitigation/Conclusion. No significant impacts on cultural resource would occur. In the event of an unanticipated discovery of archeological resources during earth-moving activities, compliance with

compliance with the Land Use Ordinance would ensure potential impacts would be reduced to less than significant. Therefore, no additional mitigation is necessary.

6. GEOLOGY AND SOILS *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?	☐	☐	☒	☐
b) Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?	☐	☐	☒	☐
c) Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?	☐	☐	☒	☐
d) Include structures located on expansive soils?	☐	☐	☒	☐
e) Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?	☐	☐	☒	☐
f) Preclude the future extraction of valuable mineral resources?	☐	☐	☒	☐
g) Other: _____	☐	☐	☐	☒

* **Per Division of Mines and Geology Special Publication #42**

Geology and Soils

Setting. The following relates to the project's geologic aspects or conditions:

Topography: Nearly level to gently sloping

Within County's Geologic Study Area?: No

Landslide Risk Potential: Low to high

Liquefaction Potential: Low

Nearby potentially active faults?: Yes Distance? Approximately 6 miles

Area known to contain serpentine or ultramafic rock or soils?: No

Shrink/Swell potential of soil: Low to moderate

Other notable geologic features? None

Impact. The following analysis is based on the Geotechnical Engineering Report for the proposed project (Mid-Coast Geotechnical 2015).

The proposed project would result in the disturbance of approximately 4.48 acres (195,149 square feet) including approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill. Additionally, a 12-inch pipeline would be placed in an 18-inch trench, 4-feet deep, for approximately 1,159 feet along the existing access road. During grading activities, there is a potential for erosion and down-gradient sedimentation to occur. The applicant has included standard grading and erosion control measures to be implemented during construction on the project site. These measures include protection of slopes, stockpiles, disturbed areas, and access areas, and site inspections and maintenance of all erosion control measures. A sedimentation and erosion plan is required for all construction and grading projects (LUO Sec. 22.52.120) to minimize potential impacts related to erosion control, necessary creek setbacks, and siltation. The plan must be prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Typically, projects involving more than one acre of disturbance are subject to Regional Water Quality Control Board (RWQCB) requirements for preparation of a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. However, SWPPP requirements do not apply to agricultural reservoirs.

Based on the findings of the Geotechnical Engineering Report prepared for this project, no significant geologic hazards would occur. The applicant is required to comply with existing Land Use Ordinance standards, including Sections 22.52.100 (Grading Plan Requirements) and 22.52.150 (Standards). The project would conform to the County Public Improvement Standards for material and construction specifications and incorporate specific geotechnical design recommendations. Compliance with these practices and other applicable standards would typically indicate that risks to people and /or structures, including those related to unstable earth conditions, were properly safeguarded against.

The San Juan Fault is the nearest active fault, located approximately 6 miles east of the project site. Based on the quality and conditions of the in-place soils and the absence of a high water table, it was determined that the potential for liquefaction and/or lateral spreading is low at the proposed project site (Mid-Coast Geotechnical 2015). The County's Land Use View mapping database identifies a moderate liquefaction potential at the site. The Geotechnical Engineering Report prepared for the project site found that the site is suitable for the proposed development provided that the recommendations contained in the report are properly implemented into the project.

Mitigation/Conclusion. Based on compliance with existing regulations and recommendations in the Geotechnical Engineering Report, implementation of the sedimentation and erosion control measures as specified in project plans, and compliance with the measures outlined in the County's Land Use ordinances and codes, no significant geologic or soil impacts would occur. No other mitigation measures are necessary.

7. HAZARDS & HAZARDOUS MATERIALS - ***Will the project:***	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

7. HAZARDS & HAZARDOUS MATERIALS - *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?	☐	☐	☒	☐
e) Impair implementation or physically interfere with an adopted emergency response or evacuation plan?	☐	☐	☒	☐
f) If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?	☐	☐	☒	☐
h) Be within a 'very high' fire hazard severity zone?	☐	☐	☒	☐
i) Be within an area classified as a 'state responsibility' area as defined by CalFire?	☐	☐	☒	☐
j) Other: _____	☐	☐	☐	☐

Hazards and Hazardous Materials

Setting. The project is not located in an area of known hazardous material contamination and is not on a site listed on the "Cortese List" (which is a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5) (SWRCB 2018; DTSC 2018). The project is located within a high fire hazard severity zone and based on the County's response time map, it will take approximately 10 to 15 minutes to respond to a call regarding fire or life safety. The project is not located within an Airport Review Area and there are no active private landing strips within the vicinity (although one of the

adjacent agricultural roads was formerly used as an agricultural landing strip; the landing strip is no longer in use).

Impact. The project proposes construction of an agricultural reservoir to support an existing vineyard. The reservoir would be constructed in accordance with industry standards and consistent with applicable codes. The project would not include the construction of buildings for human habitation and therefore would not expose people to a substantial new hazard. The project does not propose the use of hazardous materials or the generation of hazardous wastes. The use of standard materials, oils, and fuels to operate and maintain construction equipment would be handled pursuant to existing regulations. The project does not present a significant fire safety risk and the project is would not conflict with any regional emergency response or evacuation plan.

Mitigation/Conclusion. No significant impacts related to hazards or hazardous materials would occur, and no mitigation measures are necessary.

8. NOISE *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Expose people to noise levels that exceed the County Noise Element thresholds?	☐	☐	☒	☐
b) Generate permanent increases in the ambient noise levels in the project vicinity?	☐	☐	☒	☐
c) Cause a temporary or periodic increase in ambient noise in the project vicinity?	☐	☐	☒	☐
d) Expose people to severe noise or vibration?	☐	☐	☒	☐
e) If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?	☐	☐	☒	☐
f) Other: _____	☐	☐	☐	☒

Noise

Setting. The project is not considered a “noise sensitive land use” and is not within close proximity of loud noise sources. The project is located within an agricultural area and based on the Noise Element’s projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area. The nearest sensitive receptors are approximately 2,000 feet away. The project is not located within an Airport Review Area and there are no active private landing strips within the vicinity.

Impact. The project is not expected to generate loud noises, nor conflict with the surrounding uses. Short-term construction noise would be limited in nature and duration and operation of the reservoir

would not generate loud noise levels. The project would not expose people to existing or increased noise levels.

Mitigation/Conclusion. No significant noise impacts would occur, and no mitigation measures are necessary.

9. POPULATION/HOUSING *Will the project:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?	☐	☐	☒	☐
b) Displace existing housing or people, requiring construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Create the need for substantial new housing in the area?	☐	☐	☒	☐
d) Other: _____	☐	☐	☐	☒

Population/Housing

Setting In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County's Inclusionary Housing Ordinance requires provision of new affordable housing in conjunction with both residential and nonresidential development and subdivisions.

Impact. The proposed project proposed construction of an agricultural reservoir to serve existing agricultural uses. The proposed project does not include any residential uses or structures for human habitation. The project would not result in a need for a significant amount of new housing, and would not displace existing housing.

Mitigation/Conclusion. No significant population and housing impacts would occur. No mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES *Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*	**Potentially Significant**	**Impact can & will be mitigated**	**Insignificant Impact**	**Not Applicable**
a) Fire protection?	☐	☐	☒	☐
b) Police protection (e.g., Sheriff, CHP)?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Roads?	☐	☐	☒	☐

10. PUBLIC SERVICES/UTILITIES *Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
e) Solid Wastes?	☐	☐	☒	☐
f) Other public facilities?	☐	☐	☒	☐
g) Other: _____	☐	☐	☐	☒

Public Services

Setting. The project area is served by the following public services/facilities:

Police: County Sheriff	Location: Templeton (Approximately 20 miles to the west)	
Fire: Cal Fire (formerly CDF)	Hazard Severity: High	Response Time: 10-15
Location: Shandon Station (Approximately 4.75 miles to the northwest)		
School District: Shandon Joint Unified School District.		

Impact. The project proposes construction of an agricultural reservoir to serve existing agricultural uses and would not generate substantial long-term increases in demand for fire protection, police protection, emergency services, schools, roads, solid waste, or other public services or utilities. Electrical demands of the project would be negligible and electrical service is available immediately adjacent to the project site. The proposed project site would be accessed by existing local and farm roads and would not generate substantial long-term operational trips. Cut and fill material would be balanced on-site and the project would not generate substantial amounts of solid waste requiring disposal. Therefore, potential impacts on public services or utilities would be less than significant.

Mitigation/Conclusion. No significant impacts to public services or utilities would occur. No mitigation measures are necessary.

11. RECREATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase the use or demand for parks or other recreation opportunities?	☐	☐	☒	☐
b) Affect the access to trails, parks or other recreation opportunities?	☐	☐	☒	☐
c) Other _____	☐	☐	☐	☒

Recreation

Setting. The project would be located within privately-owned operational agricultural parcels that primarily support existing vineyards.

Impact. Construction and operation of the proposed reservoir would not have any adverse effects on existing or planned recreational opportunities in the County. The proposed project would not create a significant need for additional park, Natural Area, and/or recreational resources.

Mitigation/Conclusion. No significant impacts to recreational resources would occur, and no mitigation measures are necessary.

12. TRANSPORTATION/CIRCULATION *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Increase vehicle trips to local or areawide circulation system?	☐	☐	☒	☐
b) Reduce existing "Level of Service" on public roadway(s)?	☐	☐	☒	☐
c) Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?	☐	☐	☒	☐
d) Provide for adequate emergency access?	☐	☐	☒	☐
e) Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?	☐	☐	☒	☐
f) Conflict with an applicable congestion management program?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐
h) Result in a change in air traffic patterns that may result in substantial safety risks?	☐	☐	☒	☐
i) Other: _____	☐	☐	☐	☒

Transportation

Setting. The County has established the acceptable Level of Service on roads for this rural area as "C" or better. The existing road network in the area, including Truesdale Road and Shell Creek Road, are operating at acceptable levels. Based on existing road speeds and configuration (vertical and horizontal road curves), sight distance is considered acceptable.

Impact. The proposed project includes construction of an agricultural reservoir to serve an existing agricultural operation. Short-term construction related trips would be minimal and area roadways are operating and acceptable levels and would be able to accommodate construction related traffic. Long-term maintenance and operational trips would not substantially differ from existing onsite vineyard operations. As a result, the proposed project would have no long-term impact on existing road service or traffic safety levels. The project does not conflict with adopted policies, plans and programs related

to transportation, and would not affect air traffic patterns or policies related to public transit, bicycle, or pedestrian facilities.

Mitigation/Conclusion. No significant traffic impacts would occur, and no mitigation measures are necessary.

13. WASTEWATER *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	☐	☐	☐	☒
b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?	☐	☐	☐	☒
c) Adversely affect community wastewater service provider?	☐	☐	☐	☒
d) Other: _____	☐	☐	☐	☒

Wastewater

Setting/Impacts. The proposed project would not generate wastewater or require wastewater disposal. Short-term construction activities would be served by onsite portable restroom and handwashing stations, which would be disposed of at a licensed facility.

Mitigation/Conclusion. No significant impacts related to wastewater would occur, and no mitigation measures are necessary.

14. WATER & HYDROLOGY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
QUALITY				
a) Violate any water quality standards?	☐	☐	☒	☐
b) Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?	☐	☐	☒	☐
c) Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?	☐	☐	☒	☐

14. WATER & HYDROLOGY *Will the project:*	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?	☐	☐	☒	☐
e) Change rates of soil absorption, or amount or direction of surface runoff?	☐	☐	☒	☐
f) Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?	☐	☐	☒	☐
g) Involve activities within the 100-year flood zone?	☐	☐	☒	☐
QUANTITY				
h) Change the quantity or movement of available surface or ground water?	☐	☒	☐	☐
i) Adversely affect community water service provider?	☐	☐	☒	☐
j) Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure,etc.), or inundation by seiche, tsunami or mudflow?	☐	☐	☒	☐
k) Other: _____	☐	☐	☐	☒

Water

Setting. The project proposes to utilize existing wells within the Truesdale Vineyard to fill the reservoir. The project site is within the San Juan sub-area of the Paso Robles Groundwater Basin (the basin). Encompassing an area of approximately 505,000 acres (760 square miles), the basin extends from the Garden Farms area south of Atascadero to San Ardo in Monterey County, and from the Highway 101 corridor to east of Shandon. It is the primary, and in many places the only, source of water available to property owners throughout the North County.

In 2015, the State legislature approved a new groundwater management law known as the Sustainable Groundwater Management Act (SGMA). SGMA requires that high and medium priority basins comply with the new law. DWR designated the Paso Robles Groundwater Basin as a high priority basin and designated the basin to be in a "condition of critical overdraft."

In January 2007 the Board of Supervisors directed the preparation of a Resource Capacity Study (RCS) for the Paso Robles Groundwater Basin in accordance with the County's Resource Management System (RMS). The RMS describes a resource in terms of its "level of severity" (LOS) based on the rate of depletion and an estimate of the remaining capacity, if any.

Table 2. Water Resource Levels of Severity

Level of Severity	Description
LOS I	Level I is reached for a water resource when increasing water demand projected over 9 years equals or exceeds the estimated dependable supply.
LOS II	Level II for a water resource occurs when water demand projected over 7 years (or other lead time determined by a resource capacity study) equals or exceeds the estimated dependable supply.
LOS III	A Level of Severity III exists when water demand equals the available resource; the amount of consumption has reached the dependable supply of the resource.

The RCS established an LOS III for the main basin and a separate LOS I for the Atascadero sub-basin, which is hydrogeologically distinct from the main basin.

The Countywide Water Conservation Program and Water-Related General Plan and County Code Amendments

On October 27, 2015 the Board of Supervisors adopted the Countywide Water Conservation Program to address ongoing water scarcity concerns. The objectives of the Countywide Water Conservation Program are to halt increase in groundwater extraction in areas that have been certified LOS III; provide a mechanism to allow new development and new or altered irrigated agriculture to proceed in certified LOS III areas, subject to the requirements of the County General Plan and County Code, in a manner that fully offsets projected water use; and to reduce the wasteful use of water in the county. The amendments were effective on November 26, 2015 and affect the following areas:

- Paso Robles Groundwater Basin:
    - New buildings and new irrigated agriculture must offset new water use. (Building and Construction Ordinance and The County Land Use Ordinance)
    - New construction and new irrigated agriculture in the Paso Robles Groundwater Basin must be water neutral.
- Countywide:
    - Water waste prevention measures apply to all unincorporated areas where a similar program is not already operated by a water purveyor. (Health and Sanitation Ordinance)
    - Agricultural best management practices are encouraged in all unincorporated areas (The County Land Use Ordinance)

The adopted Countywide Water Conservation Program and ordinances included amendments to the County Health and Sanitation Ordinance, Building and Construction Ordinance, County Land Use Ordinance, and County Fee Schedule.

Drainage Characteristics

The topography of the project is nearly level to gently sloping to. The closest creek is San Juan Creek, approximately 0.80 miles away. As described in the NRCS Soil Survey, the soil surface is considered to have moderate erodibility.

Projects involving more than one acre of disturbance are typically required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion however, enrollment in the stormwater permit and SWPPP requirements do not apply to construction projects solely for agricultural purposes such as frost protection and irrigation reservoirs. When work is done in the rainy

season, the County's Land Use Ordinance requires that temporary erosion and sedimentation measures to be installed.

DRAINAGE – The following relates to the project's drainage aspects:

Within the 100-year Flood Hazard designation? Yes

Closest creek? San Juan Creek Distance? Approximately 0.80 miles

Soil drainage characteristics: Moderately drained to well drained

For areas where drainage is identified as a potential issue, the Land Use Ordinance (LUO Sec. 22.52.110 or CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

SEDIMENTATION AND EROSION – Soil type, area of disturbance, and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project's soil types and descriptions are listed in the previous Agriculture section under "Setting". As described in the NRCS Soil Survey, the project's soil erodibility is as follows:

Soil erodibility: Moderate

A sedimentation and erosion control plan is required for all construction and grading projects (LUO Sec. 22.52.120, CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. .

Impact

Water Quality

The reservoir would be constructed on nearly flat topography and is not within a 100-year Flood Hazard designation; however, construction of the well connection pipeline would partially extend into the 100-year Flood Hazard designation. The project would be located approximately 0.80 miles from San Juan Creek. Underlying soils have moderate erodibility. The applicant has proposed erosion control measures to be implemented during construction, including protection of stockpiles, protection of slopes, protection of all disturbed areas, protection of access roads and perimeter containment measures.

With regards to project impacts on water quality the following conditions apply:

- Approximately 195,149 square feet of site disturbance is proposed and the movement of approximately 44,000 cubic yards of cut and 44,000 cubic yards of fill material;
- The project will be subject to standard County requirements for drainage, sedimentation and erosion control for construction and permanent use;
- The project is not on highly erodible soils, nor on moderate to steep slopes;
- The project is more than 100 feet from the closest creek or surface water body;
- Stockpiles will be properly managed during construction to avoid material loss due to erosion; and
- All hazardous materials and/or wastes will be properly stored on-site, which include secondary containment should spills or leaks occur.

To provide protection from downward migration of stored water within the reservoir, the proposed earthen irrigation reservoir would be lined with 40-mil high density polyethylene (HDPE) plastic. This

HDPE liner would provide protection from leakage into the subsurface; therefore, no water quality related impacts to groundwater would occur. With this liner in place, no potentially adverse impacts to the Paso Robles Groundwater Basin would occur and impacts associated with subsurface leakage would be less than significant.

Water Quantity

Water used to fill the reservoir would be sourced from two existing wells. The applicant intends to increase water-use efficiency during the peak frost period by constructing the reservoir and reducing the cumulative amount of water simultaneously pumped from the basin during frost events. The proposed reservoir would therefore increase water-use efficiency by enabling better water management during frost events. However, it would also result in water loss through evaporation from the water surface to the atmosphere and increased pumping from the basin to compensate for reservoir evaporation. To reduce evaporative water losses, the applicant proposes to fill the reservoir for frost protection purposes during the typical peak frost period (March through May). At the end of the frost season, the reservoir would be maintained at 25 percent capacity for irrigation operations from June 1st through November 15th. The reservoir would remain empty between November 16th and February 28th.

Evaporative Loss

The proposed project would result in long-term evaporative water losses through surface evaporation of stored water in the reservoir. To estimate evaporative losses, Monsoon Consultants (2017) prepared a hydrogeologic analysis for the project. The findings of the report indicate that the project would result in an annual evaporative loss of 5.4 acre-feet. This information was peer reviewed and confirmed by the County's consultant (GSI 2018). Due to the level of existing groundwater pumping from the basin, and requirements of the County's Countywide Water Conservation Program, the project must offset the 5.4 acre-feet of new water use to account for evaporative losses and avoid significant water quantity impacts. Water offsets could be achieved by fallowing other existing agricultural uses within the vineyard or using any "banked" water offset credits available to the applicant under the existing offset clearance determination (dated October 18, 2016). An Agricultural Offset Clearance has been granted by the County of San Luis Obispo, allowing for an additional 148.6 acres of vineyards to be planted. The water duty factor for the vineyard is 1.25 acre-feet per acre per year. A 1:1 net evaporative water loss would be obtained by committing to not plant 4.23 acres of new vineyards. Mitigation requiring evidence that a 5.4 acre-foot per year offset has been achieved by the project applicant, subject to the approval of the County and verification by an independent hydrogeologist would be required before permit issuance. Offsets would be required to be achieved from within the existing Truesdale Vineyards that the reservoir would benefit. Fallowing of agricultural areas to achieve the required offset would not result in indirect significant impacts, as this is a normal part of agricultural operations within the vineyard (fallowing certain areas, planting new areas). Mitigation has been identified to reduce potential water quantity impacts to less than significant.

Well Interference

The applicant's consultant, Monsoon Consultants, performed a well interference analysis of the impact to the groundwater level at the four nearest offsite wells from the withdrawal of the water required for the initial filling of the reservoir and the net evaporative losses from the reservoir. The analysis determined that after the initial filling, the estimated pump rate at the supply well to account for evaporative loss of water (when the reservoir contains water) would average 1.68 gallons per minute, depending on various climatic condition scenarios. The anticipated drawdown, as measured at the property lines nearest to the well, resulting from the increased pumping to account for evaporative losses would were estimated to range from approximately 0.7 to 6.6 feet during the initial filling and 0.014 to 0.69 feet during operation. This information was peer reviewed and confirmed by the County's consultant (GSI 2018). Well interference impacts of this magnitude would not substantially affect well operations and are not considered significant (GSI 2018).

Drainage and Flood Hazard

As noted above, the proposed reservoir site it nearly level. Stormwater would be diverted around the reservoir via a drainage swale that would discharge into rock energy dissipaters.

As proposed, the reservoir is designed to withstand storm and flood events and would not be located in an area that would substantially impede floodwaters or otherwise create a public health and safety issue. Flood waters would continue to flow downslope across the project area and surrounding vineyards. Based on the incorporation of standard engineered design standards and compliance with existing regulations, no significant drainage or flood hazard impacts would occur.

Mitigation/Conclusion. Compliance with existing regulations and/or required plans would adequately address the potential for surface water quality impacts during construction and permanent use of the project. No change in groundwater quality would occur. Therefore, no additional mitigation is required.

Increased water demand resulting from evaporative losses would be mitigated through a mandatory 1:1 offset requirement. Mitigation requiring evidence that a 5.4 acre-foot per year offset has been achieved by the project applicant, subject to the approval of the County and verification by an independent hydrogeologist would be required before permit issuance, reducing potential water quantity impacts to less than significant.

The project would result in negligible water level drawdown at neighboring properties due to increased pumping activities. Potential impacts related to water level drawdown would be less than significant. Therefore, no additional mitigation measures are necessary.

15. LAND USE *Will the project:*	**Inconsistent**	**Potentially Inconsistent**	**Consistent**	**Not Applicable**
a) Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?	☐	☐	☒	☐
b) Be potentially inconsistent with any habitat or community conservation plan?	☐	☐	☐	☒
c) Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?	☐	☐	☒	☐
d) Be potentially incompatible with surrounding land uses?	☐	☐	☒	☐
e) Other: _____	☐	☐	☐	☒

Land Use

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, etc.). Identified mitigation would require new water use offsets at a 1:1 ratio consistent with County plans and ordinances aimed at addressing water

shortages within the Paso Robles Groundwater Basin. The project was found to be consistent with applicable planning documents (refer also to Exhibit A on reference documents used).

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Mitigation/Conclusion. No land use or planning related policy inconsistencies were identified. Potential impacts would be less than significant and no mitigation is necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable

a) ***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 pre-history?***

☐ ☐ ☒ ☐

b) ***Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects*** **of probable future projects)**

☐ ☐ ☒ ☐

c) ***Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*** ☐ ☐ ☒ ☐

For further information on CEQA or the County's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://resources.ca.gov/ceqa/ for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning Department has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

Contacted	Agency	Response
☐	County Public Works Department	**Not Applicable**
☐	County Environmental Health Services	**Not Applicable**
☐	County Agricultural Commissioner's Office	**Not Applicable**
☐	County Airport Manager	**Not Applicable**
☐	Airport Land Use Commission	**Not Applicable**
☐	Air Pollution Control District	**Not Applicable**
☐	County Sheriff's Department	**Not Applicable**
☐	Regional Water Quality Control Board	**Not Applicable**
☐	CA Coastal Commission	**Not Applicable**
☒	CA Department of Fish and Wildlife	**None**
☐	CA Department of Forestry (Cal Fire)	**Not Applicable**
☐	CA Department of Transportation	**Not Applicable**
☐	Community Services District	**Not Applicable**
☐	Other _____	**Not Applicable**
☐	Other _____	**Not Applicable**

*** "No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

☒ Project File for the Subject Application

County documents

- ☐ Coastal Plan Policies
- ☒ Framework for Planning (Coastal/Inland)
- ☒ General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements:
  - ☒ Agriculture Element
  - ☒ Conservation & Open Space Element
  - ☐ Economic Element
  - ☐ Housing Element
  - ☒ Noise Element
  - ☒ Parks & Recreation Element/Project List
  - ☒ Safety Element
- ☒ Land Use Ordinance (Inland/Coastal)
- ☐ Building and Construction Ordinance
- ☒ Public Facilities Fee Ordinance
- ☐ Real Property Division Ordinance
- ☐ Affordable Housing Fund
- ☐ Airport Land Use Plan
- ☐ Energy Wise Plan
- ☒ North County Area Plan/Shandon-Carrizo SA and Update EIR
- ☐ Design Plan
- ☐ Specific Plan
- ☒ Annual Resource Summary Report
- ☐ Circulation Study

Other documents

- ☒ Clean Air Plan/APCD Handbook
- ☐ Regional Transportation Plan
- ☐ Uniform Fire Code
- ☒ Water Quality Control Plan (Central Coast Basin – Region 3)
- ☒ Archaeological Resources Map
- ☒ Area of Critical Concerns Map
- ☒ Special Biological Importance Map
- ☒ CA Natural Species Diversity Database
- ☒ Fire Hazard Severity Map
- ☒ Flood Hazard Maps
- ☒ Natural Resources Conservation Service Soil Survey for SLO County
- ☒ GIS mapping layers (e.g., habitat, streams, contours, etc.)
- ☐ Other

In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

1. California Department of Conservation. 2016. Farmland Mapping and Monitoring Program. <http://maps.conservation.ca.gov/dlrp/ciftimeseries/> Accessed on: April 12, 2018.
2. California Department of Toxic Substance Control (DTSC). 2018. Envirostor. <https://www.envirostor.dtsc.ca.gov/public/> Accessed on: April 1, 2018.
3. California Department of Transportation (Caltrans). 2018. California Scenic Highway Mapping System. <http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/>. Accessed on: April 1, 2018.
4. California Environmental Protection Agency (CalEPA). 2018. Cortese List Data Resources. <https://calepa.ca.gov/sitecleanup/corteselist/> Accessed on: April 18, 2018.
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Exhibit B - Mitigation Summary Table

Per Public Resources Code Section 21081.6, the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, are responsible to verify compliance with these COAs.

Agricultural Resources

AG-1 **Prior to issuance of grading and/or construction permits,** the project plans shall clearly state the purpose of the reservoir for on-site frost control and irrigation purposes and that off-site transfer of reservoir water and/or other uses of the reservoir are prohibited.

Air Quality

AQ-1 **Fugitive PM10 Mitigation Measures. Upon application for construction permits,** all required PM_{10} measures shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Reduce the amount of the disturbed area where possible;

b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible;

c. All dirt stock pile areas should be sprayed daily or covered with tarps or other dust barriers, as needed;

d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil-disturbing activities;

e. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;

f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County APCD;

g. All roadways, driveways, sidewalks, etc. 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;

h. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;

i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;

j. Install wheel washers or other devices to control tracking of mud and dirt onto adjacent roadways where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;

k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible. Roads shall be pre-wetted prior to sweeping when feasible;

l. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the San Luis Obispo County APCD Engineering & Compliance Division prior to the start of any grading, earthwork, or demolition.

AQ-2 **Standard Mitigation Measures for Construction Equipment. Upon application for construction permits,** all standard mitigation measures for construction equipment shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Maintain all construction equipment in proper tune according to manufacturer's specifications;

b. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

c. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;

d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;

e. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;

f. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;

g. Diesel idling within 1,000 feet of sensitive receptors is not permitted;

h. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;

i. Electrify equipment when feasible;

j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,

k. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Biological Resources

San Joaquin Kit Fox

The Kit Fox Evaluation, which was completed for the Truesdale Feedlot Site by Kevin Merk Associates, LLC, indicates the project will impact **2.8** acres of San Joaquin kit fox habitat. CDFW reviewed the evaluation and requires that all impacts to kit fox habitat be mitigated at a ratio of 3 acres conserved for each acre impacted **(3:1**). Compensatory mitigation required for the proposed reservoir is **8.4 acres**, based on **3** times **2.8** acres impacted.

Note that the required mitigation ratio is subject to change upon the completion of the California Department of Fish and Wildlife's review of the habitat evaluation. The mitigation options identified in BR-1 through BR-11 apply **to the proposed project only**; should the project change, the mitigation obligation may also change, and a reevaluation of the mitigation measures would be required.

BR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall submit evidence to the County of San Luis Obispo, Department of Planning and Building, Environmental and Resource Management Division (County) (see contact information below) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:

a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **8.4 acres** of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) (see contact information below) and the County.

This mitigation alternative (a.) requires that all aspects of this program must be in place before County permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy" (see contact information below), would total **$21,000.00** based on **$2,500 per acre**. This fee is calculated based on the current cost-per-unit of $2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County, and mitigation ratios are under review by Fish and Wildlife; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification identifying your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.

c. Purchase **8.4** credits in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total $21,000.00. This fee is calculated based on the current cost-per-credit of $2,500 per acre of mitigation. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to County permit issuance and initiation of any ground disturbing activities.

BR-2 **Prior to issuance of grading and/or construction permits**, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the County Division of Environmental and Resource Management. The retained biologist shall perform the following monitoring activities:

a. **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction**, the biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the County reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.

b. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-3 through BR11. Site-disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-2-c). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the County.

c. **Prior to or during project activities**, if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact the U.S. Fish and Wildlife Service and the Department for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the U.S. Fish and Wildlife Service/Department determine it is appropriate to resume work.

   If incidental take of kit fox during project activities is possible, **before project activities commence**, the applicant must consult with the U.S. Fish and Wildlife Service and the Department (see contact information below). The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

In addition, the qualified biologist shall implement the following measures:

d. **Within 30 days prior to initiation of site disturbance and/or construction**, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

    1. Potential kit fox den: 50 feet
    2. Known or active kit fox den: 100 feet
    3. Kit fox pupping den: 150 feet

e. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.

f. If kit foxes or known or potential kit fox dens are found on site, daily monitoring during ground disturbing activities shall be required by a qualified biologist.

BR-3 **Prior to issuance of grading and/or construction permits,** the applicant shall clearly delineate as a note on the project plans, that: "*Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox".* Speed limit signs shall be installed on the project site **within 30 days prior to initiation of site disturbance and/or construction**.

In addition, **prior to permit issuance and initiation of any ground disturbing activities**, conditions BR-3 through BR-11 of the Developer's Statement/Conditions of Approval shall be clearly delineated on project plans.

BR-4 **During the site disturbance and/or construction phase**, grading and construction activities after dusk shall be prohibited unless coordinated through the County, during which additional kit fox mitigation measures may be required.

BR-5 **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction,** all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the county, as well as any related biological report(s) prepared for the project. The applicant shall notify the County shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.

BR-6 **During the site-disturbance and/or construction phase,** to prevent entrapment of the San Joaquin kit fox, all excavation, steep-walled holes or trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BR-7 **During the site-disturbance and/or construction phase**, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary, be moved only once to remove it from the path of activity, until the kit fox has escaped.

BR-8 **During the site-disturbance and/or construction phase,** all food-related trash items such as wrappers, cans, bottles, and food scraps generated shall be disposed of in closed containers only and regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

BR-9 **Prior to, during and after the site-disturbance and/or construction phase,** use of pesticides or herbicides shall be in compliance with all local, state and federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.

BR-10 **During the site-disturbance and/or construction phase,** any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and County. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the U.S. Fish and Wildlife Service and the Department by telephone (see contact information below). In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to the Department for care, analysis, or disposition.

BR-11 **During the site-disturbance and/or construction phase,** the applicant shall install a temporary wildlife ladder or similar feature approved by the County within the reservoir that would enable wildlife species to exit the reservoir. The ladder or similar feature shall remain in place until the permanent perimeter fence is constructed and no wildlife species is present within the reservoir. Once the pond has been constructed, a permanent wildlife ladder or similar feature, or an exclusionary feature such as smaller gauge mesh material or fencing around the bottom of the perimeter fence, shall be installed to prevent small wildlife from entering and/or getting trapped in the pond area. This measure shall be shown on all applicable grading and construction plans.

Water Resources

WR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall provide evidence to the County Planning and Building Department that a water offset equivalent to 5.4 acre feet per year has been achieved. The offset shall be acquired from existing or approved uses within the Truesdale Vineyards. The future offset plan shall be subject to independent review and verification by a hydrogeologist **prior to issuance of construction/grading permits**.

Date: September 4, 2018 rev.1

DEVELOPER'S STATEMENT FOR
BORDIAEA INC. (TRUESDALE FEEDLOT) /
MAJOR GRADING PERMIT / PMT2017-01859

The applicant agrees to incorporate the following measures into the project. These measures become a part of the project description and therefore become a part of the record of action upon which the environmental determination is based. All development activity must occur in strict compliance with the following mitigation measures. These measures shall be perpetual and run with the land. These measures are binding on all successors in interest of the subject property.

> **Note:** The items contained in the boxes labeled "Monitoring" describe the County procedures to be used to ensure compliance with the mitigation measures.

The following mitigation measures address impacts that may occur as a result of the development of the project.

Per Public Resources Code Section 21081.6, the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, are responsible to verify compliance with these COAs.

Agricultural Resources

AG-1 **Prior to issuance of grading and/or construction permits,** the project plans shall clearly state the purpose of the reservoir for on-site frost control and irrigation purposes and that off-site transfer of reservoir water and/or other uses of the reservoir are prohibited.

> **Monitoring:** Compliance will be verified by the County Department of Planning and Building.

Air Quality

AQ-1 **Fugitive PM10 Mitigation Measures. Upon application for construction permits,** all required PM_{10} measures shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Reduce the amount of the disturbed area where possible;
b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (non-potable) water should be used whenever possible;

c. All dirt stock pile areas should be sprayed daily or covered with tarps or other dust barriers, as needed;
d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil-disturbing activities;
e. Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the San Luis Obispo County APCD;
g. All roadways, driveways, sidewalks, etc. 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;
h. Vehicle speed for all construction vehicles shall not exceed 15 miles per hour on any unpaved surface at the construction site;
i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code Section 23114;
j. Install wheel washers or other devices to control tracking of mud and dirt onto adjacent roadways where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site;
k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible. Roads shall be pre-wetted prior to sweeping when feasible;
l. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below the San Luis Obispo County APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period, and to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the San Luis Obispo County APCD Engineering & Compliance Division prior to the start of any grading, earthwork, or demolition.

Monitoring: Compliance will be verified by the County Department of Planning and Building.

AQ-2 **Standard Mitigation Measures for Construction Equipment. Upon application for construction permits,** all standard mitigation measures for construction equipment shall be shown on applicable grading or construction plans and made applicable during grading and construction activities as described below.

a. Maintain all construction equipment in proper tune according to manufacturer's specifications;
b. Fuel all off-road and portable diesel powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);

c. Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation;

d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;

e. Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;

f. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;

g. Diesel idling within 1,000 feet of sensitive receptors is not permitted;

h. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;

i. Electrify equipment when feasible;

j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,

k. Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

Monitoring: Compliance will be verified by the County Department of Planning and Building.

Biological Resources

San Joaquin Kit Fox

The Kit Fox Evaluation, which was completed for the Truesdale Feedlot Site by Kevin Merk Associates, LLC, indicates the project will impact **2.8** acres of San Joaquin kit fox habitat. CDFW reviewed the evaluation and requires that all impacts to kit fox habitat be mitigated at a ratio of **3** acres conserved for each acre impacted **(3:1).** Compensatory mitigation required for the proposed reservoir is **8.4** acres, based on **3** times **2.8** acres impacted.

Note that the required mitigation ratio is subject to change upon the completion of the CDFW's review of the habitat evaluation. The mitigation options identified in BR-1 through BR-11 apply **to the proposed project only**; should the project change, the mitigation obligation may also change, and a reevaluation of the mitigation measures would be required.

BR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall submit evidence to the County of San Luis Obispo, Department of Planning and Building, Environmental and Resource Management Division (County) (see contact information below) that states that one or a combination of the following three San Joaquin kit fox mitigation measures has been implemented:

a. Provide for the protection in perpetuity, through acquisition of fee or a conservation easement of **8.4 acres** of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway

58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (Department) (see contact information below) and the County.

This mitigation alternative (a.) requires that all aspects of this program must be in place before County permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County, and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (b) above can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in agreement between the Department and TNC to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The fee, payable to "The Nature Conservancy" (see contact information below), would total **$21,000.00** based on **$2,500 per acre**. This fee is calculated based on the current cost-per-unit of $2,500 per acre of mitigation, which is scheduled to be adjusted to address the increasing cost of property in San Luis Obispo County, and mitigation ratios are under review by Fish and Wildlife; your actual cost may increase depending on the timing of payment. This fee must be paid after the Department provides written notification identifying your mitigation options but prior to County permit issuance and initiation of any ground disturbing activities.

a. Purchase **8.4 credits** in a Department-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (c) above can be completed by purchasing credits from the Palo Prieto Conservation Bank (see contact information below). The Palo Prieto Conservation Bank was established to preserve San Joaquin kit fox habitat, and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with the California Environmental Quality Act (CEQA). The cost for purchasing credits is payable to the owners of The Palo Prieto Conservation Bank, and would total **$21,000.00**. This fee is calculated based on the current cost-per-credit of **$2,500 per acre of mitigation**. The fee is established by the conservation bank owner and may change at any time. Your actual cost may increase depending on the timing of payment. Purchase of credits must be completed prior to County permit issuance and initiation of any ground disturbing activities.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the County Division of Environmental and Resource Management.

BR-2 **Prior to issuance of grading and/or construction permits**, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the County Division of Environmental and Resource Management. The retained biologist shall perform the following monitoring activities:

a. **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction**, the biologist shall conduct a pre-activity (i.e., preconstruction) survey for known or potential kit fox dens and submit a letter to the County reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.

b. **The** qualified biologist shall conduct weekly site visits during site-disturbance activities (e.g., grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-3 through BR11. Site-disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made onsite or the qualified biologist recommends monitoring for some other reason (see BR-2.c). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the County.

c. **Prior to or during project activities, if any observations are made of SJKF, or** any known or potential SJKF dens are discovered within the project limits, the qualified biologist shall reassess the probability of incidental take (e.g., harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact the U.S. Fish and Wildlife Service (USFWS) and the CDFW for guidance on possible additional kit fox protection measures to implement and whether or not a federal and/or state incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS and/or CDFW determine it is appropriate to resume work.

   If incidental take of kit fox during project activities is possible, **before project activities commence**, the applicant must consult with the USFWS and the CDFW. The results of this consultation may require the applicant to obtain a federal and/or state permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

In addition, the qualified biologist shall implement the following measures:

d. **Within 30 days prior to initiation of site disturbance and/or construction**, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

   1. Potential kit fox den: 50 feet
   2. Known or active kit fox den: 100 feet
   3. Kit fox pupping den: 150 feet

e. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.

f. If kit foxes or known or potential kit fox dens are found on site, daily monitoring during ground-disturbing activities shall be required by a qualified biologist.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the County Division of Environmental and Resource Management.

BR-3 **Prior to issuance of grading and/or construction permits,** the applicant shall clearly delineate as a note on the project plans, that: "*Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox.*" Speed limit signs shall be installed on the project site **within 30 days prior to initiation of site disturbance and/or construction**.

In addition, **prior to permit issuance and initiation of any ground-disturbing activities**, conditions BR-3 through BR-11 of the Developer's Statement/Conditions of Approval shall be clearly delineated on project plans.

BR-4 **During the site disturbance and/or construction phase**, grading and construction activities after dusk shall be prohibited unless coordinated through the County, during which additional kit fox mitigation measures may be required.

BR-5 **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction,** all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e., SJKF). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the County, and any related biological report(s) prepared for the project. The applicant shall notify the County shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers, and other personnel involved with the construction of the project.

BR-6 **During the site-disturbance and/or construction phase,** to prevent entrapment of the SJKF, all excavation, steep-walled holes, or trenches in excess of 2 feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to the onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BR-7 **During the site-disturbance and/or construction phase**, any pipes, culverts, or similar structures with a diameter of 4 inches or greater stored overnight at the project site shall be thoroughly inspected for trapped SJKF before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the

construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary, be moved only once to remove it from the path of activity, until the kit fox has escaped.

BR-8 **During the site-disturbance and/or construction phase,** all food-related trash items such as wrappers, cans, bottles, and food scraps generated shall be disposed of in closed containers only and regularly removed from the site. Food items may attract SJKF onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

BR-9 **Prior to, during and after the site-disturbance and/or construction phase,** use of pesticides or herbicides shall be in compliance with all federal, state, and local regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which SJKF depend.

BR-10 **During the site-disturbance and/or construction phase,** any contractor or employee that inadvertently kills or injures a SJKF or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and County. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFW by telephone. In addition, formal notification shall be provided in writing within 3 working days of the finding of any such animal(s). Notification shall include the date, time, location, and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to the CDFW for care, analysis, or disposition.

BR-11 **During the site-disturbance and/or construction phase,** the applicant shall install a temporary wildlife ladder or similar feature approved by the County within the reservoir that would enable wildlife species to exit the reservoir. The ladder or similar feature shall remain in place until the permanent perimeter fence is constructed and no wildlife species is present within the reservoir. Once the pond has been constructed, a permanent wildlife ladder or similar feature, or an exclusionary feature such as smaller gauge mesh material or fencing around the bottom of the perimeter fence, shall be installed to prevent small wildlife from entering and/or getting trapped in the pond area. This measure shall be shown on all applicable grading and construction plans.

Monitoring (San Joaquin Kit Fox Measures BR-3 – BR-11): Compliance will be verified by the County Division of Environmental and Resource Management in consultation with the California Department of Fish and Game. As applicable, each of these measures shall be included on construction plans.

Water Resources

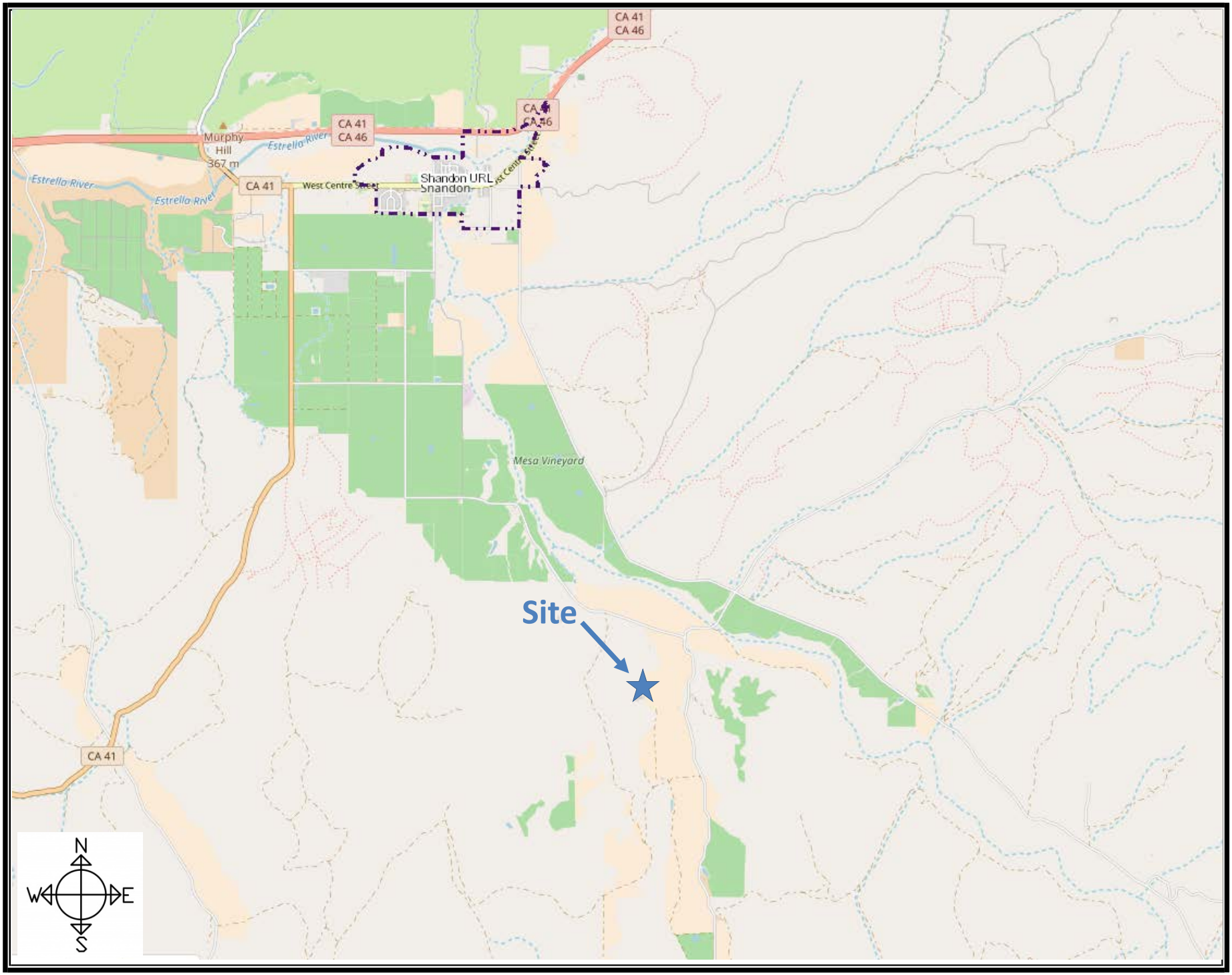
WR-1 **Prior to issuance of grading and/or construction permits,** the applicant shall provide evidence to the County Planning and Building Department that a water offset equivalent to 5.4 acre feet per year has been achieved. The offset shall be acquired from existing or approved uses within the Truesdale Vineyards. The future offset plan shall be subject to independent review and verification by a hydrogeologist **prior to issuance of construction/grading permits**.

Monitoring: Compliance will be verified by the County Department of Planning and Building.

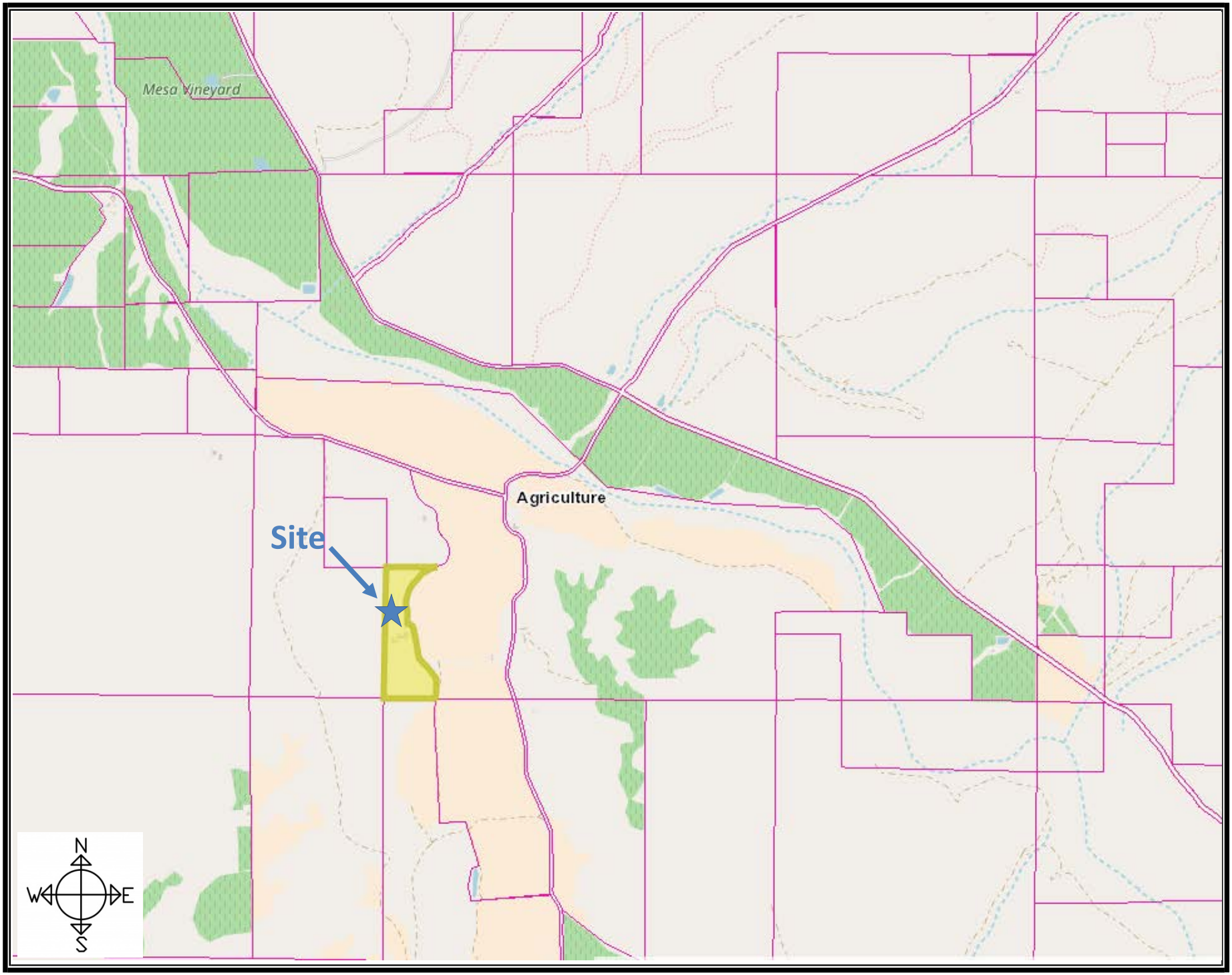
The applicant understands that any changes made to the project description subsequent to this environmental determination must be reviewed by the Environmental Coordinator and may require a new environmental determination for the project. By signing this agreement, the owner(s) agrees to and accepts the incorporation of the above measures into the proposed project description.

Signature of Agent(s)

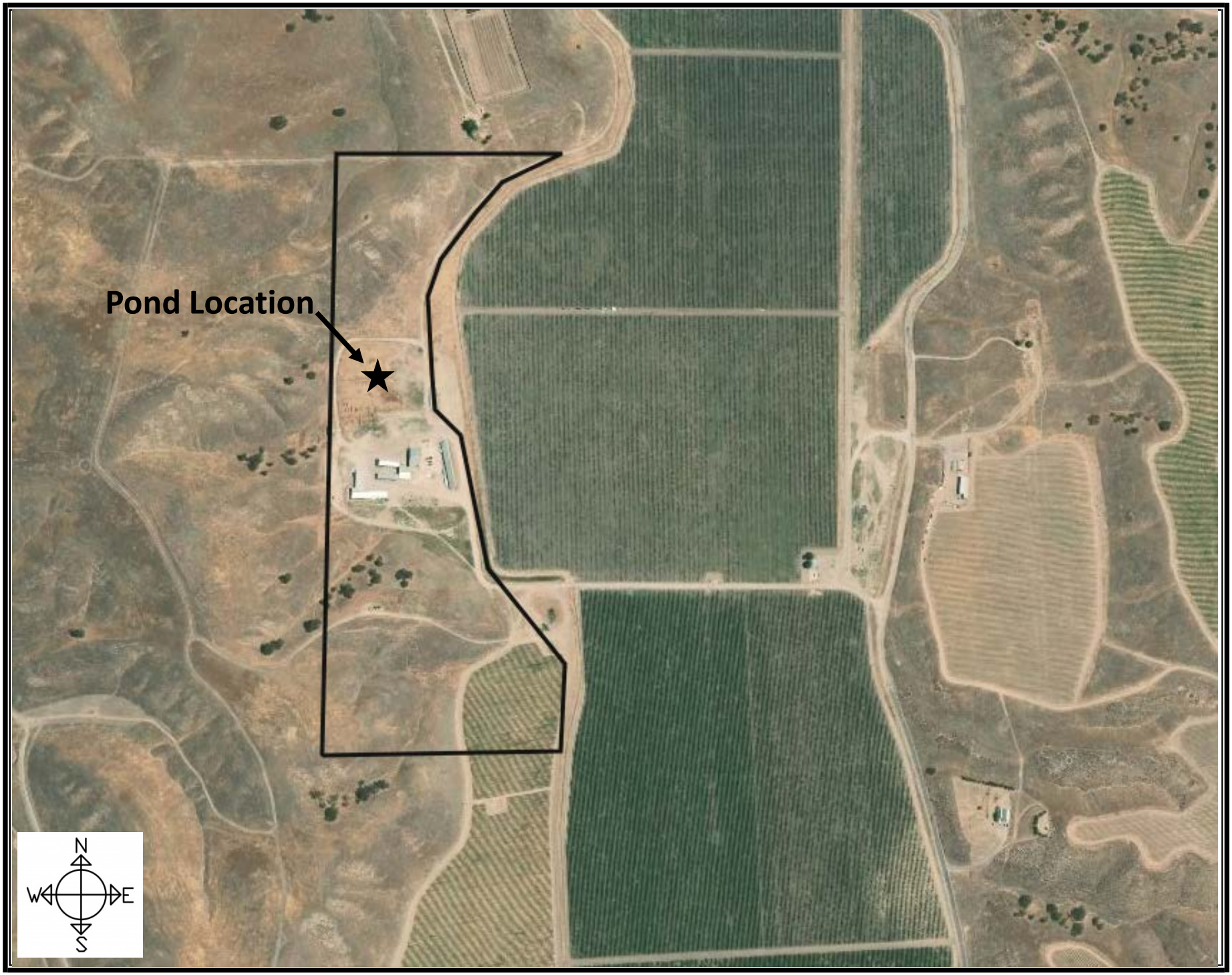
Sept. 5, 2018
Date



PMT2017-01859– TRUESDALE FEEDLOT GRADING PERMIT–VICINITY MAP



PMT2017-01859– TRUESDALE FEEDLOT GRADING PERMIT– LAND USE CATEGORIES MAP



PMT2017-01859– TRUESDALE FEEDLOT GRADING PERMIT–AERIAL MAP

Truesdale Ranch Feedlot Reservoir
APN 037-291-038

Grading Notes:

1. All grading construction shall conform to the applicable codes and to the Soil Report #16369 prepared by Mid Coast Geotechnical on August 21, 2015 for this project.
2. Dust control is to be maintained at all times during construction.
3. Areas of fill shall be overexcavated to a depth of three (3) feet to a limit of three feet outside the proposed fill then scarified and moisture conditioned prior to compacting to 90% of maximum density. All areas shall be observed by a Soils or Civil Engineer prior to placing fill.
4. Fill materials shall be compacted to 90% of maximum density or as specified in the soil report. Interior fill slopes must be overfilled and then cut to finish grade. Exterior slopes may be track walked upon completion to leave a firm surface capable accepting hydroseed.
5. Remove any deleterious material encountered before placing fill
6. No cut or fill slopes shall exceed two horizontal to one vertical (2:1) or as specified in the soil report.
7. All disturbed areas shall be hydro-seeded or planted with an approved erosion control material as soon as possible after construction.
8. Minimum setbacks to creeks and bluffs shall be maintained. Minimum setbacks of two feet from all property lines shall be maintained.
9. Minimum slope away from the toe of slope shall be 2% for the first five feet around the perimeter.
10. An approved erosion control plan will be required to be submitted, approved and implemented should grading occur between October 15 and April 15.
11. Soils Engineer shall determine if the soil is suitable to support the intended structure. A formal report including progress and/or compaction reports shall be submitted to the County Field Inspector prior to final inspection. When a Soils Report is obtained the County policy regarding pad certification shall be followed. When applicable the Engineer of Record shall observe the grading operations and provide the field inspector with the required compaction reports and a report stating that the grading has been observed and is in conformance with the UBC and County Ordinanaces.

Erosion Control Notes:

1. Erosion control measures shall be implemented on all projects and shall include source control, including protection of stockpiles, protection of slopes, protection of all disturbed areas, and protection of accesses. In addition, perimeter containment measures shall be placed prior to the commencement of grading and site disturbance activities unless the Public Works Department determines temporary measures to be unnecessary based upon location, site characteristics or time of year. The intent of the erosion control measures shall be to keep all sediment from entering a swale, drainage way, watercourse or onto adjacent properties.
2. Site inspections and appropriate maintenance of erosion control devices shall be conducted and documented prior to, during, and after rain events.
3. The developer shall be responsible for the placement and maintenance of all erosion control devices as specified by the approved plan until such time that the project is accepted as complete by the Public Works Department. Erosion control devices may be relocated, deleted or additional items may be required depending on the actual soil conditions encountered. Additional erosion control shall be placed at the discretion of the Engineer of Work, County Inspector, SWPPP Monitor or RWQCB Inspector. Guidelines for determining appropriate erosion control devicesare included in the appendix of the Public Improvement Standards.
4. All erosion control devices shall be the first order of work and shall be in place between October 15 and April 15 or anytime when the rain probability exceeds 30%. This work shall be installed or applied after each area is graded and no longer than five (5) working days after the completion of each area.
5. The Engineer of Work and the Public Works Department shall be notified before October 15 for inspection of installed erosion control devices.
6. A standby crew for emergency work shall be available at all times during the rainy season (October 15 through April 15). Necessary materials shall be available and stockpiled at convenient locations to facilitate rapid construction or maintenance of temporary devices when rain is imminent.
7. Permanent erosion control shall be placed and established with 90% coverage on all disturbed surfaces other than paved or gravel surfaces prior to final inspection. Permanent erosion control shall be fully established prior to final inspection. Temporary erosion control measures shall remain in place until permanent measures are established.
8. In the event of a failure, the developer and/or his representative shall be responsible for cleanup and all associated costs or damages. In the event that damage occurs within the right of way and the County is required to perform cleanup, all work shall cease on the project until cleanup costs are fully paid.
9. If any work is not in compliance with the plans or permits approved for the project, the Department shall revoke all active permits and recommend that County Code Enforcement provide a written notice or stop work order in accordance with Section 22.52.140 (23.10) of the Land Use Ordinance.
10. All projects involving site disturbance of one acre or greater shall comply with the requirements of the National Pollutant Discharge Elimination System (NPDES). The developer shall submit a Notice of Intent (NOI) to comply with the General Permit for Constuction Activity with the Regional Water Quality Control Board (RWQCB). The Developer shall provide the County with the Waste Dicharge Identification Number (WDID) or with verification that an exemption has been granted bu RWQCB.
    WDID#__Exempt per RWQCB_____
11. Person to contact 24 hours a day in the event there is an erosion control/sedimentation problem (Storm Water Compliance Officer)
    Name__Fritz Heltzer_____
    Local Phone___835-1442_____

Project Air Quality Control Notes:

During Construction the contractor shall designate a person or persons to monitor the Dust Control Program and to order increases measures as necessary to prevent the transport of dust off-site. Their duties shall include holiday and weekend periods when work may or may not be in progress. The name and telephone number for such persons shall be provided to the APCD prior to the commencement of construction.
The measures for dust control are as follows but not limited to:

Reduce the amount of disturbed area where possible.

1. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15mph. Reclaimed (non-potable) water should be used whenever possible.
2. All dirt stockpile areas shall be sprayed daily as needed.
3. Exposed ground areas that are planned to be reworked at dates later than one month after initial grading should be seeded with a fast germinating native grass seed and watered until vegetation is established.
4. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the ACCD.
5. All external slopes shall be hydroseeded as soon as possible upon completion.
6. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
7. All trucks hauling dirt, sand, soil, or other loose material are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114.
8. Install wheel washers where vehicles enter and exit paved roads and streets, or wash off trucks and equipment leaving the site.
9. Prior to final inspection all disturbed areas shall be vegetated with a fast-growing, native seed mix.

General Notes

1. No construction shall be started without plans approved by the County Planning Department. The Planning Department shall be notified at least 24 hrors prior to the start of construction and the time and location for the preconstruction conference.
2. All construction work and installations shall conform to the County Standards and Specifications.
3. Soils tests shall be done in accordance with the County Standards and Specifications Sections 11-351.1403 and Section 11.351-1404. The test results shall clearly indicate the location and source of materials.
4. Compaction tests shall be made on all embankment materials, subgrades and ditch backfill.
5. There will be no need for special concrete inspection. Concrete for the anchor pad shall be 2000 psi. The rebar shall be inspected prior to the placement of the concrete. All concrete and the two sack slurry for the anti-seep collars and ditch backfill where shown shall be properly vibrated.
6. The Design Engineer shall inspect the installation of the HDPE Liner. The liner shall be installed by a contractor specializing in lining ponds.
7. The Engineer of Record shall certify that the improvements when completed are in accordance to the plans prior to the request for Final Inspection. As-built plans are to be prepared after construction is completed. The Engineer certifying the improvements shall be present at the Final Inspection.
8. Final Reports for grading and earthwork shall be prepared in accordance with the requirements of the UBC, Chapter 33.
9. Upon completion of the work, the Geotechnical Engineer shall submit to the Engineer of Record a complete summary of all testing done during the project.
10. The Construction Contractor shall maintain a current, complete and accurate record of all changes which deviate from the approved plans. No changes shall be made without the prior approval of the Engineer of Record and the County.
11. The site shall be posted for a construction speed limit of 25 mph to protect the San Joaquin Kit Fox.

Address: Shell Creek Road, Shandon, CA 93461
APN 037-291-038
Legal Description
Lot size Acres: 43.89
Zoning AG
Project Description: Construct a 40 ac-ft Agricultural Reservoir for irrigation purposes

Kit Fox Special Requirements

(1) Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the County Devision of Environmental and Resource Management. The retained biologist shall perform the following monitoring activities:
a. Prior to issuance of grading and/or contruction permits and within 30 days prior to initiation of site disturbance and/or construction, the biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the County reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.
b. The qualified biologist shall conduct weekly site visits during site-disturbance activities (i.e. grading, discing, excavation, stock piling of dirt or removal of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-3 through BR-11. Site-disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-2-c3). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the County.
c. Prior to or during project activities, if any observations are made of San Joaquin kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact the U.S. Fish and Wildlife Service and the Department for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the U.S. Fish and Wildlife Service/Department determine it is appropriate to resume work.
If inadental take of kit fox during project activities is possible, before project activies commence, the applicant must consult with the U.S. Fish and Wildlife Service and the Department (see contact information below). The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.
In addition, the qualified biologist shall implement the following measures:
1. Within 30 days prior to initiation of site distrubance and/or construction, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:
a) Potential kit fox den 50 feet
b) Known or active kit fox den 100 feet
c) Kit fox pupping den 150 feet
2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.
3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring during ground distrubing activies shall be required by a qualified biologist.
(2) Prior to issuance of grading and/or contruction permits, the applicant shall delineate as a note on the project plans,that: "Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox." Speed limit signs shall be installed on the project site within 30 days prior to initiation of site distrubance and/or contruction. In addition, prior to permit issuance and initiation of any ground disturbing activities, conditions BR-3 through BR-11 of the Developer's Statement/Conditions of Approval shall be clearly delineated on project plans.
(3) During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the County, during which additional fit fox mitigation measures nay be required.
(4) Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (e.g. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the county, as well as any related biological reports) prepared for the project. The applicant shall notify the County shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.
(5) During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavation, steep-walled holes or trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
(6) During the site-disturbance and/or construction phase, any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any qay. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary, be moved only once to remove it from the path of activity, until the kit fox has escaped.
(7) During the site-disturbance and/or construction phase, all food-related trash items such as wrappers, cans, bottles, and food scraps generated shall be disposed of in closed containers only and regularly removed from the site. Food items nay attract San Joaquin kit foxes onto the project site, consequently exposing such animales to increased risk of injury or mortaly. No deliberate feeding of wildlife shall be allowed.
(8) Prior to, during and after the site-disturbance and/or construction phase, use of pesticides or herbicides shall be in compliance with all local, state and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.
(9) During the site-disturbance and/or construction phase, any contractor or employee that inadvertantly kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident inmediately to the applicant and County. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the U.S. Fish and Wildlife Service and the Department by telephone (see contact information below). In additional, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location adn circumstances of the incident. Any threatened or endagered species found dead or injured shall be turned over immediately to the Department for care, analysis, or disposition.
BR-11. During the site-disturbance and/or construction phase, the applicant shall install a temporary wildlife ladder or similar feature approved by the County within the reservoir that would enable wildlife species to exit the reservoir. The ladder or similar feature shall remain in place until the permanent perimeter fence is constructed and no wildlife species is present within the reservoir. This measure shall be shown on all applicable grading and construction plans.

Table 1705.6
Required Verification and Inspection of Soils

Verification and Inspection Task	Continuos During Task Listed	Periodically During Task Listed
1. Verify materials below embankments are adequate to achieve the design capacity	———	X
2. Verify excavations are extended to proper depth and have reached proper material.	———	X
3. Perform classification and testing of controlled filled materials.	———	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	X	———
5. Prior to placement of controlled fill, observe subgrade	———	X

Mid-Coast Geotechnical shall perform all special inspections for the earthwork for this project.
Call 24 hours prior to inspection to set up an appointment.

Scope of Work

The work consists of constructing a new lined 40 acre-foot reservoir 207' by 457' by 28' deep specifically for irrigation and frost control purposes. All areas to receive fill shall be excavated a minimum of three feet, the exposed surface scarified and moisture conditioned, then recompact to 90% relative compaction. The intent is to balance the earthwork with no import or export. The completed interior slopes shall be fine graded and all rocks removed. A 40 mil HDPE geomembrane liner will then be installed on the slopes. The liner will be installed per manufacturer's recommendations by a company specializing in liner installation. A five foot by n foot by twenty five foot eight inch reinforced concrete pad for anchoring the liner shall be constructed around the pump inlet pipes. No special inspection for the concrete work shall be required. A 6 foot non-climb fence will be built around the exterior perimeter. The sources of water are existing pvc waterlines from existing wells and reservoirs and no surface water shall enter the reservoir.. Valving, filters and pumps will be installed after the reservoir is constructed by the Irrigation Contractor and are not part of this permit. This contract is for stubbing one 10"x0.250 wall thickness pipe through the exterior slope for future connection to the fill and transfer lines by an Irrigation Contractor. This pipe shall have concrete slurry anti-seep collars. A 15" PVC Drop Pipe Outlet Structure will serve as an emergency overflow in the event the high water limit switch fails and is sized to prevent the reservoir from overtopping. Access to the reservoir is by existing dirt farm roads. No driveways will be constructed. The existing farm field sheet flows across the location from 5% to 16%. An earthen swale will be constructed in the cut slope on the uphill perimeter to keep any flow away from the toe of the fill slopes. No electrical work nor utility work is included in this permit.

Benchmark and Basis of Bearing

Benchmark is a metal Triangulation Monument on hill above reservoir
N 2402435.13
E 5865106.77
Elev = 1454.72
Basis of Bearing is line between control points 709 and 711

Pre-construction Meeting

Prior to construction a pre-construction meeting is required with the inspector to go over the special inspection reporting requirements, final and progress reports, & erosion control.
Call SLO County Building Dept 781-5600 and North County Inspector at 781-2076

Reports Required

Upon the completion of Construction the Engineer of Record shall prepare and submit to the County of SLO a Final Report stating that the work is in substantial conformance with the approved plans. Progress Reports are required by the Engineer of Record to the grading inspection as determined during the pre-construction meeting.

Special Inspections

1. No special inspections will be required for this project
2. Mid-Coast Geotechnical shall inspect all earthwork and normal concrete and slurry placement. Contact Dane Jensen at 461-0965
3. The Engineer of Record shall inspect the installation of the pond liner. Contact Tom Howell at 925-5311

Project Information

Contacts:

Owner: Grapevine Land Management
Matt Turrentine
444 Higuera St Suite 202
San Luis Obispo, CA 93401
805 312-1828

Engineer: Tom A Howell
1812 N Vine
Santa Maria, CA 93454
805 925-5311

Geotechnical Engineer: Mid Coast Geotechnical, Inc
Dane Jensen
3124 El Camino Real
Atascadero, CA 93423-2220
805 461-0965

Pond Report

Top of dam elevation: 1164.25
Bottom of pond elevation: 1134.25
Top of dam width: 14.00
Cut Slope: 2.00:1
Fill Slope: 2.50:1
Interior Slope: 2.50:1

Pond Earthwork Volumes

Fill Factor: 1.30
Total cut : 44,000 C.Y.
Total fill: 44,000 C.Y.
Area cut: 110,347 S.F.
Area Fill: 84,672 S.F.
Total Area: 195,019 S.F. 4.48 Acres

Sheet Index

Engineer's Certificate

I, Tom A Howell, RCE 27037, Engineer of Record, hereby certify that these plans are in accordance with the following codes: _____Date:_____

2013 California Energy Codes
2016 California Building Code Vols 1 & 2
2016 California Electrical Code
2016 California Energy Code
2016 California Fire Code
2016 California Green Building Code
2016 California Mechanical Code
2016 California Plumbing Code
2016 Reference Standards Code
County Building and Construction Ordinance Title 19
County Coastal Zone Land Use Ordinance Title 23
County Fire Code Ordinance Title 16
County Land Use Ordinance Title 22

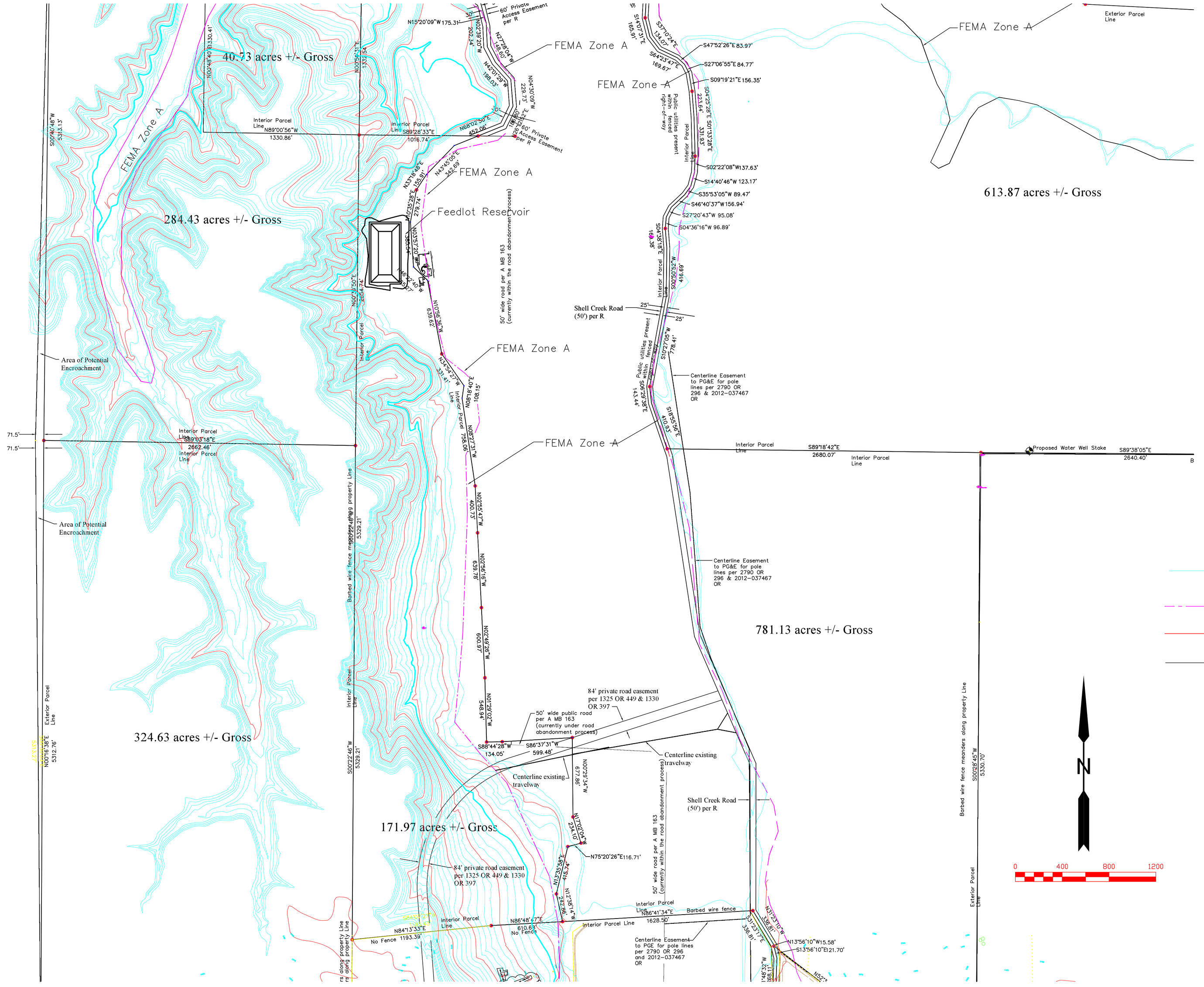
Geotechnical Engineer's Certificate

I have reviewed the plans and specifications and have found them to be in substantial conformance with the recommendations as found in my Soil Investigation.
_____Date:_____

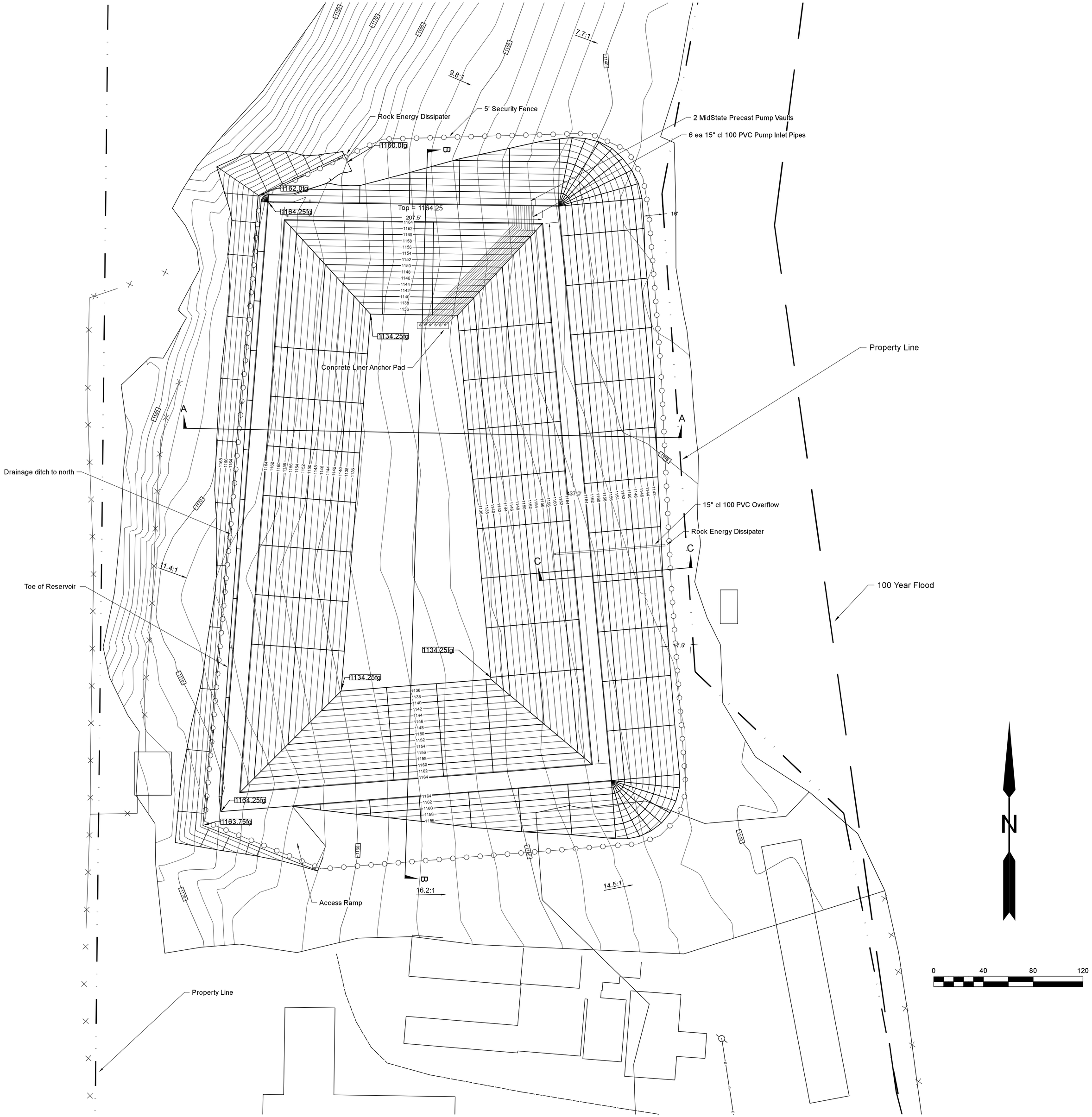
REGISTERED PROFESSIONAL ENGINEER
TOM A. HOWELL
No. C 27037
Expires 3/31/19
CIVIL
STATE OF CALIFORNIA

Feedlot Reservoir

DRAWN TH	DATE 8/01/17	Cover Sheet 40 Ac-ft Shell Creek Rd Shandon
APPROVED	DATE	
SCALE	SHEET 1 of 6	PROJECT NO. 150519



Feedlot Reservoir		
DRAWN	DATE	*Property Lines*
TH	*8/01/17*	*Easements*
APPROVED	DATE	*Flood Zone*
SCALE	SHEET	PROJECT NO.
1"=400'	*2 of 6*	*150519*



Pond Report

Top of dam elevation: 1164.25
Bottom of pond elevation: 1134.25
Top of dam width: 14.0
Cut Slope: 2.000:1
Fill Slope: 2.500:1
Interior Slope: 2.500:1

Pond Earthwork Volumes

Fill Factor: 1.30
Total cut : 44,000 C.Y.
Total fill: 44,000 C.Y.

Pond Storage Volumes

Water Elev	Storage(AcreFt)	(Gallons)	Area(Acre)
1134.25	0.00	0.00	0.652
1136.25	1.39	454330	0.744
1138.25	2.97	970440	0.841
1140.25	4.76	1551261	0.942
1142.25	6.75	2199728	1.048
1144.25	8.95	2918771	1.159
1146.25	11.39	3711326	1.274
1148.25	14.05	4580323	1.394
1150.25	16.96	5528698	1.518
1152.25	20.12	6559381	1.646
1154.25	23.55	7675307	1.779
1156.25	27.24	8879408	1.917
1158.25	31.22	10174617	2.059
1160.25	35.48	11563867	2.205
1162.25	40.09	13050091	2.356
1164.25	44.91	14636221	2.512

Control Points

Point	Northing	Easting	Elevation	Description
700	2409672.680	5866705.170	1147.86	CP Pole
701	2413916.980	5865558.440	1120.25	CP North
702	2414354.670	5862822.310	1116.80	AT OLD
703	2414781.210	5861623.650	1116.83	AT 1
704	2411728.430	5860883.220	1129.75	AT 2
705	2409594.980	5873872.510	1146.48	AT 3
706	2414054.050	5869006.970	1162.17	AT
707	2406328.530	5864783.830	1188.08	AT 4
708	2398023.740	5863718.700	1654.30	CP
709	2402435.340	5865106.770	1454.72	CP Triangulation
710	2402579.130	5862826.780	1423.45	AT 5
711	2407534.300	5869504.050	1367.38	CP Triangulation
712	2407807.310	5869532.810	1346.21	AT 7
714	2398023.790	5863718.740	1654.13	CP Spike
715	2395882.570	5862761.920	1581.34	AT 6
716	2398100.950	5866172.700	1192.60	Monument
717	2398094.570	5866118.750	1193.97	AT 8
718	2402446.480	5869483.080	1320.37	AT 9
719	2402622.190	5872356.900	1487.86	AT 10

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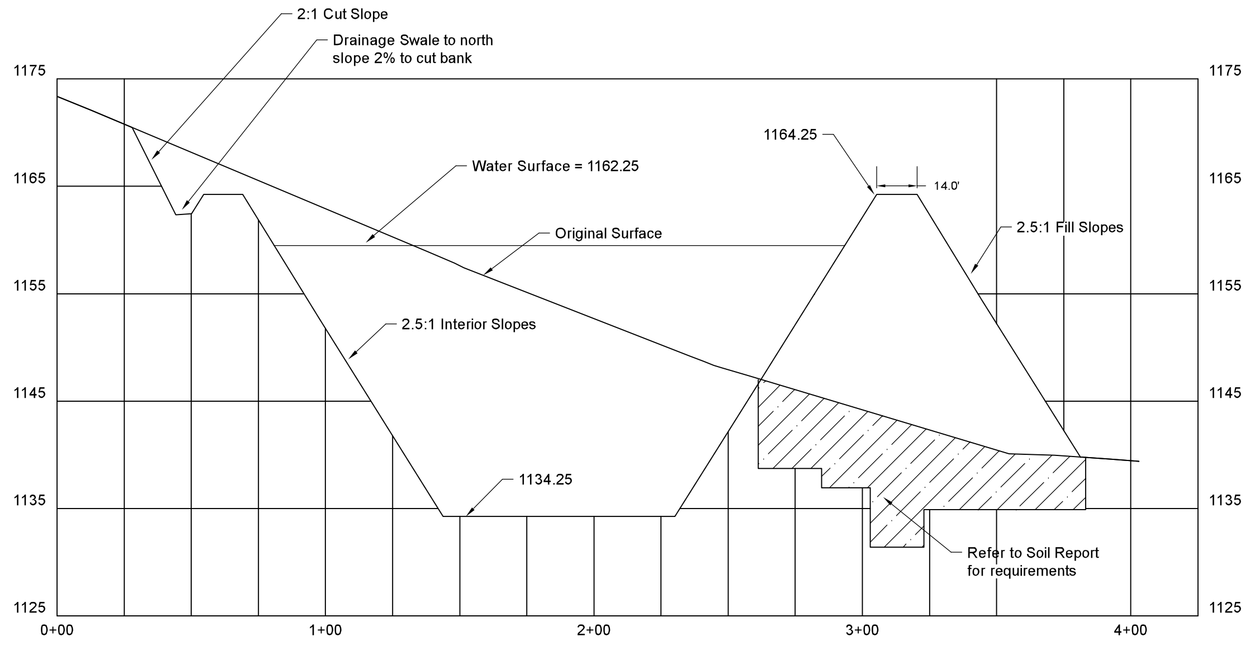
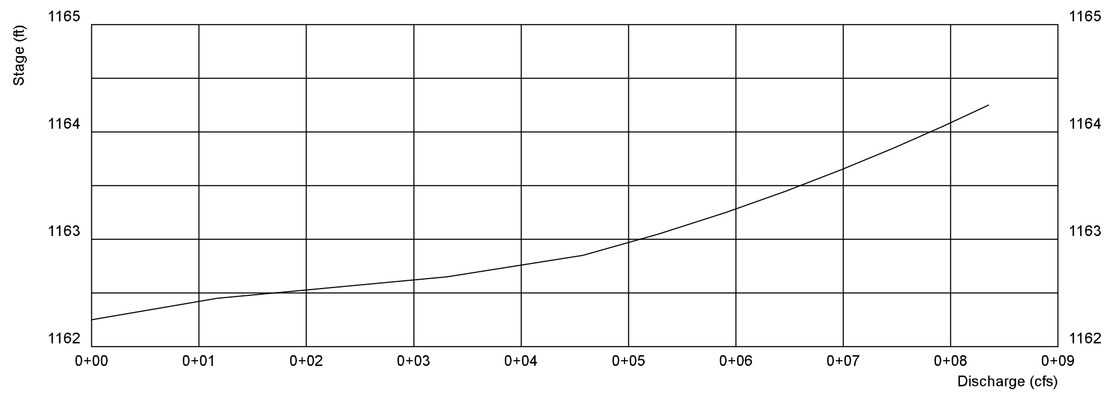
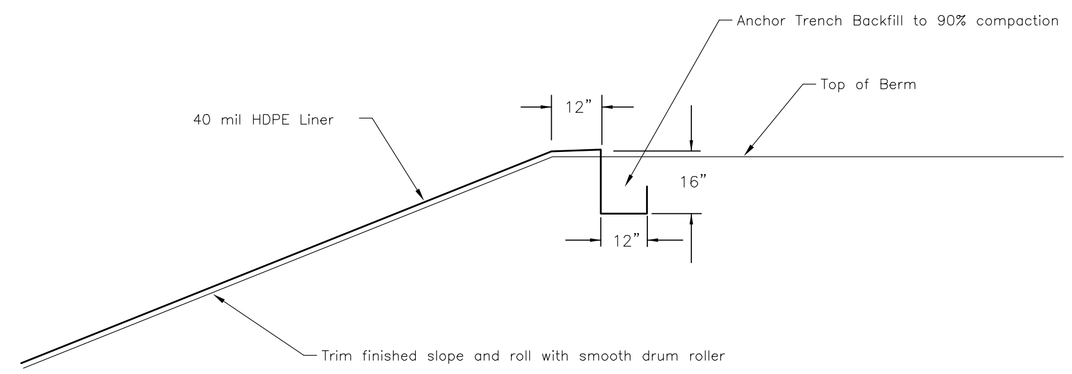
DRAWN TH	DATE 8/01/17	40 Ac-ft Usable Grading Plan
APPROVED	DATE	
SCALE 1"=40'	SHEET 3 of 6	PROJECT NO.

Section A-A

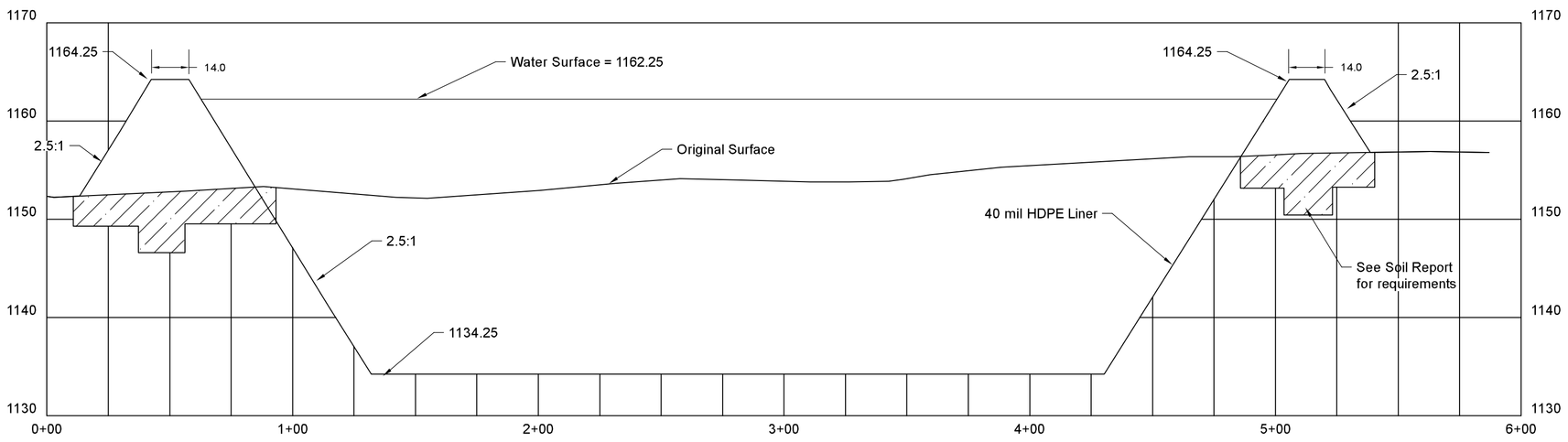




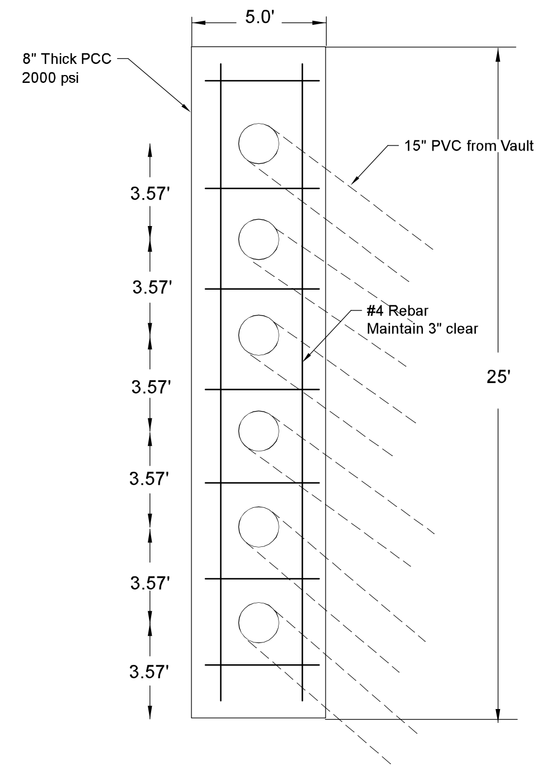
HDPE Liner Anchor Trench



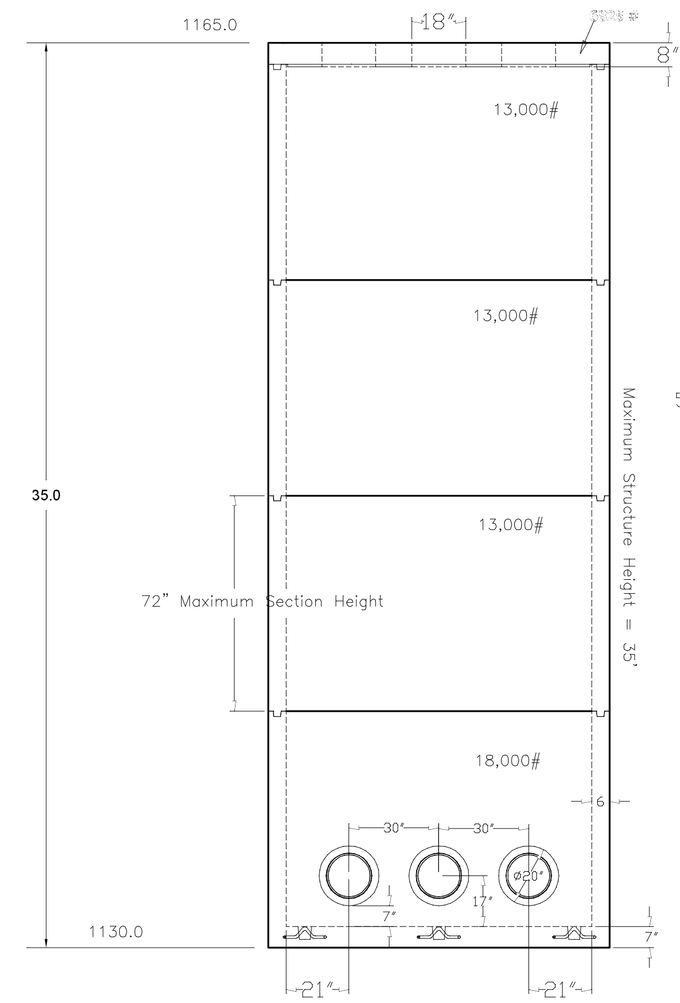
Section B-B

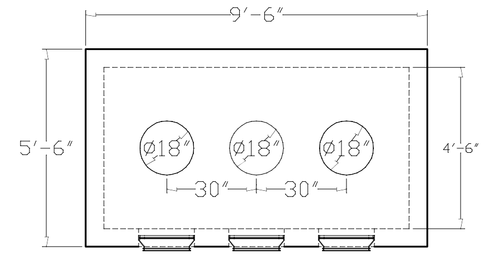


Concrete Liner Anchor Pad



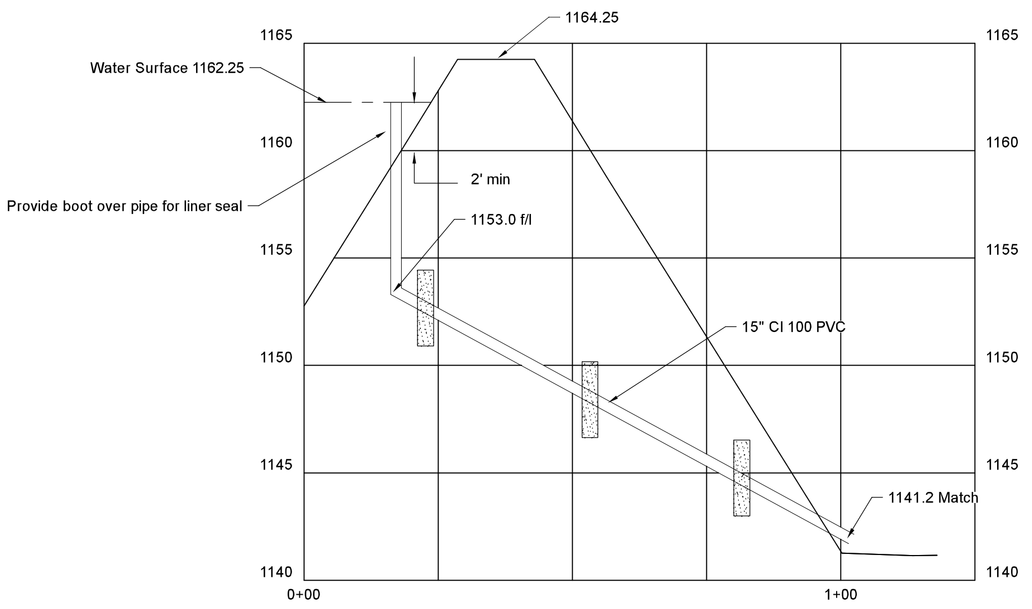
Mid-State Concrete Products Pump Housing Vault



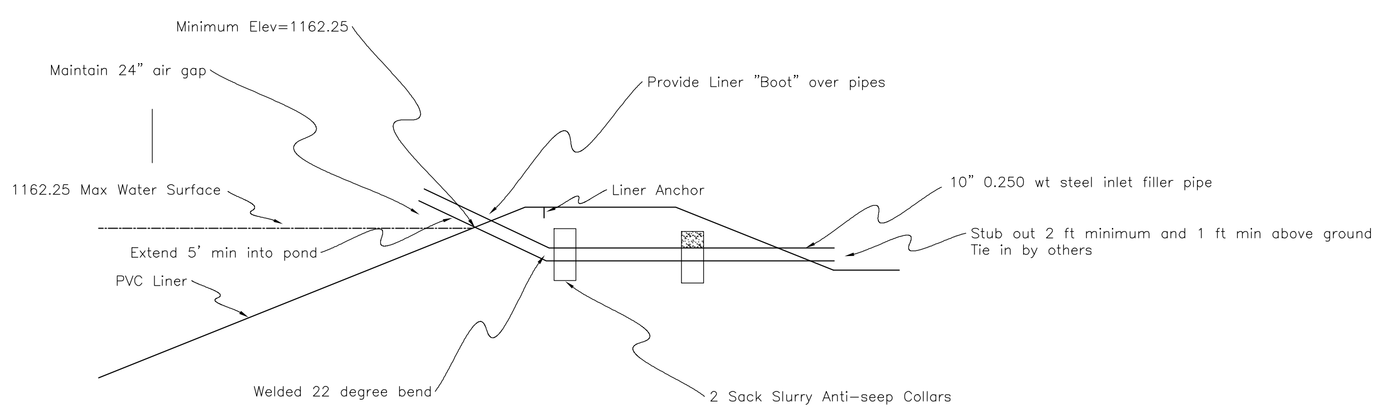


Vault Inlet View

15" PVC Overflow Detail



Inlet Pipe Details



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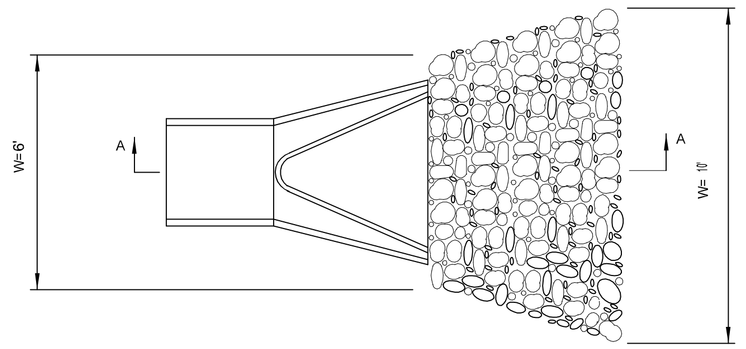
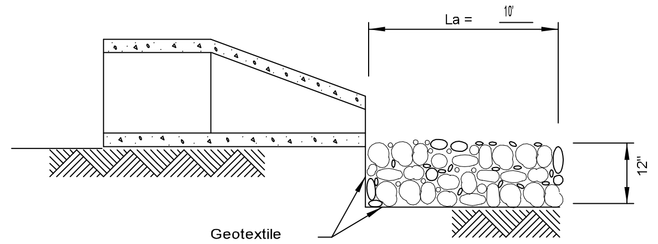
APPROVED	DATE	
SCALE varies	SHEET 4 of 6	PROJECT NO.

Rock Energy Dissipater



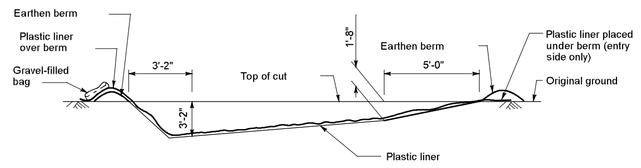
PLAN



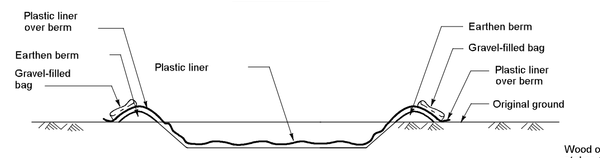
SECTION A-A

Notes:

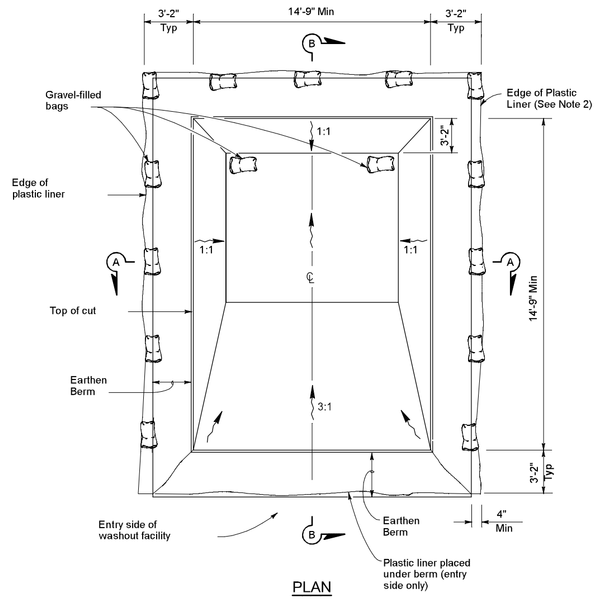
1. Rock shall be 6" to 12" diameter
2. Minimum diminsion shall be 6' x 10' x 12"



SECTION B-B

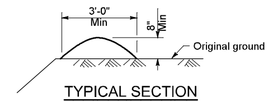


SECTION A-A

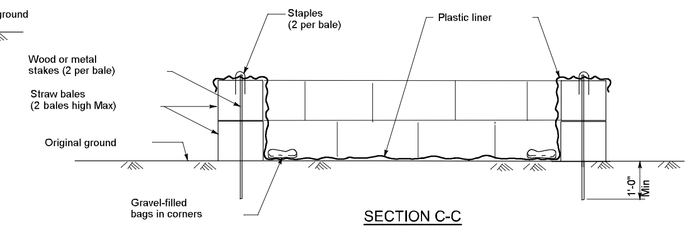


PLAN

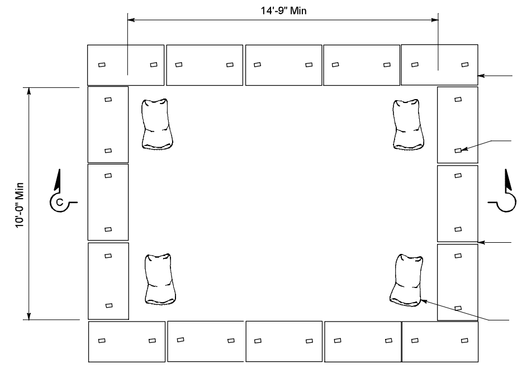
TEMPORARY CONCRETE WASHOUT FACILITY



TYPICAL SECTION
EARTHEN BERM



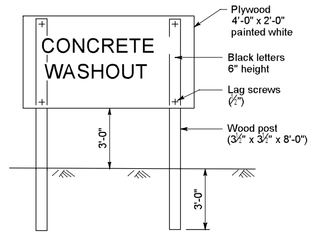
SECTION C-C



PLAN
TEMPORARY CONCRETE WASHOUT FACILITY

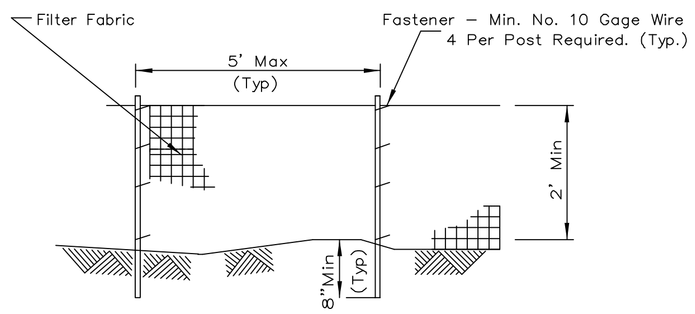
NOTES:

1. The concrete washout sign shall be installed within 32'-10" of the temporary concrete washout facility.
2. Plastic liner shall be anchored with gravel-filled bags for below grade concrete washout facility.

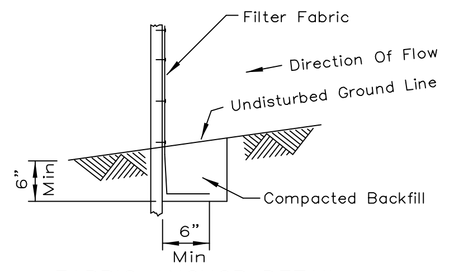


CONCRETE WASHOUT
SIGN DETAIL

SILT FENCE PLAN



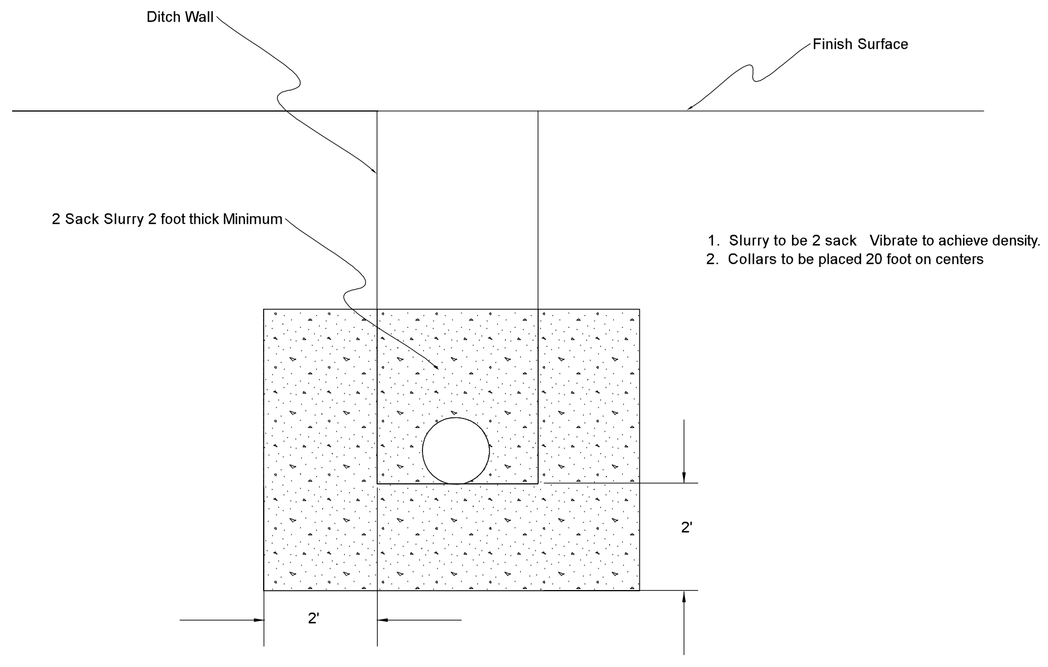
ELEVATION



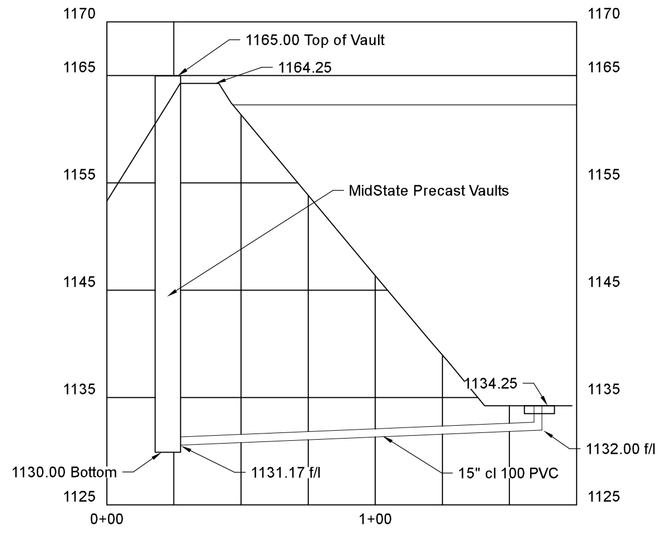
FABRIC ANCHOR DETAIL

NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.

Anti-seep Collar Detail



Pump Inlet Detail



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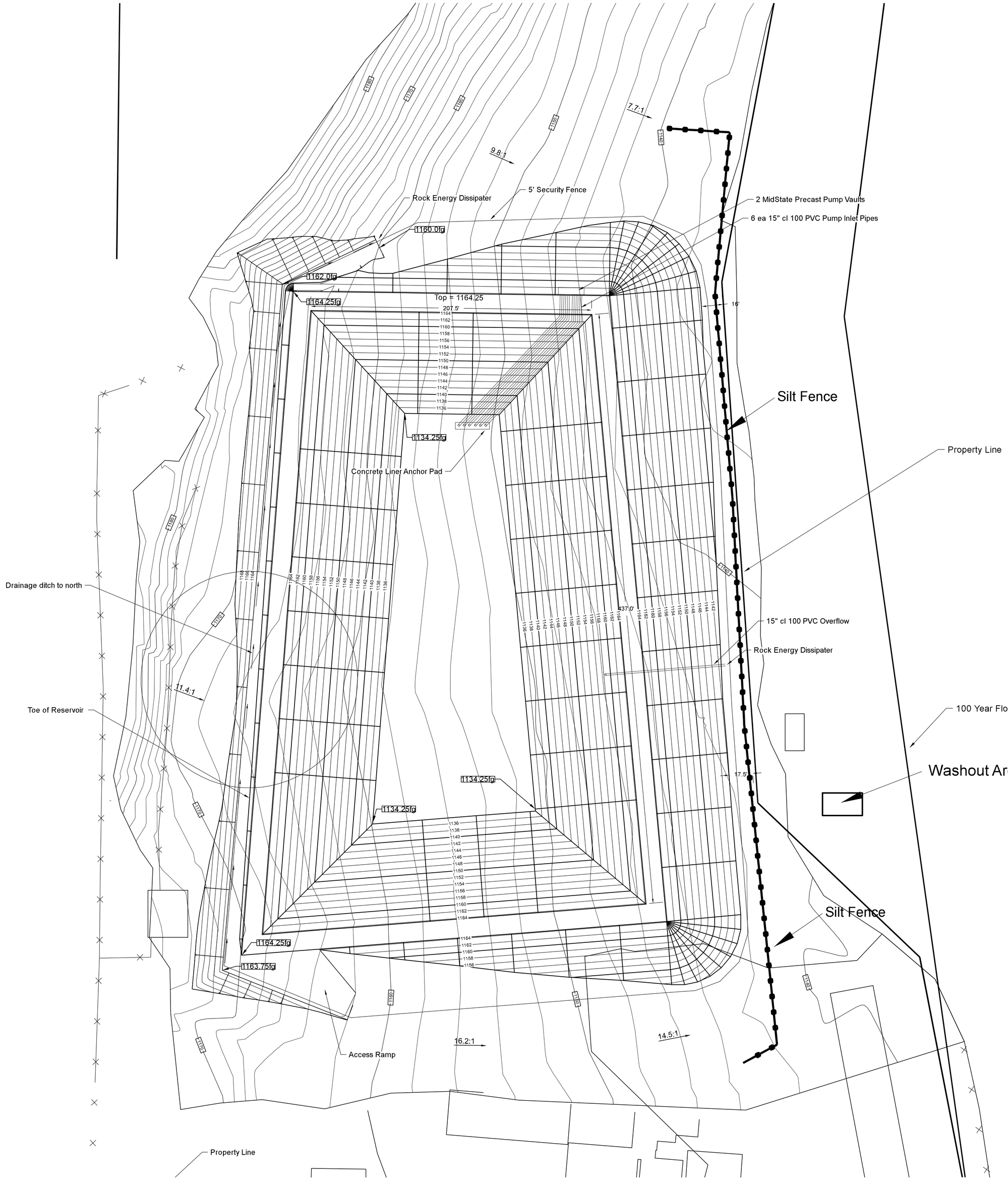
Feedlot Reservoir

DRAWN TH	DATE 8/01/17	Details BMP's
APPROVED	DATE	
SCALE varies	SHEET 5 of 6	PROJECT NO.



Erosion Control Notes:

1. Erosion control measures shall be implemented on all projects and shall include source control, including protection of stockpiles, protection of slopes, protection of all disturbed areas, and protection of accesses. In addition, perimeter containment measures shall be placed prior to the commencement of grading and site disturbance activities unless the Engineer determines temporary measures to be unnecessary based upon location, site characteristics or time of year. The intent of the erosion control measures shall be to keep all sediment from entering a swale, drainage way, watercourse or onto adjacent properties. An approved Erosion Control and Sedimentation Control Plan will require County approval
2. Site inspections and appropriate maintenance of erosion control devices shall be conducted and documented prior to, during, and after rain events.
3. The developer shall be responsible for the placement and maintenance of all erosion control devices as specified by the approved plan until such time that the project is accepted as complete by the Engineer. Erosion control devices may be relocated, deleted or additional items may be required depending on the actual soil conditions encountered. Additional erosion control shall be placed at the discretion of the Engineer of Work, Engineer, SWPPP Monitor or RWQCB Inspector. Guidelines for determining appropriate erosion control devices are included in the appendix of the Public Improvement Standards.
4. All erosion control devices shall be the first order of work and shall be in place between October 15 and April 15 or anytime when the rain probability exceeds 30%. This work shall be installed or applied after each area is graded and no longer than five (5) working days after the completion of each area.
5. The Engineer of Work and the Engineer shall be notified before October 15 for inspection of installed erosion control devices.
6. A standby crew for emergency work shall be available at all times during the rainy season (October 15 through April 15). Necessary materials shall be available and stockpiled at convenient locations to facilitate rapid construction or maintenance of temporary devices when rain is imminent.
7. Permanent erosion control shall be placed and established with 70% coverage on all disturbed surfaces other than paved or gravel surfaces prior to final inspection. Permanent erosion control shall be fully established prior to final inspection. Temporary erosion control measures shall remain in place until permanent measures are established. A water truck shall be used to water areas hydroseeded until the planting is established.
8. In the event of a failure, the developer and/or his representative shall be responsible for cleanup and all associated costs or damages.
9. Slurry Mix: The slurry mix shall be composed of the following materials:

Bromus mollis - Blando Brome (95%, 85%)	20 pounds per acre
Festuca megalura - Zorro Fescue (85%, 80%)	8
Trifolium hirtum "Hykon" - Rose Clover (95%, 90%) inouculated with appropriate bacteria	30
	3
Eschscholzia californica - Callifornia Poppy (95%, 75%)	3
Lupinus nanus - Sky Lupine (95%, 75%)	4

(Seed avaialbale at S&S Seeds (805) 684-0436

Other Materials:

100% Wood fiber mulch (green)	1600 pounds per acre
Commercial Fertilizer (16-20-0)	400
"M-Binder" (stabilizing emulsion) or equal	120
Water (as needed for application and as specified by manufacturer)	

10. Application: The slurry preparation shall take place at the site and in the presence of the Engineer. Spraying of the slurry shall be done by an experienced hydroseeding company and commence within five minutes after all the materials have been mixed thoroughly.

11. The hydroseeded areas shall be watered with a fine mist on a daily basis until the seed begins to germinate then every other day until the roots are established and 70% of the area is covered. Do not use the side spray of a watertruck but instead use a nozzle adjusted to spray a fine mist attached to a hose.
12. BMP's to be constructed include but are not limited to:
    a: Silt Fence
    b: Stabilized Construction entrance (only required if tracking becomes a nuisance as no trucks are expected to be utilized and the paved road entrance is one half mile from the site.
    c: Concrete washout area
    d: Fueling area

Silt Fence

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DRAWN TH	DATE 8/01/17	Erosion and Sedimentation Plan
APPROVED	DATE	
SCALE 1"=40'	SHEET 6 of 6	PROJECT NO.