

“K”

Notification of Streambed Alteration Permit for Bridge



FOR DEPARTMENT USE ONLY

Date Received	Amount Received	Amount Due	Date Complete	Notification No.
	\$	\$		
Assigned to:				

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name			
Business/Agency			
Mailing Address			
City, State, Zip			
Telephone		Fax	
Email			

2. CONTACT PERSON (Complete only if different from applicant)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

3. PROPERTY OWNER (Complete only if different from applicant)

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name				
B. Agreement Term Requested		<input type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	



5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, E, or F is checked, complete the specified attachment.	
A.	<input type="checkbox"/> Standard (<i>Most construction projects, excluding the categories listed below</i>)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (<i>Attachment A</i>) Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (<i>Attachment B</i>) THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (<i>Attachment C</i>) SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (<i>Attachment D</i>)
F.	<input type="checkbox"/> Remediation of Marijuana Cultivation Sites (<i>Attachment E</i>)
G.	<input type="checkbox"/> Department Grant Programs Agreement Number: _____
H.	<input type="checkbox"/> Master
I.	<input type="checkbox"/> Master Timber Operations

6. FEES

See the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. Note: The Department may not process this notification until the correct fee has been received.			
	A. Project	B. Project Cost	C. Project Fee
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
		D. Base Fee (<i>if applicable</i>)	
		E. TOTAL FEE*	

* Check, money order, and Visa or MasterCard payments are accepted. When payment is made by credit card, CDFW shall assess a separate credit card processing fee of 1.6% to the Total Fee. Credit card payment must be submitted with a completed Credit Card Payment Authorization Form (DFW 1443b (Rev. 8/15)) available online at: <https://www.wildlife.ca.gov/Conservation/LSA/Forms> or at a Department regional office.



7. PRIOR NOTIFICATION AND ORDERS

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?		
<input type="checkbox"/> Yes (<i>Provide the information below</i>) <input type="checkbox"/> No		
Applicant	Notification Number	Date
B. Is this notification being submitted in response to a court or administrative order or notice, or a notice of violation (NOV) issued by the Department?		
<input type="checkbox"/> No <input type="checkbox"/> Yes (<i>Enclose a copy of the order, notice, or NOV. If the applicant was directed to notify the Department verbally rather than in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.</i>)		
<input type="checkbox"/> Continued on additional page(s)		

8. PROJECT LOCATION

A. Address or description of project location. (<i>Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway</i>)				
<input type="checkbox"/> Continued on additional page(s)				
B. River, stream, or lake affected by the project.				
C. What water body is the river, stream, or lake tributary to?				
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
E. County				
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian (<i>check one</i>)	<input type="checkbox"/> Humboldt <input type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
<input type="checkbox"/> Continued on additional page(s)				



M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)			
Latitude/Longitude	Latitude:		Longitude:
	<input type="checkbox"/> Degrees/Minutes/Seconds	<input type="checkbox"/> Decimal Degrees	<input type="checkbox"/> Decimal Minutes
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27	<input type="checkbox"/> NAD 83 or WGS 84

9. PROJECT CATEGORY

WORK TYPE	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR-MAINTAIN-OPERATE EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal: pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
flood control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing: horizontal directional drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water diversion without facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water diversion with facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



10. PROJECT DESCRIPTION

A. Describe the project in detail. Include photographs of the project location and immediate surrounding area.

- Written description of all project activities with detailed step-by-step description of project implementation.
- Include any structures (e.g., rip-rap, culverts) that will be placed or modified in or near the stream, river, or lake, and any channel clearing.
- Specify volume, and dimensions of all materials and features (e.g., rip rap fields) that will be used or installed.
- If water will be diverted or drafted, specify the purpose or use.
- Enclose diagrams, drawings, plans, and maps that provide all of the following: site specific construction details; dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; overview of the entire project area (i.e., “bird’s-eye view”) showing the location of each structure and/or activity, significant area features, stockpile areas, areas of temporary disturbance, and where the equipment/machinery will access the project area.

☐ Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

☐ Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

☐ Yes ☐ No (*Skip to box 11*)

D. Will the proposed project require work in the wetted portion of the channel?

☐ Yes (*Enclose a plan to divert water around work site*)
☐ No



11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

☐ Continued on additional page(s)

B. Will the project affect any vegetation?

☐ Yes (*Complete the tables below*) ☐ No (*Include aerial photo with date supporting this determination*)

Vegetation Type	Temporary Impact	Permanent Impact
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

☐ Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

☐ Yes (*List each species and/or describe the habitat below*) ☐ No ☐ Unknown

☐ Continued on additional page(s)

D. Identify the source(s) of information that supports a “yes” or “no” answer above in Box 11.C.

☐ Continued on additional page(s)

E. Has a biological study been completed for the project site?

☐ Yes (*Enclose the biological study*) ☐ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.



F. Has a hydrological study been completed for the project or project site?

☐ Yes (*Enclose the hydrological study*) ☐ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

G. Have fish or wildlife resources or waters of the state been mapped or delineated on the project site?

☐ Yes (*Enclose the mapped results*) ☐ No

Note: Check "yes" if fish and wildlife resources or waters of the state on the project site have been mapped or delineated. "Wildlife" means and includes all wild animals, birds, plants, fish, amphibians, reptiles and related ecological communities, including the habitat upon which the wildlife depends." (Fish & G. Code, § 89.5.) If "yes" is checked, submit the mapping or delineation. If the mapping or delineation is in digital format (e.g., GIS shape files or KMZ), you must submit the information in this format for the Department to deem your notification complete. If "no" is checked, or the resolution of the mapping or delineation is insufficient, the Department may request mapping or delineation (in digital or non-digital format), or higher resolution mapping or delineation for the Department to deem the notification complete.

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

☐ Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

☐ Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

☐ Continued on additional page(s)



13. PERMITS

List any local, State, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

- A. _____ ☐ Applied ☐ Issued
- B. _____ ☐ Applied ☐ Issued
- C. _____ ☐ Applied ☐ Issued
- D. Unknown whether ☐ local, ☐ State, or ☐ federal permit is needed for the project. (Check each box that applies)

☐ Continued on additional page(s)

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA)?

- ☐ Yes (Check the box for each CEQA or NEPA document that has been prepared and enclose a copy of each.)
- ☐ No (Check the box for each CEQA or NEPA document listed below that will be or is being prepared.)

- ☐ Notice of Exemption
- ☐ Initial Study
- ☐ Negative Declaration
- ☐ THP/ NTMP

- ☐ Mitigated Negative Declaration
- ☐ Environmental Impact Report
- ☐ Notice of Determination (Enclose)
- ☐ Mitigation, Monitoring, Reporting Plan

☐ NEPA document (type):

B. State Clearinghouse Number (if applicable)

C. Has a CEQA lead agency been determined?

☐ Yes (Complete boxes D, E, and F) ☐ No (Skip to box 14.G)

D. CEQA Lead Agency

E. Contact Person

F. Telephone Number

G. If the project described in this notification is not the "whole project" or action pursuant to CEQA, briefly describe the entire project (Cal. Code Regs., tit. 14, § 15378).

☐ Continued on additional page(s)

H. Has a CEQA filing fee been paid pursuant to Fish and Game Code section 711.4?

- ☐ Yes (Enclose proof of payment) ☐ No (Briefly explain below the reason a CEQA filing fee has not been paid)

Note: If a CEQA filing fee is required, the Lake or Streambed Alteration Agreement may not be finalized until paid.



15. SITE INSPECTION

Check one box only.

- ☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
- ☐ I request the Department to first contact (*insert name*) _____
at (*insert telephone number*) _____ to schedule a date and time
to enter the property where the project described in this notification will take place. I understand that this may
delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required
and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

- ☐ Yes (Please enclose the information via digital media with the completed notification form)
- ☐ No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Signature of Applicant or Applicant's Authorized Representative

Date

Print Name

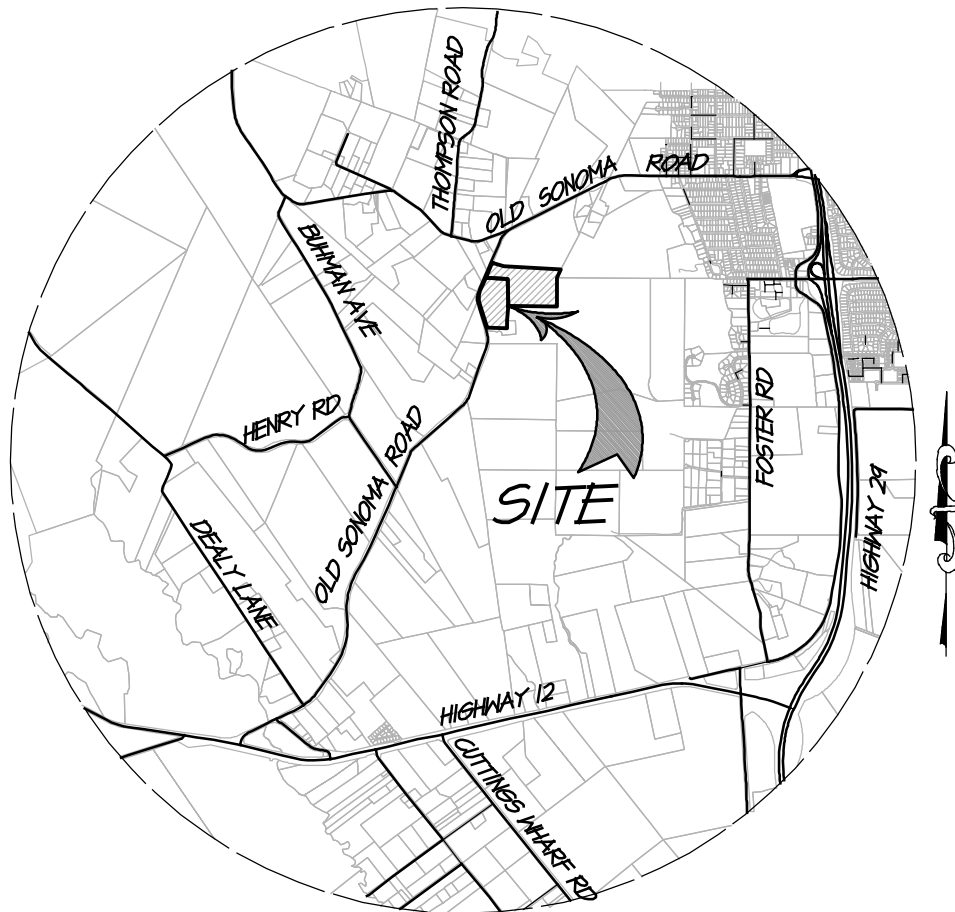


Attachment A

Vicinity Map

TRUCHARD WINERY VICINITY MAP

NAPA COUNTY CALIFORNIA





Attachment B
Project Description
Bridge Exhibit



Truchard Winery Replacement Bridge

Section 10 - Project Description

A spanning bridge will replace an existing non-spanning bridge structure located on an unnamed tributary to Congress Valley Creek. The new bridge will provide access to a proposed winery, located on the same parcel. The existing bridge will be removed with equipment operating from the top-of-bank, lifting the deck and supporting walls, piers, and posts without entering or disturbing the bed and banks of the creek.

On the right bank, a total of 40 lineal feet of 10" thick concrete walls will be removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts, under the existing bridge deck. Immediately downstream of the bridge, a total of 6, 12" diameter concrete posts will be removed, (these posts appear to have previously supported a revetment wall in the creek channel).

The existing bridge slated for replacement measures 14 feet wide, (deck width) by 45 feet long. The deck, railings, and supporting beams consist of pressure-treated lumber. The replacement bridge will be a steel prefabricated structure with a concrete deck, measuring 20 feet wide, (deck width) by 55 feet long. The deck will rest on reinforced concrete abutments constructed on the top of banks, located entirely out of bed and banks of the channel. Total volume of concrete will be 37 cubic yards, with 10.6 cubic yards of the total extending above natural ground. Abutment walls will be 12 inches thick and 20 feet in length on each bank. Walls will protrude 1 ft. above natural ground, at each top-of-bank.

The roadway will ramp up to meet the bridge deck elevation at 1 foot above grade. Ramping will consist of compacted earth fill and asphalt paving. A total volume of 17 cubic yards of compacted earth fill and gravel, and 8 cubic yards of asphalt will be required for the ramp up. Ramp up lengths on each side of the bridge will be 33 feet. A total of 40 feet of the total ramp up length will extend beyond the 81 foot wide riparian corridor, as measured at the outboard dripline of the riparian canopy.

A 10 foot section of an existing wall on the upstream right bank will be retained to provide ongoing erosion scour protection for the right bank abutment. This will provide ongoing protection of water quality. The wall will be tested for support strength at the time of construction to determine if anchoring is needed. If wall integrity is determined to be inadequate, a 10 foot section of bio-technical slope protection, (vegetation reinforced slope stabilization, VRSS) will be used.

Care will be taken to insure that no sediment or fill enters the bed or bank of the stream within the ordinary high water mark, (OHWM). VRSS, if deemed necessary will not exceed a fill volume of 1 cubic yard per running foot within the OHWM zone. All construction work will be conducted during the dry season, and no creek waters will be diverted or drafted.

The following photos and maps provide specific site conditions, construction layout and details, and mapping of stockpile areas, and equipment staging/ site access locations.



Looking downstream at the old bridge.



Concrete support posts and most concrete revetment walls will be lifted and removed from the bed and banks taking care not to allow rubble or detritus from entering the channel cross section as fill.



This 10 foot section of existing wall may remain, to provide necessary erosion scour protection. If it is deemed too weak to stand in place, it will be replaced with VRSS. Any replacement material will not exceed 1 cubic yard per running foot of stream. Avoidance of fill and in-stream construction activity will also void the need to acquire a Section 404 federal permit from USACOE.



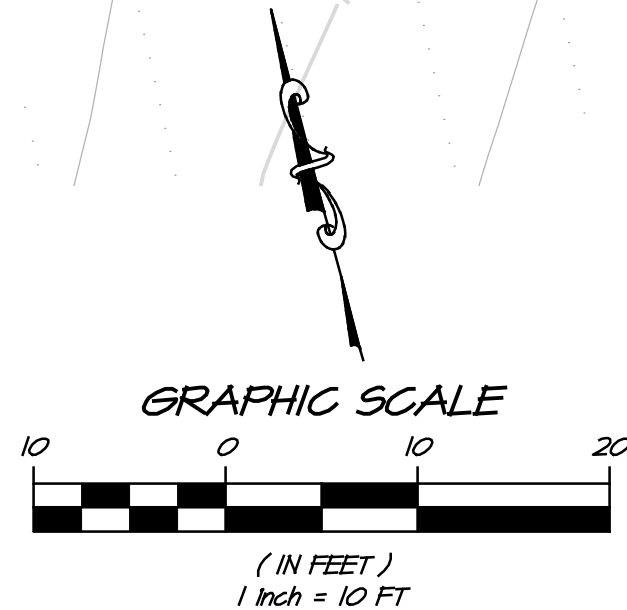
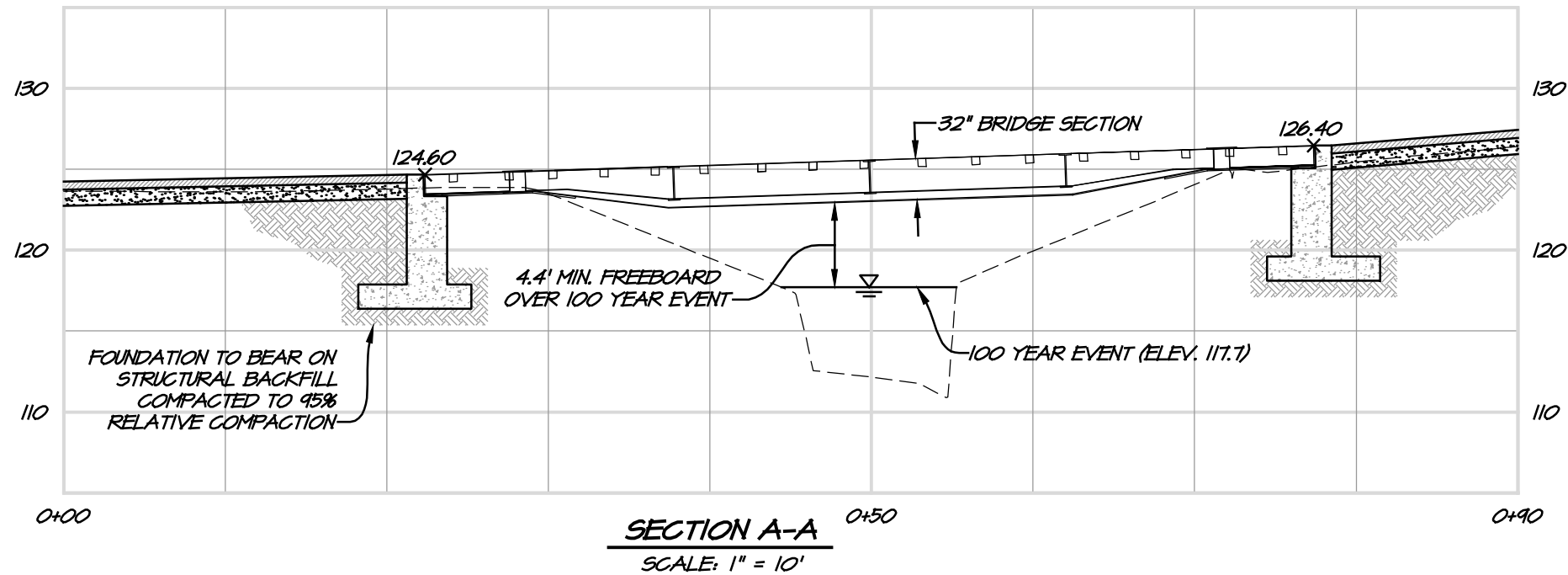
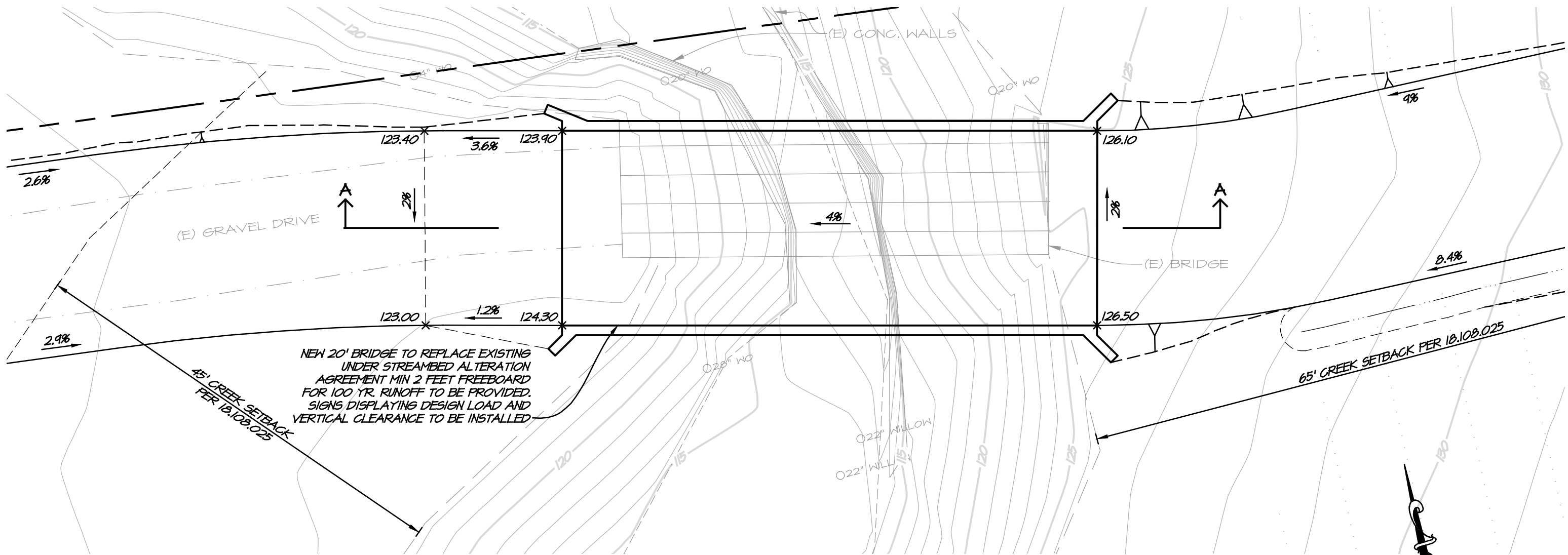


The 6 concrete posts shown here, immediately downstream of the bridge will be pulled out of the creek from the top of bank, taking care not to allow for fill to enter the creek. The wall in the lower right corner of the image will be removed in a similar manner.



The White oak, (*Quercus lobata*) trees, (10" DBH & 18" DBH) pictured at the far left abutments will need to be either trimmed or removed to accommodate construction of the new bridge. All attempts will be made to save the trees and/or minimize trimming of branches. The over-sized Yellow willow, (*Salix lutea*) pictured near the far right end of the bridge will be removed. Willow cuttings will be harvested for use as some of the replacement/ enhancement vegetation, including the VRSS, if needed.

TRUCHARD WINERY BRIDGE EXHIBIT



RSA⁺	1515 FOURTH STREET NAPA, CALIF. 94559 OFFICE 707 252.3301 + www.RSAcivil.com +

RSA⁺ | CONSULTING CIVIL ENGINEERS + SURVEYORS + est. 1980

MARCH 22, 2017 4113042.0 Exh-Bridge.dwg



Attachment C

Project Impacts Narrative

Section 11.c - Project Impacts

11.f – Hydrology Study



Truchard Winery
Project Impacts Narrative

Section 11 a. Project Impacts:

Impacts to the bed, channel and banks of the creek will be minimal. On the right bank, a total of 40 lineal feet of 10" thick concrete walls will be removed. On the left bank, a total of 60 lineal feet of 10" thick concrete walls will be removed. A total of 11, 12" diameter concrete support posts under the existing bridge deck will be removed. Immediately downstream of the bridge, a total of 6, 12" diameter concrete posts will be removed.

Total area impacted by concrete removal for the project equals 590 ft², (.014 acres). The concrete walls and concrete posts to be removed total 21.4 yds³.

It should be noted that because the walls and posts will be lifted out of the channel, ground disturbance will be held to a minimum. Removal of the above-listed "impact" concrete materials will allow for a more natural flow conveyance, and will also make it possible to plant native plant materials in place of the concrete.

The new spanning bridge will be placed within the footprint of the old one, and because abutments will be set at the top-of-bank only, impacts to the natural environs will also be reduced to a significant degree.

If the 15 foot section of wall upstream of the bridge on the right bank is replaced with a vegetation-reinforced soil treatment, native willow, (*Salix lasiolepis*) will be used, in addition to native soil and heavy coconut, (non-plastic reinforced) erosion control fabric. If this treatment is used, a total of 3.3 yds³ of soil, coconut fabric and live willow cuttings will be used. Within the ordinary high water mark, (OHWM) less than 1 cubic yard of soil fill will be necessary.

Section 11 b. Project Impacts- Trees:

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
Yellow willow, (<i>Salix lutea</i>)	1	22 inches
White oak, (<i>Quercus lobata</i>)*	2	10 to 20 inches

- *Every effort will be made to save the 2 oaks listed above. If trees can be saved, branches will require pruning to allow for setting of the new bridge.*

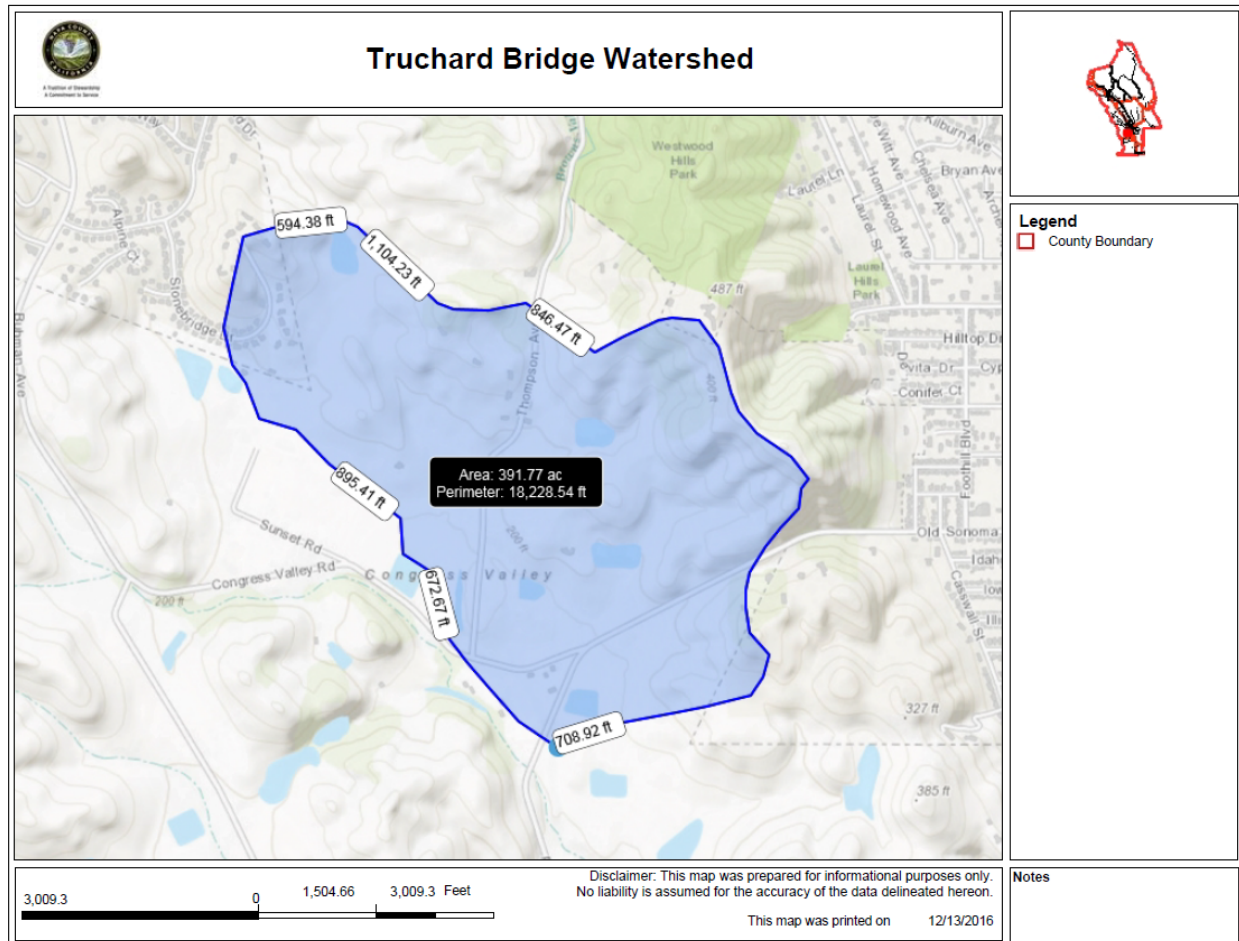
Truchard Winery Replacement Bridge - LSAA Section 11 C. Project Impacts
CNDDDB Napa Quadr.- List of Species w/ Potential Occurrence *

Element Type	Scientific Name	Common Name	Habitat	Occurrence in Study Area/ Mitigation Needed
Animals- Amphibians	<i>Dicamptodon ensatus</i>	California Giant Salamander	Larvae of this species usually inhabit clear, cold streams, lakes and ponds. Adults are found in humid forests under rocks and logs	Occurrence is possible. Dry season construction activities should be pursued for avoidance.
Animals- Amphibians	<i>Rana boylei</i>	Foothill yellow-legged frog	Variety of habitats with shallow, flowing water, small to moderate sized streams with some cobble-sized substrate and sparse riparian cover	Low. Habitat in the area is not likely to support the species. Cobble substrate is lacking. Bullfrog predators are present in the creek.
Animals- Amphibians	<i>Rana draytonii</i>	California red-legged frog	Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent vegetation. Occupies upland habitat, especially in wet winter months.	Low. Winter habitat is lacking. Bullfrog predators are present in the immediate creek environs. No known mapping in the area.
Animals- Reptiles	<i>Emys marmorata</i>	Western pond turtle	Prefer permanent, slow moving creeks, streams, ponds, rivers, marshes and irrigation ditches for basking sites.	Potential habitat is present. Surveys should be conducted prior to construction and the site should be monitored by a biologist.
Animals- Fish	<i>Oncorhynchus mykiss irideus</i>	Steelhead, Central CA	Requires suitable stream flows, migration passage, and suitable spawning habitat.	None. Suitable stream flows, migration passage and spawning habitat in Congress Valley Creek are not present. Not mapped in this section of creek.

Element Type	Scientific Name	Common Name	Habitat	Occurrence in Study Area/ Mitigation Needed
Animals- Crustaceans	<i>Syncaris pacifica</i>	California freshwater shrimp	Low elevation, low gradient streams with densely-vegetated margins.	Not known to occur within 4 or more miles from project area. Appropriate habitats are lacking on or near the site. No mapping in Congress Valley Creek.
Animals- Mammals	<i>Antrozous pallidus</i>	Pallid bat	Deserts, grasslands, shrublands, woodlands. Most common in open, dry habitats with rocky areas for roosting.	Medium. Pre-construction surveys should be conducted to determine presence, and any necessary protection measures.
Animals- Insects	<i>Bombus occidentalis</i>	Western bumblebee	Grasslands and open meadows.	None. Disturbance of appropriate habitats will not occur.
Animals- Insects	<i>Desmocerus californicus dimorphus</i>	Elderberry Longhorn Beetle	Utilizes elderberry plants, (<i>Sambucus nigra</i>) as habitat.	Not present. <i>Sambucus</i> spp does not occur in the project area.
Plants- Vascular	<i>Juglans hindsii</i>	Northern California black walnut	Riparian woodlands and upland woodlands.	None. Is not present in the project area.

* Note: A variety of CNDDDB-listed birds, (neo-tropicals and raptors) may be present, or nearby. The designated biologist for the project will need to conduct a bird survey prior to construction and construction scheduling may also need to be modified to avoid nesting season, (post- August 31).

Section 11.f – Hydrology Study





HYDROLOGY/ HYDRAULICS SUMMARY

Watershed Area: 392 acres

T_c: 0.183 hours

Storm Data:

Q₂: 68.55 cfs

Q₁₀: 194.55 cfs

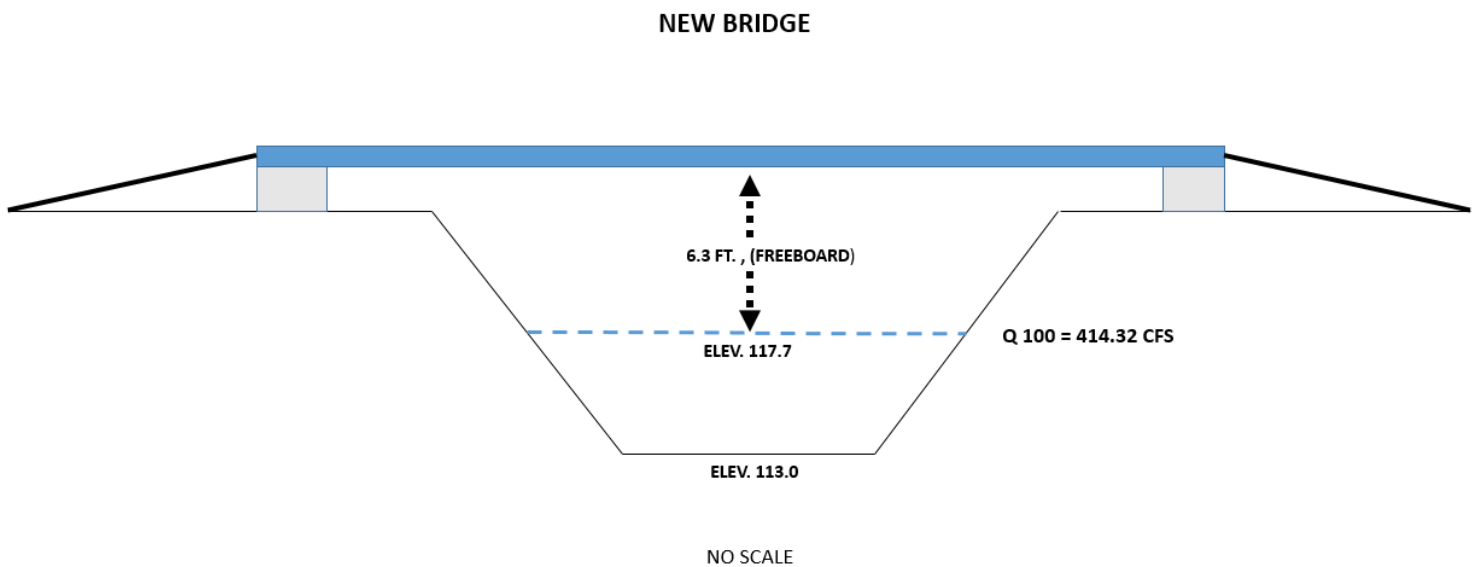
Q₅₀: 344.79 cfs

Q₁₀₀: 411.45 cfs

Channel "D": 13.5 ft.

Q₁₀₀ "D" @ Structure: 4.7 ft.

Freeboard Above Q₁₀₀: 6.3 ft.



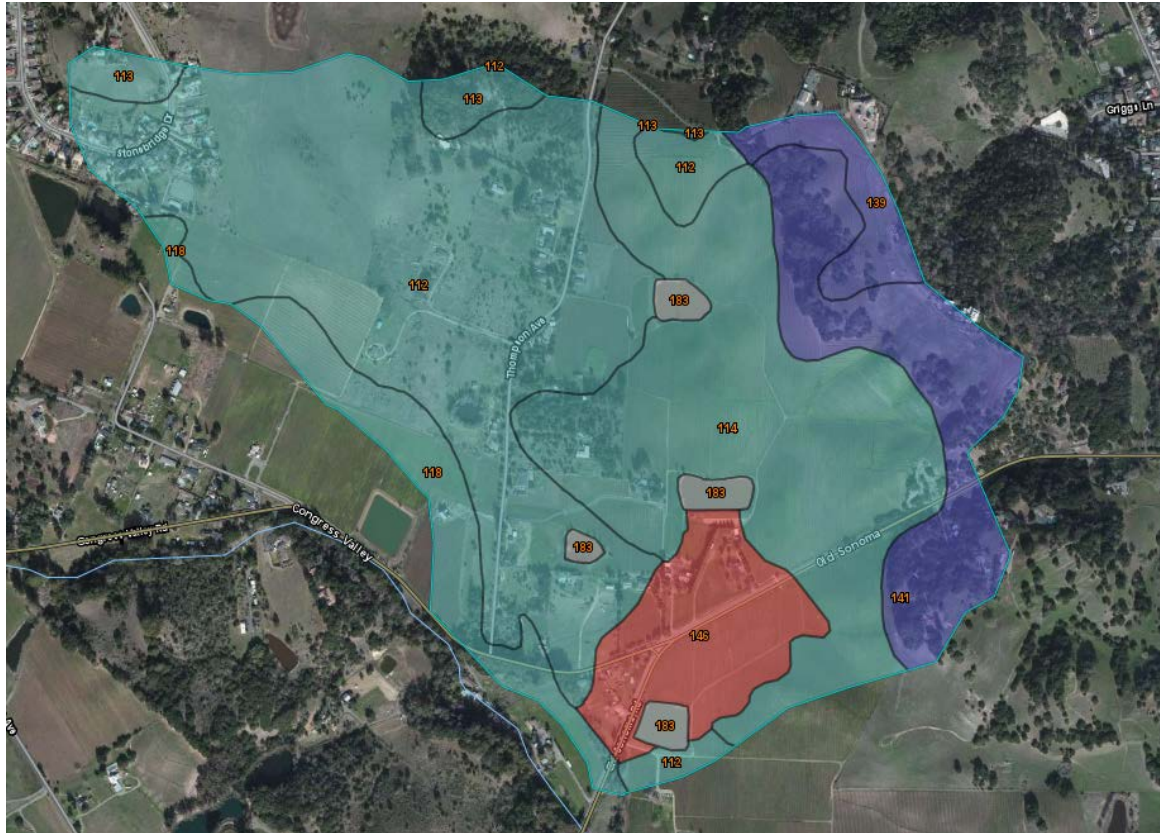
Watershed Soils (Source: USDA Napa County Soil Survey)



Napa County, California (CA055)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
112	Bressa-Dibble complex, 5 to 15 percent slopes	157.6	41.1%
113	Bressa-Dibble complex, 15 to 30 percent slopes	9.6	2.5%
114	Bressa-Dibble complex, 30 to 50 percent slopes	98.3	25.7%
118	Cole silt loam, 0 to 2 percent slopes	26.3	6.9%
139	Forward gravelly loam, 9 to 30 percent slopes	10.7	2.8%
141	Forward-Kidd complex, 50 to 75 percent slopes	43.6	11.4%
146	Haire loam, 2 to 9 percent slopes	30.1	7.9%
183	Water	6.8	1.8%
Totals for Area of Interest		383.2	100.0%



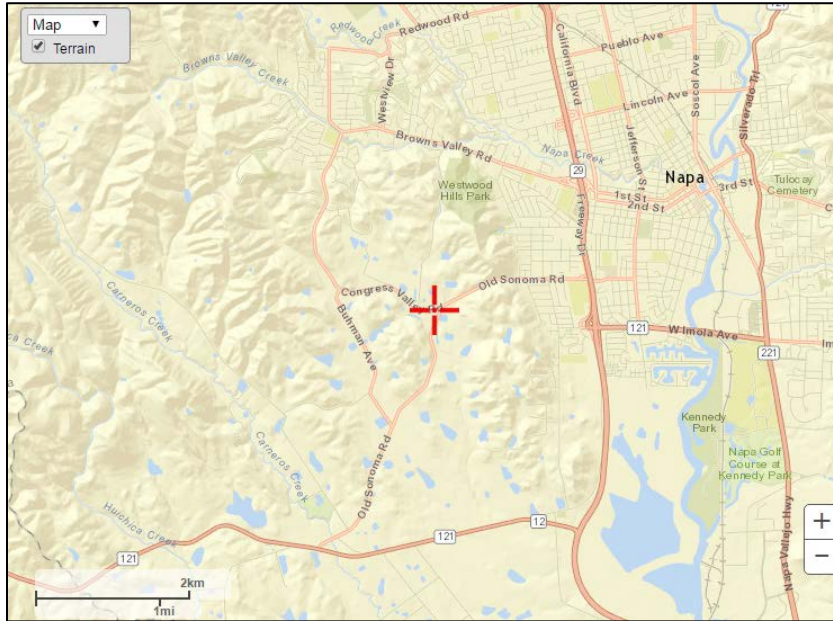
Hydrologic Soil Groups:



Tables — Hydrologic Soil Group — Summary By Map Unit				
Summary by Map Unit — Napa County, California (CA055)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
112	Bressa-Dibble complex, 5 to 15 percent slopes	C	157.6	41.1%
113	Bressa-Dibble complex, 15 to 30 percent slopes	C	9.6	2.5%
114	Bressa-Dibble complex, 30 to 50 percent slopes	C	98.3	25.7%
118	Cole silt loam, 0 to 2 percent slopes	C	26.3	6.9%
139	Forward gravelly loam, 9 to 30 percent slopes	B	10.7	2.8%
141	Forward-Kidd complex, 50 to 75 percent slopes	B	43.6	11.4%
146	Haire loam, 2 to 9 percent slopes	D	30.1	7.9%
183	Water		6.8	1.8%
Totals for Area of Interest			383.2	100.0%



NOAA Rainfall Data:



PDS-based precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.122 (0.108-0.138)	0.153 (0.136-0.174)	0.196 (0.174-0.223)	0.231 (0.203-0.266)	0.281 (0.237-0.336)	0.320 (0.263-0.392)	0.360 (0.288-0.454)	0.402 (0.312-0.524)	0.461 (0.341-0.630)	0.509 (0.362-0.722)
10-min	0.174 (0.155-0.198)	0.220 (0.195-0.250)	0.281 (0.249-0.320)	0.332 (0.291-0.382)	0.402 (0.340-0.481)	0.458 (0.378-0.561)	0.516 (0.413-0.650)	0.577 (0.447-0.751)	0.661 (0.489-0.903)	0.729 (0.519-1.03)
15-min	0.211 (0.188-0.239)	0.266 (0.236-0.302)	0.340 (0.301-0.387)	0.401 (0.352-0.462)	0.487 (0.411-0.582)	0.554 (0.457-0.679)	0.624 (0.500-0.786)	0.697 (0.541-0.908)	0.800 (0.592-1.09)	0.882 (0.627-1.25)
30-min	0.300 (0.268-0.341)	0.379 (0.337-0.431)	0.484 (0.429-0.552)	0.572 (0.502-0.658)	0.694 (0.586-0.830)	0.790 (0.651-0.968)	0.889 (0.713-1.12)	0.994 (0.772-1.29)	1.14 (0.844-1.56)	1.26 (0.895-1.78)
60-min	0.433 (0.386-0.491)	0.546 (0.486-0.621)	0.698 (0.619-0.795)	0.824 (0.724-0.948)	1.00 (0.844-1.20)	1.14 (0.938-1.39)	1.28 (1.03-1.61)	1.43 (1.11-1.86)	1.64 (1.22-2.24)	1.81 (1.29-2.57)
2-hr	0.658 (0.586-0.746)	0.818 (0.728-0.930)	1.03 (0.913-1.17)	1.21 (1.06-1.39)	1.44 (1.22-1.73)	1.63 (1.34-2.00)	1.82 (1.46-2.29)	2.02 (1.57-2.63)	2.29 (1.69-3.13)	2.50 (1.78-3.55)
3-hr	0.840 (0.748-0.953)	1.04 (0.927-1.19)	1.31 (1.16-1.49)	1.53 (1.34-1.76)	1.82 (1.54-2.18)	2.05 (1.69-2.51)	2.28 (1.83-2.88)	2.52 (1.96-3.28)	2.85 (2.11-3.89)	3.11 (2.21-4.41)
6-hr	1.24 (1.10-1.41)	1.55 (1.38-1.76)	1.95 (1.73-2.22)	2.27 (1.99-2.61)	2.71 (2.28-3.23)	3.04 (2.50-3.72)	3.37 (2.70-4.25)	3.71 (2.88-4.83)	4.17 (3.09-5.70)	4.53 (3.22-6.43)
12-hr	1.68 (1.50-1.91)	2.17 (1.93-2.47)	2.80 (2.48-3.19)	3.30 (2.90-3.79)	3.96 (3.35-4.74)	4.46 (3.68-5.47)	4.96 (3.98-6.26)	5.47 (4.25-7.12)	6.15 (4.55-8.39)	6.67 (4.74-9.46)
24-hr	2.27 (2.04-2.57)	3.03 (2.73-3.44)	4.00 (3.59-4.55)	4.77 (4.25-5.47)	5.79 (5.02-6.81)	6.55 (5.59-7.84)	7.30 (6.09-9.02)	8.05 (6.57-10.1)	9.05 (7.13-11.7)	9.81 (7.51-13.1)
2-day	2.94 (2.64-3.33)	3.92 (3.32-4.45)	5.16 (4.63-5.87)	6.15 (5.48-7.04)	7.45 (6.46-8.77)	8.42 (7.18-10.1)	9.39 (7.84-11.5)	10.4 (8.45-13.0)	11.7 (9.18-15.1)	12.6 (9.87-16.8)
3-day	3.44 (3.10-3.90)	4.57 (4.10-5.18)	5.99 (5.38-6.82)	7.12 (6.35-8.16)	8.61 (7.47-10.1)	9.73 (8.29-11.6)	10.8 (9.04-13.2)	11.9 (9.74-14.9)	13.4 (10.6-17.4)	14.5 (11.1-19.4)
4-day	3.85 (3.46-4.36)	5.11 (4.59-5.80)	6.70 (6.01-7.63)	7.96 (7.09-9.11)	9.60 (8.32-11.3)	10.8 (9.22-13.0)	12.0 (10.0-14.7)	13.2 (10.8-16.6)	14.8 (11.7-19.2)	16.0 (12.3-21.4)
7-day	4.74 (4.26-5.37)	6.38 (5.73-7.24)	8.40 (7.53-9.55)	9.95 (8.87-11.4)	11.9 (10.4-14.1)	13.4 (11.4-16.0)	14.8 (12.4-18.1)	16.2 (13.2-20.3)	18.0 (14.2-23.3)	19.3 (14.8-25.7)
10-day	5.38 (4.84-6.10)	7.29 (6.55-8.27)	9.60 (8.61-10.9)	11.4 (10.1-13.0)	13.6 (11.8-16.0)	15.2 (13.0-18.2)	16.7 (14.0-20.5)	18.2 (14.9-22.8)	20.1 (15.9-26.1)	21.5 (16.5-28.7)
20-day	7.10 (6.39-8.05)	9.55 (8.59-10.8)	12.5 (11.2-14.2)	14.7 (13.1-16.9)	17.5 (15.2-20.6)	19.4 (16.8-23.0)	21.3 (17.8-26.0)	23.1 (18.8-28.9)	25.3 (20.0-32.8)	26.9 (20.6-35.9)
30-day	8.59 (7.73-9.74)	11.4 (10.3-13.0)	14.8 (13.3-16.8)	17.3 (15.4-19.8)	20.5 (17.7-24.1)	22.7 (19.3-27.2)	24.8 (20.7-30.3)	26.8 (21.9-33.5)	29.3 (23.1-37.9)	31.1 (23.8-41.4)
45-day	10.7 (9.59-12.1)	13.9 (12.5-15.7)	17.7 (16.3-20.1)	20.6 (18.3-23.5)	24.1 (20.9-28.4)	26.6 (22.7-31.9)	29.0 (24.2-35.4)	31.2 (25.5-39.1)	34.1 (26.8-44.1)	36.1 (27.6-48.1)
60-day	12.8 (11.6-14.6)	16.4 (14.7-18.6)	20.6 (18.4-23.4)	23.7 (21.1-27.2)	27.6 (24.0-32.5)	30.4 (25.9-36.4)	33.0 (27.6-40.3)	35.5 (29.0-44.4)	38.6 (30.4-50.0)	40.8 (31.3-54.5)



TR-55 Hydrology Modeling:



P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier				Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
1a	Row Crop	SR + Crop residue	(good)	C	134.2	82	
	Row Crop	SR + Crop residue	(good)	D	30	85	
	Woods - grass combination		(good)	B	54.3	58	
	Woods - grass combination		(good)	C	158	72	
	Total Area / Weighted Curve Number				376.5	75	

P Blake

Truchard Winery
Winery Bridge Replacement
Napa County, California

Storm Data

Rainfall Depth by Rainfall Return Period

2-Yr (in)	10-Yr (in)	50-Yr (in)	100-Yr (in)	-Yr (in)	-Yr (in)	-Yr (in)
3.03	4.77	6.55	7.3	.0	.0	.0

Storm Data Source: User-provided custom storm data
 Rainfall Distribution Type: Type IA
 Dimensionless Unit Hydrograph: <standard>



P Blake		Truchard Winery Winery Bridge Replacement Napa County, California					
Sub-Area Time of Concentration Details							
Sub-Area Identifier/	Flow Length (ft)	Mannings's Slope (ft/ft)	n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)

1a							
SHEET	100	0.1000	0.170				0.097
SHALLOW	1000	0.1000	0.050				
CHANNEL	2375	0.0073	0.035	69.00	22.50	7.671	0.086
Time of Concentration							<u>.183</u>

P Blake		Truchard Winery Winery Bridge Replacement Napa County, California			
Hydrograph Peak/Peak Time Table					
Sub-Area or Reach Identifier	Peak Flow and Peak Time (hr) by Rainfall Return Period				
	2-Yr (cfs) (hr)	10-Yr (cfs) (hr)	50-Yr (cfs) (hr)	100-Yr (cfs) (hr)	

SUBAREAS					
1a	68.55 8.03	194.55 8.02	344.79 8.00	411.45 8.00	
REACHES					
OUTLET	68.55	194.55	344.79	411.45	

#4113042.0

Truchard Winery

Notification of Lake or Streambed Alteration

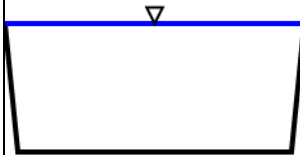
Supporting Documents



Truchard- Congress Valley Creek Area

estimated flows at Truchard bridge

Set units: <input type="checkbox"/> m <input type="checkbox"/> mm <input type="checkbox"/> ft <input type="checkbox"/> in			Results		
Bottom width	10	<input type="text"/> ft ▼	Flow area	49.21	ft ² ▼
Side slope 1 (horiz./vert.)	.1		Wetted perimeter	19.45	ft ▼
Side slope 2 (horiz./vert.)	.1		Hydraulic radius	2.53	ft ▼
Manning roughness, n ?	.028		Velocity, v	8.42	ft/sec ▼
Channel slope	.0073	<input type="text"/> rise/run ▼	Flow, Q	414.32	cfs ▼
Flow depth	4.7	<input type="text"/> ft ▼	Velocity head, h _v	1.10	ft ▼
Bend Angle? (for riprap sizing)			Top width, T	10.94	ft ▼
Stone specific gravity (2.65)			Froude number, F	0.70	
			Shear stress (tractive force), tau	2.14	psf ▼
			Implied riprap size based on n	0.14	ft ▼
			Required bottom angular riprap size, D50, Maricopa County	-1.35	ft ▼
			Required side slope 1 angular riprap size, D50, Maricopa County	-13.60	ft ▼
			Required side slope 2 angular riprap size, D50, Maricopa County	-13.60	ft ▼
			Required angular riprap size, D50, per Maynard, Ruff, and Abt (1989)	NaN	ft ▼
			Required angular riprap size, D50, per Searcy (1967)	0.48	ft ▼





Attachment D

11.g – Resource Mapping

Section 11.g Resource Mapping- Map 1 of 3: SOURCE- CA Wildlife Habitat Relations System, CWHR, 2005 (With Presumed CDFW Jurisdictional Area)



Section G. Resource Mapping- Map 2 of 3 : SOURCE- National Wetlands Inventory, V2



Section G. Resource Mapping- Map 3 of 3 : SOURCE- Bay Area Aquatic Resource Inventory, (BAARI), San Francisco Estuary Institute





Attachment E

Section 13 – Permits



Truchard Winery Replacement Bridge

Section 13. Permits- Continuation Sheet

A use permit is in progress with the County of Napa. It is assumed that the county will assume duties as lead agency. As stated in Section 10, "Project Description", no fill in quantity exceeding 1 cubic yard per running foot of channel is planned to be placed with the ordinary high water mark, (OHWM) of the channel. Therefore, no Army Corp. of Engineers Section 404 permit will apply.