

Appendix A Honeydew Bridge Replacement
Project Programmatic Section 4(f)
Evaluation

Honeydew Bridge Replacement Project Programmatic Section 4(f) Evaluation



HUMBOLDT COUNTY, CALIFORNIA
DISTRICT 01-HUM-CR-0
Federal Project No. STPLZ 5904(024); Bridge No. 04C-0055

April 2019



**HONEYDEW BRIDGE REPLACEMENT PROJECT
PROGRAMMATIC SECTION 4(F) EVALUATION**

**HUMBOLDT COUNTY, CALIFORNIA
DISTRICT 01-HUM-CR-0
Federal Project No. STPLZ 5904(024); Bridge No. 04C-0055
Submitted Pursuant to
49 USC 303**

THE STATE OF CALIFORNIA

**Caltrans Office of Local Assistance, District 1, Eureka and
Humboldt County Public Works Department**

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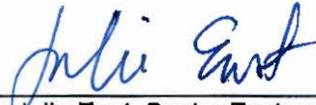
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05/17/2019

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Date

7/1/19

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 326.

05/17/2019

Honeydew Bridge Replacement Project Programmatic Section 4(F) Evaluation

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Appendix B	State Historic Preservation Officer Concurrence Letters (2013, 2017) and Finding of Adverse Effect Including Attachments (August 2017)
Appendix C	Memorandum of Agreement (Fully Executed December 27, 2017)
Appendix D	Project Alternative Figures
Appendix E	Notice of Preparation and 2017 Public Scoping Workshop Correspondence

Chapter 1. Introduction

Under the purview of the California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA) pursuant to 23 USC 326, the Humboldt County Public Works Department (County), is proposing to replace the historic Honeydew Bridge (Bridge Number 04C-0055) on Mattole Road over the Mattole River. The existing bridge is structurally deficient and functionally obsolete and does not comply with modern geometric and seismic standards. The Honeydew Bridge is on Mattole Road between the intersections of Mattole Road and Burrel Road at the north approach, and Mattole Road and Wilder Ridge Road at the south approach, in the unincorporated community of Honeydew in southwest Humboldt County, California.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 USC 326.

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law in 49 USC 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the federal Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

Responsibility for compliance with Section 4(f) has been assigned to the County pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

If a project meets the requirements of a *Programmatic Section 4(f)* evaluation, the project may be streamlined by eliminating the requirement to consult with agencies that do not have jurisdiction over the resource. Additionally, the Section 4(f) evaluation would not require a draft and final document, nor need to be publically circulated.

1.1. Project Background

This Section 4(f) Evaluation was prepared because the County's proposed Honeydew Bridge Replacement Project (project) would be funded with federal highway dollars and because the project would affect a historic bridge that was determined eligible for listing in the National Register of Historic Places (NRHP) in 2003 and is considered a historic property under Section 106 of the National Historic Preservation Act (NHPA) (JRP Historical Consulting, LLC [JRP] 2013).

Caltrans, as assigned by FHWA, determined that the project qualifies for evaluation under the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges (Programmatic Section 4(f)), approved July 5, 1983 (see Section 5). This determination was based upon the findings presented in technical studies, agreements among responsible parties, and consultations with responsible and trustee agencies and interested parties. The primary documents used to reach this conclusion include the following:

- **Historic Property Survey Report (HPSR), including the Historical Resources Evaluation Report (HRER)** - Summarizes in detail the identification and evaluation efforts for cultural resources within the project's Area of Potential Effects and requested SHPO concurrence on eligibility determinations relevant to the specific project (JRP 2013a, b). Appendix A contains the HPSR.
- **Finding of Adverse Effect Report (FAE)** - Describes Caltrans' determination of adverse effect on the historic Honeydew Bridge (JRP 2017). On November 16, 2017, SHPO issued a letter concurring with Caltrans' determination in the FAE that Honeydew Bridge is eligible for NRHP listing. Based on considerations for costs, liabilities, environmental impacts, and the potential for substantial delays, the County determined that retaining the existing bridge and building a new bridge at an alternative location is not a feasible option. Removing the existing bridge and constructing a new bridge on the existing alignment is considered the only feasible option. The FAE (Appendix B) documents the variety of means used to inform and elicit public comments, and identify additional information pertaining to the history of the bridge. Outreach and consultation methods included letters, two public meetings (January 23, 2013 and March 1, 2017), and telephone calls. Parties consulted included SHPO, the Humboldt County Historical Society, the Clarke Historical Museum, the Mattole Valley Historical Society, and the Eureka Heritage Society. Native American groups identified by the Native American Heritage Commission were also contacted via letters and telephone calls in an attempt to identify and protect cultural resources. The Honeydew Country Store, at 44670 Mattole Road, was determined in January 2014 to be ineligible for NRHP listing. (See Appendix B).
- **Memorandum of Agreement (MOA)** - Documents the agreement between Caltrans, SHPO, the County, and the Mattole Valley Historical Society executed December 27, 2018 that describes measures to mitigate for the adverse effect of replacing the historic bridge (the Mattole River/Honeydew Bridge, Bridge Number 04C-0055) on its existing alignment. The existing bridge was determined eligible for listing in the NRHP and is a historic property for compliance with Section 106 of the NHPA (JRP 2013). The MOA is included as Appendix C.

- **Other Project Technical Reports** - Other technical studies prepared to evaluate conditions necessitating bridge replacement included a preliminary alternatives analysis, preliminary engineering studies (civil design, hydraulic modeling of flood capacity issues and structural design), and environmental reports (including a fisheries study, wetland delineation, and a natural environment study). Copies of these studies are on file with Humboldt County in Eureka.

Chapter 2. Description of the Proposed Project

2.1. Purpose and Need

The purpose of the project is to provide a regional road crossing over the Mattole River that meets modern highway design standards, accommodates local and regional transportation needs, and provides an increased level of public safety for vehicles, pedestrians, and bicyclists.

The project need stems from a 1997 resolution passed by the County Board of Supervisors stating the need for a bridge replacement. This resolution was based on the finding from a Caltrans Structure Maintenance inspection, which identified a low sufficiency rating. The existing bridge is near the end of its service life and is considered structurally deficient. It does not comply with modern geometric and seismic standards. The bridge consists of only one travel lane, lacks a standard shoulder width, and does not provide safe passage for pedestrians and bicyclists.

Subsequent Caltrans structure maintenance investigations performed in 2014 confirmed the previously identified structural deficiencies and an additional determination of “functionally obsolete” due to factors including height, weight, and width limitations. The bridge has a low clearance height of 14 feet, which limits access to critically needed fire vehicles and heavy equipment, including equipment that is needed to repair and reopen rural roads in the region damaged during the winter or following unseasonable severe storms and disasters. The low vertical clearance has also led to a series of incidents in which large vehicles hit and damaged the truss structure. The inspection generates a rating as a method for evaluating a bridge’s overall fitness for the duty that it performs. The rating is based on a scale of 1 to 100, with 1 being the least fit. The Honeydew Bridge received a score of 13.3. Rehabilitation of the existing bridge to meet modern geometric and seismic standards would be both technically infeasible and cost prohibitive.

Current average daily travel (ADT) numbers are approximately 300 on the weekend and roughly 400 during weekdays (Bundschuh 2017). These numbers are expected to increase to 500 near the year 2020. This level of use for a one-lane bridge contributes to the unsafe nature of the bridge.

2.2. Project Location

Honeydew Bridge is on Mattole Road at the Mattole River in the community of Honeydew in unincorporated southwestern Humboldt County (Figure 1). The existing bridge is just north of the intersection of Mattole Road and Wilder Ridge Road (Figure 2). For the purpose of the proposed project, including a temporary detour to be used during construction, the location is shown on the *Honeydew and Shubrick Peak, California* U.S. Geological Survey quadrangle in Townships 2 and 3S, Range 1W, Sections 1 and 36. The approximate center of the study area is at latitude 40.244210, longitude -124.124925 (World Geodetic System 1984).

2.3. Project Setting

The County proposes to replace the existing load-limited historic bridge, referred to as the Honeydew Bridge (Bridge Number 04C-0055), on Mattole Road at Mattole River. Because

of the environmental requirements of the National Environmental Policy Act (NEPA); Section 106 of the NHPA (16 USC 470); Section 4(f) of the Department of Transportation Act (49 USC 303), which includes evaluation of use of historic sites eligible for the NRHP; and Executive Order 11988 regarding floodplain management, rehabilitation of the historic bridge was also analyzed. In order to meet the FHWA Highway Bridge Program safety criteria, the crossing must be functional and structurally sound to industry standards outlined by Caltrans and the American Associate of State Highway and Transportation Officials (AASHTO). The proposed project would consist of a two-lane, two-span structure built within the existing bridge and roadway approach alignment. The new structure would meet federal sufficiency and functionality standards. Three build alternatives and a no-build alternative were considered during the design process.

The existing single-lane bridge is 386 feet long and 17 feet wide, with a vertical clearance of 14 feet, and is posted to limit truck and bus speeds to 15 miles per hour. The bridge has a wooden deck and wooden side rails. The deck has two wooden wheel bases, each four boards wide. The bridge contains no shoulders or sidewalks for pedestrians and bicyclists.

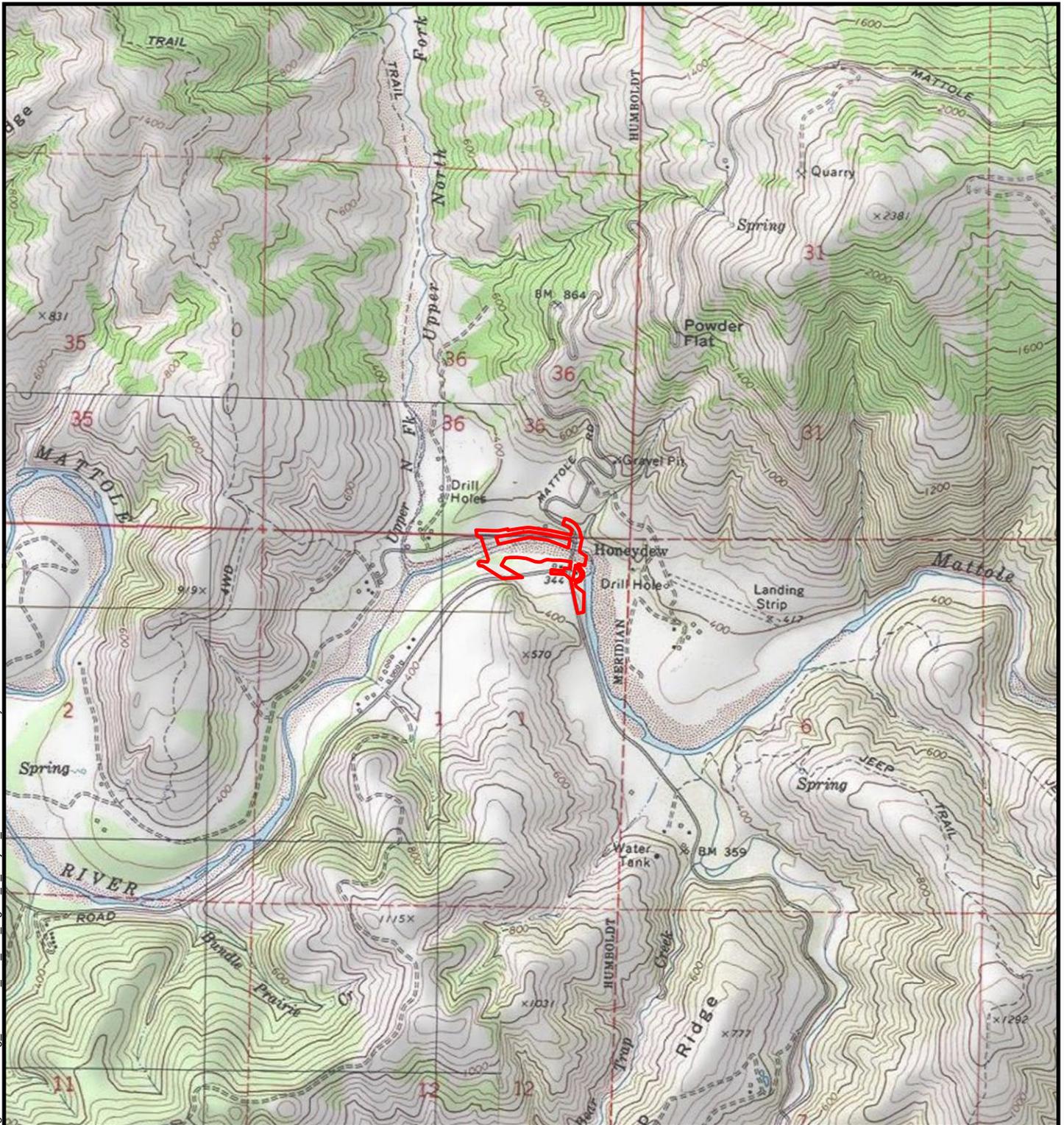
The bridge is a critically needed regional route used for emergency vehicle access (for those vehicles that meet the weight and height limitations of the existing bridge) and for residents. Regionally available alternative routes are limited and are considerable distances from Honeydew. The closest alternate route from Honeydew to Highway 101 is via Wilder Ridge Road through Ettersburg to Redway, approximately 40 miles. Honeydew Bridge is significant to the local economy as it provides access to agricultural lands and is used by residents, tourists, delivery trucks, emergency services, pedestrians, and bicyclists. There are no public transportation services in the project area.

In the vicinity of Honeydew, the Mattole River is relatively winding, wide, and shallow, and is constrained on the northeast by a steep hillside. The channel contains a substantial amount of large, immobile rock. The northeast bank of the Mattole River is steep and consists of rock and colluvium with heavy vegetation above the river bank. Downstream from the wide, flat floodplain on which the community of Honeydew is situated, the southwest bank of the river is steep and consists of alluvial deposits with a cover a heavy vegetation. Infrequent floods in the Mattole River are substantially natural and are not significantly influenced by land use activities within the drainage basin. Floods have not been known to overtop Mattole Road.

2.4. FHWA Design Requirements

The Highway Bridge Program mandatory design criteria require that a rehabilitated or replaced bridge provide adequate hydraulic capacity to pass a probable 50-year flood event with 3 feet of freeboard (3 feet of clearance between lowest point of the underside of the bridge [soffit] and water surface) or the water surface elevation of the most probable 100-year flood event with no freeboard, whichever is higher. Additionally, the bridge design must not increase potential flood risk to upstream infrastructures, including nearby roads, homes, or businesses. The design must also meet seismic, load-bearing (vehicle weight), and geometric (such as lane and shoulder width) standards for a local rural road and bridge. Thus, the crossing must be upgraded to eliminate load restrictions and increase the bridge's roadway width to two 11-foot-wide lanes and two 2-foot-wide shoulders.

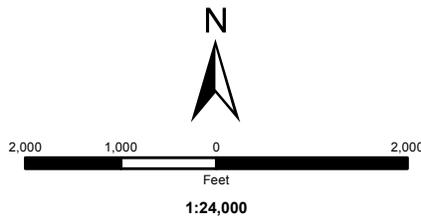
G:\Projects\16_159_000_Honeydew_Bridge\GIS\Working_MXD\16_159_000_Figure_1_Project_Location.mxd Imooney 2/7/2017



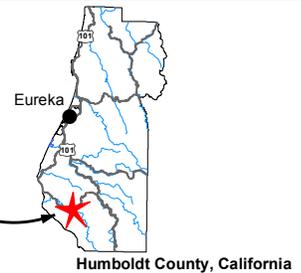
 Study Area (15.93 acres)

Public Land Survey:
T02S, R01W, Sec. 36
T03S, R01W, Sec. 1

USGS 7.5 Quad:
Honeydew 1970
Shubrick Peak 1969

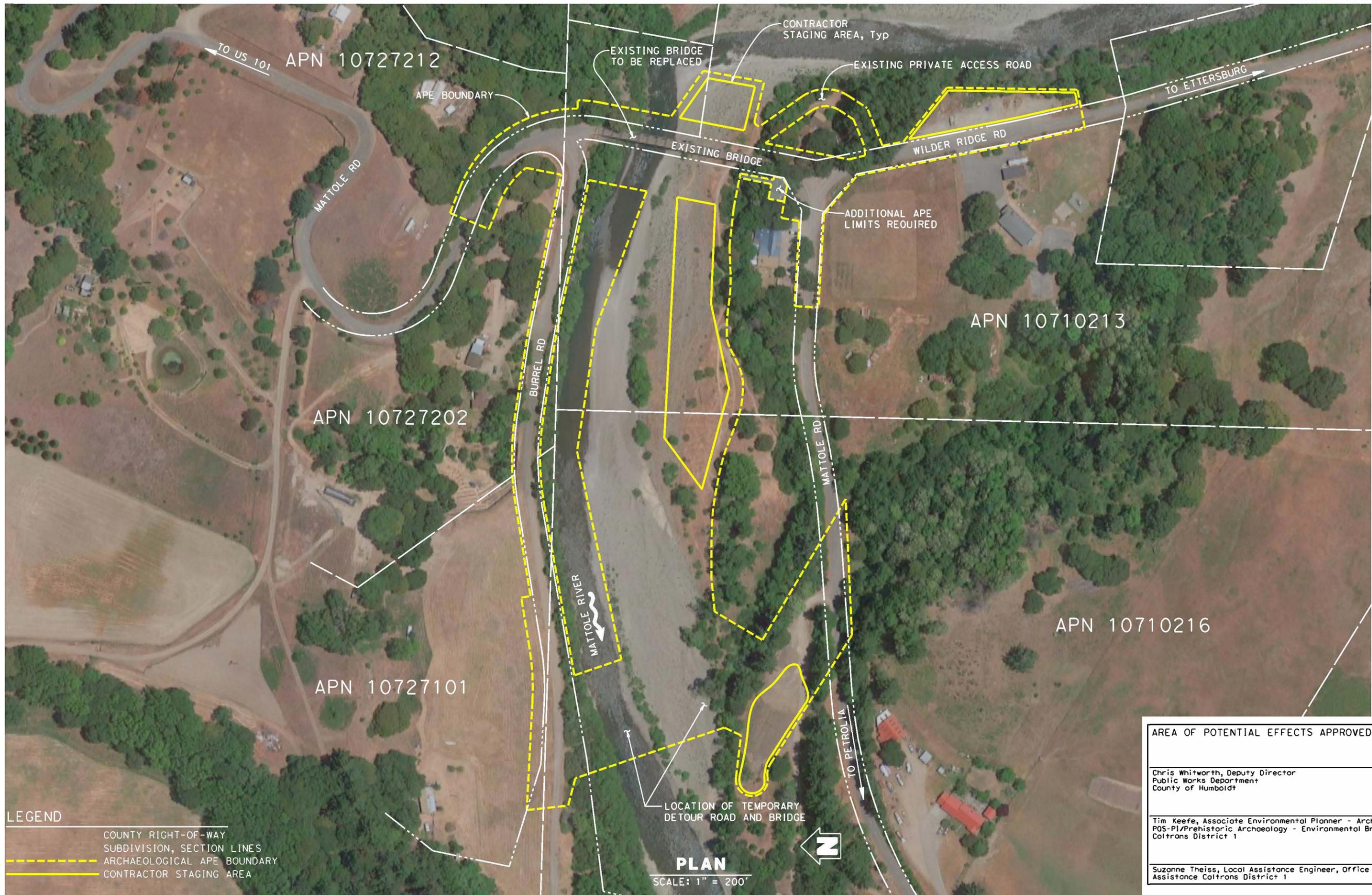


Project Location



Honeydew Bridge Replacement Project

Figure 1
Project Location



LEGEND

- COUNTY RIGHT-OF-WAY
- SUBDIVISION, SECTION LINES
- - - - - ARCHAEOLOGICAL APE BOUNDARY
- CONTRACTOR STAGING AREA

PLAN
SCALE: 1" = 200'

AREA OF POTENTIAL EFFECTS APPROVED BY	
Chris Whitworth, Deputy Director Public Works Department County of Humboldt	Date _____
Tim Keefe, Associate Environmental Planner - Archaeology POS-PI/Prehistoric Archaeology - Environmental Branch Coltrons District 1	Date _____
Suzanne Theiss, Local Assistance Engineer, Office of Local Assistance Coltrons District 1	Date _____

**MORRISON
STRUCTURES**

DESIGN	by B. Maue
DETAILS	by R. Uhlmann

Robert Morrison Jr.
PROJECT ENGINEER

**MATTOLE RIVER BRIDGE REPLACEMENT PROJECT
FIGURE 2. AREA OF POTENTIAL EFFECT**

ORIGINAL SCALE IN INCHES
FOR REDUCED PLANS



CU
EA

DISREGARD PRINTS BEARING
EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
8/19/13	1	1

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2.5. Project Description – Alternatives

Three build alternatives and the No-Build Alternative are under consideration. Alternative descriptions are based on information prepared by Morrison Structures, Inc. (2018) and approved by Humboldt County.

2.5.1. NO-BUILD ALTERNATIVE

Under the No-Build Alternative, the existing bridge would remain in its current substandard state. Use of the bridge would continue while traffic volumes increase; however, its structural limitations may increase the bridge's potential for catastrophic failure (i.e., collapse) because it does not meet modern safety standards. It would continue to be a barrier to large emergency response vehicles and other large trucks due to its height, weight, and width limitations. Because transportation routes and access in this part of southern Humboldt County are limited by topography, the No-Build Alternative would maintain the existing public safety hazard and continue to hinder traffic circulation. The No-Build Alternative would not meet the purpose and need for the project. The existing bridge is illustrated in Appendix D-1.

2.5.2. PROJECT BUILD ALTERNATIVES

All three build alternatives would follow the same existing roadway approach and bridge alignment, and all three build alternatives would include a bridge crossing the Mattole River in a two-span configuration. Common design features would be incorporated into each build alternative, including final freeboard clearance and alignment. Differences between the design features would include construction timing, and visual appearance and aesthetic. Project alternatives where the bridge or its approaches would not meet both the federal 50- and 100-year floodplain requirements and the avoidance of significant upstream floodplain encroachment were not considered. Therefore, the following three project build alternatives were carried forward for analysis in compliance with the California Environmental Quality Act (CEQA) and as recommended under NEPA. These three build alternatives are illustrated in Appendix D (D-2 through D-4).

- Alternative 1 - Camelback Bridge. This alternative would be the most similar in appearance to the existing bridge.
- Alternative 2 - Steel Girder Bridge. This is the Preferred Alternative.
- Alternative 3 - Concrete Girder Bridge. This alternative would be a precast-prestressed, haunched, spliced girder bridge.)

Common Design Features of the Project Build Alternatives

DESIGN

The replacement bridge would be designed for the HL93, Tandem, and P15 Permit Design Vehicle loadings as specified in bridge design specifications described in the *Seismic Design Criteria Version 1.6* (California Department of Transportation 2010) and *AASHTO Load and Resistance Factor Design Bridge Design Specifications 8th Edition* (AASHTO 2017). The structure must be capable of conveying the base or 100-year flood and passing the 50-year flood without causing objectionable backwater, excessive flow velocities, or encroaching on through-traffic lanes, according to the Hydraulic Design Criteria established

in the *Caltrans Local Assistance Procedures Manual* (Caltrans 2019). In addition, AASHTO requires at least 3 feet of freeboard (clearance) above the 50-year flood or flood of record. According to the project's hydrologic analysis (Pacific Hydrologic 2013) the minimum soffit elevation required to meet these criteria is 335.41 feet.

Each of the build alternatives would replace the existing single-lane, camelback through-truss bridge with a new two-lane bridge over the Mattole River on the same alignment. The replacement structure would include two 11-foot-wide lanes, each having a 2-foot-wide shoulder, for a total clear width of 26 feet. The replacement bridge would consist of two equal spans, each 187 feet 7.5 inches long, for a total bridge length of 375 feet 3 inches. A steel H-pile would be used to support the north abutment, and a cast-in-drilled-hole (CIDH) supported pier would be used at the south abutment.

The roadway approaches on both ends of the new bridge would be widened to accommodate two 12-foot-wide lanes, 4-foot-wide shoulders, and 3-foot-wide unpaved shoulders. A total of four shortened metal beam guard rails (MBGRs), 50 to 100 feet long, would be added along Mattole Road on both sides of the bridge. One MBGR would be added between the Honeydew Country Store/Post Office parking lot and Mattole Road near the southwest bridge corner. Near the southeast bridge corner, an MBGR would be added between the adjacent residence and Mattole Road to protect the residence and existing trees. On the north side of the bridge, MBGR would be installed on both sides of the road, between Mattole Road and the riparian vegetation along the river banks. New signage would be added on the north and south bridge approaches.

Under each of the build alternatives, a small interpretive area would be created near the southwest corner of the new bridge alignment to commemorate the historical significance of the existing Honeydew Bridge. It is anticipated that this area would include a monument marker (a plaque), a small kiosk to house interpretive information, and a concrete picnic table. A 6-foot-wide, paved walkway would lead from the existing parking area near the store, which would be improved to include two Americans with Disabilities Act-compliant parking stalls.

CONSTRUCTION

Construction Methods. Construction specifications will be in accordance with the Special Provisions and the current Caltrans Standard Plans, Standard Specifications, and Standard Special Provisions at the time the construction contract is awarded.

Construction Sequencing. Because of the short time period of low flows for the Mattole River, during which construction can occur, two summer seasons would be required to construct the bridge replacement project regardless of the structure type alternative selected. The first season of work would involve construction of the deep foundations required for the new bridge's center pier and south abutment. During this period, access would occur either via a private road that descends to the floodplain from Wilder Ridge Road near the southeast corner of the bridge, or via a downstream temporary detour road (a portion of the larger temporary detour road that would be required for construction access during the second season). Large-diameter CIDH-pile foundations would be used for each alternative, at both the center pier and south abutment. The new bridge pier centerline would be approximately 11 feet north of the existing pier centerline. This would allow for the CIDH installations without requiring closure of the existing bridge or affecting the existing bridge support.

The second season of work would involve constructing the remainder of the temporary downstream detour and temporary supports, dismantling and removal of the existing bridge, and constructing the pier wall, abutments, retaining walls, superstructure, and roadway approaches. Temporary supports that would be used to remove the existing bridge trusses could also be used to erect the new bridge. After completion of the second season of work, the detour bridge and roadbed material from the detour road, construction access road, and private access road would be removed and the areas of temporary disturbance would be restored to pre-construction conditions.

Through-traffic flow would be maintained throughout the project construction period. During the first season, traffic routing would continue to be over the existing bridge. In the second season, traffic would be routed to the temporary detour.

Right of Way and Construction Easements. Retaining walls would be needed at the south end of project (near the residence on the east side of the Wilder Ridge Road and Mattole Road intersection, and near the store on the west side of the intersection) to keep the fill slopes within the right of way. Construction of these walls would require temporary construction easements to allow for construction access.

On the north end of the bridge, specifically the northwest corner, roadway approach construction would require acquisition of permanent right of way and temporary construction easements because the existing road was determined to be outside of the existing right of way. A cut slope would be needed outside of the existing right of way on the east side of Mattole Road from station 12+00 to station 12+75. Temporary construction easements for the detour and for the construction access road would also be required.

Detour. Each build alternative would require the use of a detour bridge approximately 1,300 feet downstream from the existing bridge. During the second construction season, a temporary detour route would be constructed by creating a connection between Burrel Road on the north side of the river and Mattole Road on the south side, bypassing the existing bridge and the Mattole Road/Wilder Ridge Road intersection. Figure 2 shows the location of the proposed temporary detour in the project area. The temporary detour route would follow Burrel Road west for approximately 1,300 feet from its intersection with Mattole Road on the north side of the Mattole River, where the detour would turn south, crossing over the river via a temporary low-water crossing bridge (i.e., an 89-foot-long flatcar provided by the County), before joining an existing, unnamed gravel road on the south side of the river. This unnamed gravel road connects to Mattole Road approximately 900 feet west of the Honeydew Store and is used to access a gravel storage area and the river. Detour road construction would consist of river-run gravel fill over geotextile fabric, with an aggregate base topping. A railroad flatcar would be used to create the temporary bridge over a narrow portion of the river, and gravel abutments would be used to support the temporary structure. Grading in the floodplain would be needed to create the temporary detour. The existing bridge would not be accessible to the public while the temporary detour was in place. Upon completion of the new bridge, the temporary detour, including the flat car bridge and approaches would be removed and the floodplain would be restored to pre-construction conditions.

Bridge Disassembly. The existing bridge would be temporarily supported, disassembled, match-marked, and transferred to the County for storage. Flexibility will be allowed in the contract to permit the contractor to select a preferred dismantling method and sequence.

Unique Features of Build Alternatives

Construction activities would differ slightly among the alternatives. It is anticipated that Alternative 2 (the Preferred Alternative) would require 154 days to construct. Alternative 1 would require 163 days, and Alternative 3 would require 183 days.

Alternative 1 most closely matches the current bridge's design. The lighter steel truss superstructure would allow for a longer working range for the cranes and minimize the need for a work trestle over the Mattole River. Alternative 1 would also have the highest freeboard clearance for hydraulic conveyance among the three build alternatives. During construction, gravel pads in the margins of the live stream would be necessary.

Alternative 2, the steel girder alternative, would allow for crane working ranges that would be long enough to minimize the need for a work trestle over the Mattole River. As it would be for Alternative 1, temporary work pads would be necessary in the margins of the live stream. For both Alternatives 1 and 2, cranes would be able to work from the north bank or north abutment and the south gravel bar when placing all of the superstructure sections.

Alternative 3 would use a concrete girder design. This alternative would require a work trestle to be constructed alongside the north span to shorten the lift radius to within working range of the cranes.

Identification of Preferred Alternative

After comparing and weighing the benefits and impacts of all practicable alternatives, the team identified Alternative 2 as the Preferred Alternative, subject to public review and comment. The Preferred Alternative meets the project's purpose and need while minimizing temporary and permanent impacts on the natural and human environments.

Comparison of Alternatives

The three build alternative designs follow the same alignment and would affect the same segments of area roads (Mattole, Burrel, and Wilder Ridge Roads). In addition, all three alternatives would involve removal of the existing bridge. The three build alternative structures would, however, differ with respect to several key physical characteristics. Table 1 compares these key structural differences.

Table 1. Alternatives - Structural Comparison

Feature	Proposed Project Alternatives			
	No-Build (Existing Bridge)	Alternative 1	Alternative 2	Alternative 3
Structure Type	Camelback truss with wood deck	Camelback Truss	Steel Girder	Concrete Girder
Total Length		375 feet 3 inches	375 feet 3 inches	375 feet 3 inches
Bridge Spans		2	2	2
Number of Piers	1	1	1	1
Superstructure Depth (inches)		43	125	118
Minimum Hydraulic Clearance		10.96 at south abutment	5.07 feet at the pier	5.66 feet at the pier
Traffic Lanes	1	2	2	2
Traffic Lane Widths		Two 11-foot-wide lanes, 2-foot-wide shoulders; 26 feet clear width	Two 11-foot-wide lanes, 2-foot-wide shoulders; 26 feet clear width	Two 11-foot-wide lanes, 2-foot-wide shoulders; 26 feet clear width
Roadway Approaches		Two 12-foot-wide lanes, 4-foot-wide shoulders, and 3-foot-wide unpaved shoulders	Two 12-foot-wide lanes, 4-foot-wide shoulders, and 3-foot-wide unpaved shoulders	Two 12-foot-wide lanes, 4-foot-wide shoulders, and 3-foot-wide unpaved shoulders
Anticipated Days to Construct	N/A	163	154	183

2.6. Summary of the Alternatives

Of the alternatives that would meet the purpose and need of the proposed project, Alternative 2 would have the significant advantage of less complicated construction and shorter construction duration than the other build alternatives. This aspect is important for ensuring that construction is completed as planned and avoiding complications with high-water conditions. This advantage justifies the higher cost than Alternative No. 3. Table 2 summarizes and compares all of the alternatives including advantages and disadvantages, some of which will be described in greater detail in subsequent sections of this document.

Table 2. Features of Each Alternative

Features of the Alternative	Advantages of the Alternative	Disadvantages of the Alternative	Estimated Costs for the Alternative (by Morrison Structures, Inc., in 2015 Dollars) ¹
No Build Alternative			
No changes.	Would avoid an existing Section 4(f) resource (historic bridge).	<p>Would not improve emergency vehicles access.</p> <p>Would not improve public safety.</p> <p>Would not eliminate width restrictions (one-lane, no shoulders).</p> <p>Would not eliminate load limit restrictions (i.e., vehicles bearing standard loads could not use bridge).</p> <p>Would not eliminate substandard seismic structural elements.</p> <p>Would not rectify hydraulic structural deficiencies. (Insufficient standards for 50- and 100-year floods, debris loading, scour etc.).</p>	<p>TOTAL \$0</p> <p>NO COST</p>
Alternative 1 - Camelback Bridge (This alternative would be the most similar in appearance to the existing bridge)			
<p>Would include construction of a new bridge on the existing bridge alignment.</p> <p>Would remove an existing Section 4(f) resource (historic bridge), store it off-site, and market it for sale for the purpose of preservation.</p>	<p>Would meet FHWA hydraulic structural standards (50- and 100-year floods, debris loading, scour, etc.).</p> <p>Would improve public safety.</p> <p>Would include interpretive monument describing the historic bridge's relevance.</p>	<p>Would not preserve historic connectivity because the Section 4(f) resource (existing bridge) would be removed from its original setting.</p> <p>As a truss bridge, this design would result in limited vertical clearance (15 feet, 8 inches).</p>	<p>TOTAL \$5.7 million</p>

Table 2. Features of Each Alternative

Features of the Alternative	Advantages of the Alternative	Disadvantages of the Alternative	Estimated Costs for the Alternative (by Morrison Structures, Inc., in 2015 Dollars) ¹
	<p>The bridge would be constructed of weathering steel, which would not require future repainting. This design is most similar to the existing bridge and thus may be considered to provide an aesthetic benefit.</p> <p>Environmental disturbance would be minor because the new bridge would be aligned on the existing alignment.</p>	<p>As a modern structure, this design would not retain the historic significance of the existing bridge associated with its eligibility for listing on the NRHP.</p> <p>Would require mitigation as identified in the Section 106 MOA pursuant to consultation with SHPO, including a Historic American Engineering Record (HAER) recordation as described in Section II Treatment of Historic Properties.</p> <p>Would require the use of a temporary bridge that would result in additional temporary impacts.</p> <p>In order to construct, would cost approximately 21% more than that for the least-costly build alternative (Alternative 3).</p>	
Alternative 2 - Steel Girder Bridge (This is the Preferred Alternative)			
<p>Would include construction of a new bridge on the existing bridge alignment.</p> <p>Would remove an existing Section 4(f) resource (historic</p>	<p>Would meet FHWA hydraulic structural standards (50- and 100-year floods, debris loading, scour, etc.).</p> <p>Would include interpretive monument</p>	<p>Would have an additional pier with less separation between piers, thus increasing the risk of catching debris (including long trees during floods) and having more</p>	<p>TOTAL \$5.6 million</p>

Table 2. Features of Each Alternative

Features of the Alternative	Advantages of the Alternative	Disadvantages of the Alternative	Estimated Costs for the Alternative (by Morrison Structures, Inc., in 2015 Dollars) ¹
<p>bridge), store it off-site, and market it for sale for the purpose of preservation.</p>	<p>describing the historic bridge's relevance.</p> <p>No clearance limit.</p> <p>Would have a slenderer profile than the truss alternatives (Alternative No. 1), which could be considered to have less intrusion into the natural landscape setting than the other truss alternative, thus providing an aesthetic benefit.</p> <p>The duration of construction for a steel bridge is estimated to be approximately 4 weeks shorter than for a concrete bridge.</p> <p>Has the significant advantage of less complicated construction and shorter construction duration. This aspect is important for ensuring that construction is completed as planned and avoiding complications with high-water conditions. This advantage justifies the higher cost than Alternative No. 3.</p> <p>Environmental disturbance would be minor because the new bridge would be aligned on the existing alignment.</p>	<p>undesirable environmental impacts.</p> <p>As a modern structure, this design would not retain the historic significance of the existing bridge associated with its eligibility for listing on the NRHP.</p> <p>Would require mitigation as identified in the Section 106 MOA pursuant to consultation with SHPO, including an HAER recordation as described in Section II Treatment of Historic Properties.</p> <p>Would require the use of a temporary bridge that would result in additional temporary impacts.</p> <p>In order to construct, would cost approximately 20% more than for the least-costly build alternative (Alternative 3).</p>	

Table 2. Features of Each Alternative

Features of the Alternative	Advantages of the Alternative	Disadvantages of the Alternative	Estimated Costs for the Alternative (by Morrison Structures, Inc., in 2015 Dollars) ¹
Alternative 3 - Concrete Girder Bridge (This alternative would be a precast-prestressed, haunched, spliced girder bridge)			
<p>Would include construction of a new bridge on the existing bridge alignment.</p> <p>Would remove an existing Section 4(f) resource (historic bridge), store it off-site, and market it for sale for the purpose of preservation.</p>	<p>Would include interpretive monument describing the historic bridge's relevance.</p> <p>No clearance limit.</p> <p>Would have a slenderer profile than the truss alternatives (Alternative No. 1), which could be considered to have less intrusion into the natural landscape setting than the other truss alternative, thus providing an aesthetic benefit.</p> <p>Environmental disturbance would be minor because the new bridge would be aligned on the existing alignment.</p>	<p>Duration of construction for a concrete bridge is estimated to be approximately 4 weeks longer than for a steel bridge.</p> <p>As a modern structure, this design would not retain the historic significance of the existing bridge associated with its eligibility for listing on the NRHP.</p> <p>Would require mitigation as identified in the Section 106 MOA pursuant to consultation with SHPO, including a HAER recordation as described in Section II Treatment of Historic Properties.</p> <p>Would require the use of a temporary bridge that would result in additional temporary impacts.</p>	<p>TOTAL \$4.5 million</p> <p>LOWEST COST FOR A BUILD ALTERNATIVE</p>

Table Notes: ¹Construction costs include a 10% mobilization cost and 20% contingencies, but do not include support costs (engineering and permitting), right of way, and construction engineering.

Chapter 3. Description of Section 4(f) Property

Honeydew Bridge on Mattole Road over the Mattole River was built in 1920 and is a single-lane, wood-deck structure composed of two steel camelback truss spans on a concrete foundation, which makes it a rare and significant bridge type. The structure's character-defining features are the two camelback trusses and substructure, along with the concrete seat abutments, single concrete pier, and timber deck and railings. The bridge is situated approximately 30 feet above the Mattole River and is supported by a center pier and concrete abutments on each bank. The total bridge length measures 386 feet long with a 14-foot vertical clearance.

The truss structure has repeatedly been struck and damaged by oversized vehicles. Several main truss members and portal cross frames have been replaced, typically with plug welding. The truss portion of the bridge was last painted in the mid 1970s. The County does not have funding for a bridge painting program. The maintenance needs of the bridge are high due to its age, design, and materials of construction. Although the bridge has been subject to contemporary repairs, it has retained its historic integrity. The extant pressure-treated timber deck and railings replaced an earlier deck and railings as recently as the 1990s (as noted in Caltrans bridge inspection reports). When evaluated, the bridge was one of only three of this type in the state on public roadways. It was determined eligible for listing in the NRHP in 2003 and is a historic property for compliance with Section 106 of the NHPA (JRP 2013a).

The County owns the Section 4(f) property (i.e., the existing Honeydew Bridge) and Mattole Road right of way. To complete the project, the County must negotiate with several private landowners for temporary easements to allow for construction access, staging, and creation of the temporary detour. Permanent taking of additional right of way on private land would be limited to a small area adjacent to the southwest corner of the bridge (near the Honeydew Country Store and Post Office) for development of the commemorative monument that would provide historical interpretation information about the historic Honeydew Bridge.

The Honeydew Bridge is used for single-lane vehicle traffic, and is open to the public. Current ADT is approximately 300 on the weekend and roughly 400 during weekdays (Bundschuh 2017). These weekday numbers are expected to increase to 500 near the year 2020. This level of use for a one-lane bridge contributes to the unsafe nature of the bridge. No other bridges exist in the vicinity, nor are there plans to construct additional bridges.

The Honeydew Bridge is the sole historic property in the area of potential impact. This bridge was determined eligible for listing in the NRHP under Criterion C in 2003 as a result of the Caltrans Historic Bridge Inventory conducted in early 2000s. The bridge was previously evaluated in 1986, but found not eligible. Caltrans changed its opinion regarding the bridge because in the span of time between the two evaluations, four bridges of this type (camelback truss) in the state were demolished, leaving only three including the Honeydew Bridge. Of the three, only the Honeydew Bridge and the Salinas River Bridge (44C0007) were built during the period when this type of bridge was popular. Under Criterion C, the bridge represents an excellent example of its type, period, and method of construction, and as a rare and significant bridge type (i.e., the Camelback Truss).

The bridge's period of significance is 1920 (the year of construction) and although contemporary repairs to the structure, such as welded members in the portal cross frame, are evident, the structure retains sufficient historic integrity to convey its historic significance. The structure's character-defining features are the two camelback trusses and substructure, along with the concrete seat abutments, single concrete pier, and timber deck and railings. The extant pressure-treated timber deck and railings replaced an earlier deck and railings. Some of the replacements occurred in the 1990s (as noted in Caltrans bridge inspection reports). Records indicate that the new decking and railings can be considered as in-kind replacements and as such they contribute to the bridge's character.

The bridge is a critically needed regional route used for emergency vehicle access (for those vehicles that meet the weight and height limitations of the existing bridge) and for residents. Regionally available alternative routes are limited and are considerable distances from Honeydew. The closest alternate route from Honeydew to Highway 101 is via Wilder Ridge Road through Ettersburg to Redway, approximately 40 miles. The bridge is significant to the local economy as it provides access to agricultural lands and is used by residents, tourists, delivery trucks, emergency services, pedestrians, and bicyclists.

Consideration of bridge replacement began in the early 1970s. Initially there was interest in relocating the bridge to allow realignment of the approach road on the north side, in order to bypass several hillslope curves. Ten alternative routes were assessed. Based on this initial assessment, the preferred location for a new bridge alignment was approximately 1,800 feet downstream from the existing alignment. The primary rationale for this selection was meeting the objective of straightening the alignment of the approach road on the north side. In the late 1970s, the County acquired right of way for a new approach road on the north side of the Mattole River through dedication on a subdivision map. Right of way was not secured on the south side of the river. Funding to pursue this option was not secured and project development was discontinued.

In 1997, the Humboldt County Board of Supervisors passed a resolution stating the intent to replace the bridge based on its lowered sufficiency rating. The low rating was based on a history of incidents in which oversize vehicles had hit and damaged the structure, as well as the overall deteriorating condition of the bridge.

In 2011, Humboldt County Public Works initiated technical studies and engineering design for bridge replacement (discussed below). This work included updated hydraulic analysis, geotechnical evaluation, and preliminary design for the bridge and road approaches.

The *Honeydew Bridge Replacement Project HPSR* (JRP 2013a) and its technical appendices, including the *Honeydew Bridge Replacement Project HRER* (JRP 2013b) were prepared to describe in detail the significance of the bridge. In 2013, JRP revisited the Honeydew Bridge and verified that the bridge still retained historic integrity and continued to meet the criteria for listing in the NRHP that were identified in 2003. The FAE study prepared in 2017 documents the impacts of each alternative on the qualities that make the bridge eligible for listing in the NRHP (JRP 2017). The bridge's unique architectural features meet the criteria set forth for project compliance under Section 4(f) Criterion C (architecture).

Chapter 4. Impacts on the Honeydew Bridge (Bridge Number 04C-0055)

This chapter describes how each alternative would affect the Honeydew Bridge, the subject Section 4(f) property. As a historic bridge, changes in noise levels, vegetation, wildlife, and air or water quality would not affect the Section 4(f) resource. Table 3 at the end of this section compares the impacts of each alternative on the Section 4(f) property.

All three build alternatives would follow the same existing roadway approach and bridge alignment. Common design features would be incorporated into each build alternative, differing only in construction timing. The alternatives would incorporate a few unique construction activities tied to the structure type; the new bridge's final freeboard clearance, which is also a function of structure type; and visual appearance and aesthetic.

4.1. No Build Alternative

Under the No-Build Alternative the existing Honeydew Bridge would not be modified, and no construction would occur. There would be no impacts on the identified attributes and features of the Section 4(f) property (historic bridge); therefore, the No Build alternative does not constitute a "use" under Section 4(f).

4.2. Alternative 1 - Camelback Truss Bridge

The impacts of Alternative 1 on cultural resources in the project area and vicinity would be similar to those described under Alternative 2 (Preferred Alternative).

4.3. Alternative 2 - Steel Girder Bridge (Preferred Alternative)

Alternative 2 would remove the historic bridge from this location entirely, thereby impairing the historic integrity of the bridge, which constitutes a demolition "use" of the historic bridge under the terms of the *Programmatic Section 4(f)*. Specifically, this alternative would affect the attributes and features identified under NRHP Criterion C (36 CFR 60.4(a)) where the bridge represents an excellent example of its type, period, and method of construction, and as a rare and significant bridge type (i.e., the Camelback Truss). If the historic bridge is not purchased and preserved in a new location, material design and workmanship attributes and features identified under Criterion C would be impaired. The FAE for the Honeydew Bridge Replacement Project (JRP 2017) further discusses the impacts in accordance with the Criterion of Adverse Effect in the regulations that govern compliance with Section 106 of the NHPA [36 CFR 800.5(a)(2)(iv) and (v)].

4.4. Alternative 3 - Concrete Girder Bridge

The impacts of Alternative 3 on cultural resources in the project area and vicinity would be similar to those described under Alternative 2 (Preferred Alternative).

4.5. Other Impacts

"Use" of the Section 4(f) property may result in other impacts related to the natural and/or human environment.

Table 3 compares other impacts of each alternative on the Section 4(f) property. Information presented in the table was derived from several sources:

- Visual Resources Impact Assessment for Honeydew Bridge (No. 4C-0055) Replacement Project (Stantec Consulting Services, Inc. [Stantec] 2019a)
- Draft Natural Environment Study for the Honeydew Bridge (No. 4C-0055) Replacement Project (Stantec 2019b)
- Historical Resources Evaluation Report for Honeydew Bridge Replacement Project (JRP 2013)
- Finding of Adverse Effect (JRP 2017)
- Memorandum of Agreement (Caltrans 2018)

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
No Build Alternative							
None	None	None	None	None	None	None	None
Alternative 1 - Camelback Truss Bridge							
<p>Bicyclists, pedestrians, and motorized vehicles would continue to have access to the bridge during the first year of the 2-year construction period. In the second year, a downstream detour would be available for motorized and non-motorized traffic over the Mattole River.</p> <p>Upon completion of the replacement bridge, bicycle, pedestrian, and vehicle access</p>	<p>During the first year of the 2-year construction cycle, the Section 4(f) bridge would remain open for motorized and non-motorized traffic conveyance across Mattole River. In the second year, a temporary detour would be constructed approximately 1,300 feet downstream and the Section 4(f) bridge would be closed and dismantled.</p>	<p>This applies to visual impacts other than those identified under the NHPA. Scenic resource impacts are determined by the viewer(s). In this case there is the view from Mattole Road and surrounding areas towards the existing bridge and the view from the bridge. Alternative 1 would replace the existing bridge with a structure having similar visual attributes, unlike Alternatives 2 and 3.</p>	N/A	<p>Some riparian vegetation removal would be necessary to accommodate the new bridge and its roadway approaches. The volume would be similar for all build alternatives.</p>	<p>Avoidance and minimization measures, and mitigation (when appropriate) would be used to avoid or minimize project impacts on fish and wildlife. Potential impacts would be similar for all build alternatives.</p>	N/A	N/A

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
<p>across the Mattole River would be provided by the new replacement bridge. The Section 4(f) bridge would be dismantled, and the MOA Treatment Plan would provide the opportunity for the bridge to be purchased, reconstructed, and preserved for use off-site.</p> <p>The replacement bridge proposed under Alternative 1 would have limited overhead clearance, which makes this alternative inconsistent with the project's stated purpose and need.</p>		<p>This would substantially change the current visual character by introducing new features that would be very different than those of the existing bridge.</p> <p>The view from the new bridge would be essentially the same as from the existing bridge because it would be within the existing alignment and the new structures would be of a style similar to that of the existing bridge.</p> <p>Alternative 1 would be the most consistent with the existing visual</p>					

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
		<p>resource and aesthetics.</p> <p>Construction activities would be temporary visual intrusions. Vegetation clearing around staging areas and around the temporary detour bridge would open up views of the Mattole River corridor, which would increase the potential for glare from construction equipment and floodplain gravel.</p> <p>Areas temporarily affected by project construction would be restored to pre-project conditions.</p>					

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
		Under Alternative 1, the degree of permanent impacts on visual resources and visual quality would be neutral.					
Alternative 2 - Steel Girder Bridge (Preferred Alternative)							
<p>Bicyclists, pedestrians, and motorized vehicles would continue to have access to the bridge during the first year of the 2-year construction period. In the second year, a downstream detour would be available for motorized and non-motorized traffic over the Mattole River.</p> <p>Upon completion of the replacement</p>	<p>During the first year of the 2-year construction cycle, the Section 4(f) bridge would remain open for motorized and non-motorized traffic conveyance across Mattole River. In the second year, a temporary detour would be constructed approximately 1,300 feet downstream and the Section 4(f) bridge would be closed and dismantled.</p>	<p>This applies to visual impacts other than those identified under the NHPA. Scenic resource impacts are determined by the viewer(s). In this case there is the view from Mattole Road and surrounding areas towards the existing bridge and the view from the bridge.</p> <p>Alternative 2 (Preferred Alternative) would</p>	N/A	<p>Some riparian vegetation removal would be necessary to accommodate the new bridge and its roadway approaches. The volume would be similar for all build alternatives.</p>	<p>Avoidance and minimization measures, and mitigation (when appropriate) would be used to avoid or minimize project impacts on fish and wildlife. Potential impacts would be similar for all build alternatives.</p>	N/A	N/A

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
<p>bridge, bicycle, pedestrian, and vehicle access across the Mattole River would be provided by the new replacement bridge. The Section 4(f) bridge would be dismantled, and the MOA Treatment Plan would provide the opportunity for the bridge to be purchased, reconstructed, and preserved for use off-site.</p>		<p>be a modern, low-profile concrete slab structure that would change the visual character of the community. However, a structure of this type would be less intrusive on the landscape (i.e., less memorable) and would allow for expanded views of the surrounding landscape as viewed both from the bridge and from areas near the bridge.</p> <p>Construction activities would be temporary visual intrusions. Vegetation clearing around staging areas and around the temporary detour bridge would open</p>					

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
		<p>up views of the Mattole River corridor, which would increase the potential for glare from construction equipment and floodplain gravel.</p> <p>Areas temporarily affected by project construction would be restored to pre-project conditions.</p> <p>Under Alternative 2, the degree of permanent impacts on visual resources and visual quality would be adverse, as they would be under Alternative 3.</p>					
Alternative 3 - Concrete Girder Bridge							
Bicyclists, pedestrians, and	During the first year of the 2-year	This applies to visual impacts other than	N/A	Some riparian vegetation	Avoidance and minimization	N/A	N/A

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
<p>motorized vehicles would continue to have access to the bridge during the first year of the 2-year construction period. In the second year, a downstream detour would be available for motorized and non-motorized traffic over the Mattole River.</p> <p>Upon completion of the replacement bridge, bicycle, pedestrian, and vehicle access across the Mattole River would be provided by the new replacement bridge. The Section 4(f) bridge would be dismantled, and the MOA Treatment</p>	<p>construction cycle, the Section 4(f) bridge would remain open for motorized and non-motorized traffic conveyance across Mattole River. In the second year, a temporary detour would be constructed approximately 1,300 feet downstream and the Section 4(f) bridge would be closed and dismantled.</p>	<p>those identified under the NHPA. Scenic resource impacts are determined by the viewer(s). In this case there is the view from Mattole Road and surrounding areas towards the existing bridge and the view from the bridge.</p> <p>Alternative 3 would be a modern, low-profile steel structure that would change the visual character of the community. As it would be under Alternative 2, this structure would be less intrusive on the landscape than the existing bridge or Alternative 1, and would allow for</p>		<p>removal would be necessary to accommodate the new bridge and its roadway approaches. The volume would be similar for all build alternatives.</p>	<p>measures, and mitigation (when appropriate) would be used to avoid or minimize project impacts on fish and wildlife. Potential impacts would be similar for all build alternatives.</p>		

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
<p>Plan would provide the opportunity for the bridge to be purchased, reconstructed, and preserved for use off-site.</p>		<p>expanded views of the surrounding landscape as viewed by various viewer groups (e.g., motorists, neighbors, recreationists).</p> <p>Construction activities would be temporary visual intrusions.</p> <p>Vegetation clearing around staging areas and around the temporary detour bridge would open up views of the Mattole River corridor, which would increase the potential for glare from construction equipment and floodplain gravel.</p> <p>Areas temporarily affected by project</p>					

Table 3. Impacts on Resources by Alternatives

Facilities, Functions, and/or Activities Potentially Affected (including Recreational Users)	Accessibility	Scenic Resources/Visual	Noise	Vegetation	Wildlife	Air Quality	Water Quality
		construction would be restored to pre-project conditions. Under Alternative 3, the degree of permanent impacts on visual resources and visual quality would be adverse, as they would be under Alternative 2.					

Chapter 5. Applicability of Programmatic Section 4(f)

Caltrans, as assigned by the FHWA pursuant to 23 USC 326, has determined that the proposed project meets the criterion of adverse effect under 36 CFR 800.5(a)(2)(i) of the 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California*, as follows:

Physical destruction of or damage to all or part of the property.

The Honeydew Bridge Replacement Project calls for the demolition of the Honeydew Bridge, which will result in a *direct adverse effect* on the bridge. The project will not cause an indirect or cumulative adverse effect on the historic property.

1. *The bridge is to be replaced or rehabilitated with Federal funds.*

The FHWA Highway Bridge Replacement and Rehabilitation Program will fund 88.53% of all project phases (i.e., project engineering, and right of way and construction costs) and local matching funds will provide the remaining balance.

2. *The project will require the use of a historic bridge structure which is on or is eligible for listing on the NRHP.*

The Honeydew Bridge (Bridge Number 04C-0055) was determined eligible for inclusion on the NRHP in 2003. Each of the build alternatives requires a Section 4(f) “use” of the Honeydew Bridge because the proposed project will impair the historic integrity of the bridge through demolition. The only avoidance alternative is the No-Build Alternative.

3. *The bridge is not a National Historic Landmark.*

This statement is true of the affected Section 4(f) property (Bridge Number 04C-0055).

4. *The FHWA Division Administrator determines that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation.*

Caltrans, under its assumption of responsibility pursuant to 23 USC 326, has determined that the facts of the project match those set forth in this Section 4(f) document.

5. *Agreement among the FHWA, the SHPO, and the Advisory Council on Historic Preservation (ACHP) has been reached through procedures pursuant to Section 106 of the NHPA.*

Caltrans and SHPO reached agreement through execution of a MOA to address project impacts, which is provided as Appendix C of this document. In accordance with 36 CFR 800.6(a)(1), Caltrans notified the ACHP of the adverse effect. The proposed

project does not meet any of the conditions cited in 36 CFR 800.6(a)(1)(i); therefore, the ACHP did not participate in the consultation.

5.1. Definition of Use under Historic Bridge Programmatic Section 4(f)

The *Programmatic Section 4(f)* defines “use” as follows:

Historic bridges covered by this *Programmatic Section 4(f)* evaluation are unique because they are historic, yet also part of either a Federal-aid highway system or a state or local highway system that has continued to evolve over the years. Even though these structures are on or eligible for inclusion on the NRHP, they must perform as an integral part of a modern transportation system. When they do not or cannot, they must be rehabilitated or replaced in order to assure public safety while maintaining system continuity and integrity. For the purpose of this *Programmatic Section 4(f)* evaluation, a proposed action will "use" a bridge that is on or eligible for inclusion on the NRHP when the action will impair the historic integrity of the bridge either by rehabilitation or demolition. Rehabilitation that does not impair the historic integrity of the bridge as determined by procedures implementing the NHPA is not subject to Section 4(f) (FHWA 1983).

Chapter 6. Avoidance Alternatives

As required under the terms of the *Programmatic Section 4(f)* for historic bridges, the purpose of this chapter is to examine alternatives that would avoid the “use” of a Section 4(f) resource, and to determine whether such avoidance alternatives are prudent and feasible.

6.1. Feasible and Prudent Standard

Under Section 4(f), an alternative that completely avoids the use of Section 4(f) property must be selected unless it would not be “feasible and prudent” to construct it [49 USC 303(c)]. According to 23 CFR 774.17, an alternative is not considered feasible if “it cannot be built as a matter of sound engineering judgment.”

An alternative is not considered prudent if any of the following are true:

1. It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need.
2. It results in unacceptable safety or operation problems.
3. After reasonable mitigation, it still causes one or more of the following:
 - a. Severe social, economic, or environmental impacts
 - b. Severe disruption to established communities;
 - c. Severe disproportionate impacts on minority or low-income populations
 - d. Severe impacts on environmental resources protected under other Federal statutes
4. It results in additional construction, maintenance, or operational costs of an extraordinary magnitude.
5. It causes other unique problems or unusual factors.
6. It involves multiple factors (in this definition) that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

6.2. Programmatic Section 4(f) Avoidance Alternatives

The *Programmatic Section 4(f)* for historic bridges dictates that the following avoidance alternatives must be considered:

1. Do nothing (no-build).
2. Build a new structure at a different location without affecting the historic integrity of the old bridge, as determined by procedures implementing the NHPA.

3. Rehabilitate the historic bridge without affecting the historic integrity of the structure, as determined by procedures implementing the NHPA.

6.2.1. AVOIDANCE ALTERNATIVE 1 - DO NOTHING

Avoidance Alternative 1 is equivalent to the No-Build Alternative. Although it is feasible and would avoid using the Section 4(f) resource, Avoidance Alternative 1 does not pass the test for prudence because it does not meet the stated purpose and need of the proposed project.

6.2.2. AVOIDANCE ALTERNATIVE 2 - BUILDING ON A NEW ALIGNMENT WITHOUT AFFECTING THE HISTORIC INTEGRITY OF THE OLD BRIDGE

Any new structure that would remove the existing bridge would compromise, under Criterion C, the historic architectural features that make the bridge unique. However, if the historic bridge could be dismantled and preserved offsite to the point that there would be no adverse effect under NHRP Criterion C, then a Section 4(f) use could be avoided.

A new bridge on a new alignment was first proposed in 1972. Several potential bridge alignments were analyzed for locations 1,800 feet or less downstream from the existing bridge. One new bridge location was eliminated because it traversed two flat properties on each side of the river. Alignments were analyzed that followed steeper terrain and affected less flat land. Such alternatives were eliminated because they would have contained substandard grades or alignments and would have far higher construction costs due to the need for significant road realignment work. In addition, a new bridge alignment would have required substantial amounts of fill to be placed within the floodplain, which would likely increase flood damage risks. Other potential new bridge locations were eliminated because they would require a sharp skew angle to the river or be on an 850-foot-radius curve. Additional reasons for eliminating consideration of a new alignment included the potential need for an excessively high structure, major modifications to Burrel Road, and impacts on three homes. A new bridge location would have also had more significant environmental impacts for which mitigation may not have been feasible, and right of way south of the river was not secured. For these reasons a new bridge location was not considered for future analysis.

Proposed alternatives would need to address potential flood events and not increase backwater surface elevations. Additionally, bridge structures must meet requirements of 23 CFR 650.115 and 650.117 for bridges, structures, and hydraulics. Exceptions to these standards may only be approved if they are found to be impractical or unreasonably costly for the proposed project and if they do not result in an increased risk of damage during floods.

6.2.3. AVOIDANCE ALTERNATIVE 3 - REHABILITATION WITHOUT AFFECTING THE HISTORIC INTEGRITY OF THE BRIDGE

Avoidance Alternative 3 would not be practicable given the historic bridge's structural inadequacies. The modifications that would be needed to rehabilitate the bridge and make it consistent with modern geometric, structural, and seismic standards would require significant changes to the its historic features. The existing bridge is near the end of its service life and is considered structurally deficient. It does not comply with modern

geometric and seismic standards and consists of only one travel lane, lacks a standard shoulder width, and does not provide safe passage for pedestrians and bicyclists.

Subsequent Caltrans structure maintenance investigations performed in 2014 confirmed the previously identified structural deficiencies and an additional determination of “functionally obsolete” due to factors including height, weight, and width limitations. The bridge has a low clearance height of 14 feet, which limits access to critically needed fire vehicles and heavy equipment, including equipment that is needed to repair and reopen rural roads in the region damaged during the winter or following unseasonable severe storms and disasters. The low vertical clearance has also led to a series of incidents in which large vehicles hit and damaged the truss structure. The existing bridge’s overall fitness rating is 13.3 (based on a scale of 1 to 100, with 1 being the least fit. Rehabilitation of the existing bridge to meet modern geometric and seismic standards would be both technically infeasible and cost prohibitive.

This alternative would not be a prudent avoidance alternative because after reasonable mitigation, such as HAER recordation of the bridge, the project would result in an adverse effect on the attributes and features of Section 4(f) resource representing a severe environmental impact.

6.3. Summary

Based on the above discussion, the avoidance alternatives 1) do nothing (no-build); 2) build a new structure on a different alignment without affecting the historic integrity of the old bridge, as determined by procedures implementing the NHPA, and 3) rehabilitate the historic bridge without affecting the historic integrity of the structure, as determined by procedures implementing the NHPA, are impracticable and would not meet the proposed project’s stated purpose and need.

Chapter 7. Measures to Minimize Harm to the Honeydew Bridge

This Section 4(f) evaluation and approval may be used for projects only if Caltrans ensures that the proposed action includes all possible planning to minimize harm, which has been done when all of the following have occurred:

1. For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved, to the greatest extent possible, consistent with an unavoidable transportation needs, safety, and load requirements.
2. For bridges that are being rehabilitated, the point that the historic integrity is affected or that are to be moved or demolished, Caltrans ensures that in accordance with the HAER standards, or other suitable means developed through consultation, fully adequate records are made of the bridge.
3. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge.
4. For bridges that are adversely affected, agreement among the SHPO, ACHP, and Caltrans is reached through the Section 106 process of the NHPA on measures to minimize harm and those measures are incorporated into the project.

Caltrans consulted with SHPO, the official with jurisdiction over the historic bridge, in accordance with the terms of Section 106 of the NHPA. In December 2018, Caltrans and SHPO executed an MOA, which stipulates that if Caltrans proceeds with the bridge replacement project, Caltrans must ensure that the recordation treatment for the historic bridge is executed. Consultation with SHPO and the below proposed resolution of adverse effects satisfies the requirements for demonstrating that all possible planning to minimize harm to the Section 4(f) resource has occurred. Section 8 provides additional detail regarding coordination with SHPO.

Before the start of any work that could adversely affect any characteristics that qualify the Honeydew Bridge as a historic property, Caltrans must ensure that the following recordation measures are completed by Humboldt County:

1. Photography and Construction Drawings
 - a. The County shall take large format (4-inch by 5-inch or larger negative size) photographs showing the Honeydew Bridge in context as well as details of the historic engineering features. Photographs shall be processed for archival permanence in accordance with the HAER photographic specifications. Views of the Honeydew Bridge shall include all of the following:
 - i. Contextual views showing the Honeydew Bridge in its setting
 - ii. Elevation views
 - iii. Views of the Honeydew Bridge pier and abutments

- iv. Detail views of the significant engineering and design elements
 - b. The County shall make a reasonable and good faith effort to locate historic construction drawings of Honeydew Bridge. If these drawings are located, the County shall photographically reproduce plans, elevations, and selected details from these drawings in accordance with HAER photographic specifications.
 - c. The County shall ensure that a written historical and descriptive report for the Honeydew Bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and significance under NRHP criteria, and address the historical context for its construction, following the format and instructions in the Heritage Documentation Programs *HAER Guidelines* (National Park Service 2017).
 - d. Upon completion, archival copies of the documentation as prescribed above shall be retained by Caltrans District 1 and the County, distributed to the Caltrans Transportation Historic Library in Sacramento, the California Office of Historic Preservation, the Fortuna Branch of the Humboldt County Library, the Humboldt County Historical Society in Eureka, and the Special Collections Unit - Humboldt Room of the Humboldt State University Library, Arcata.
2. The County will install a commemorative plaque into a rock pedestal or boulder, and interpretive history kiosk near the southwest corner of the bridge alignment (just east of the Honeydew Country Store and Post Office. This interpretive site will provide a brief history of the original bridge, its engineering features, and significance. The SHPO and Caltrans shall have 30 days to review and comment on the design and text of the new plaque before it is produced and installed.
3. The County shall offer Honeydew Bridge for sale for reuse in an alternate location to interested public agencies and non-profits. A marketing plan shall be prepared for the sale of the bridge, including a notification letter, fact sheet, and list of intended recipients. Advertisements shall be placed in appropriate newspapers of record. The offer shall run for 6 months.

Chapter 8. Coordination for the Section 4(f) Property

8.1. State Historic Preservation Officer/Advisory Council on Historic Preservation

Caltrans has consulted with the California SHPO in accordance with regulations required under the implementation of Section 106 of the NHPA specific to the effect of the project on historic properties.

Caltrans submitted the HPSR, including the HRER, for the Honeydew Bridge Replacement Project to SHPO in December 2013 in order to request concurrence on eligibility determinations of cultural resources evaluated for the proposed project. In addition to the bridge, which was identified in 2003 as being eligible for NRHP listing, these reports also included an assessment of a private property, the Honeydew Store and residence at 44670 Mattole Road. The HRER determined that this property does not appear to meet the criteria for NRHP listing pursuant to Stipulation VIII.C of the Section 106 PA. The State Historic Preservation Officer concurred with this determination in a letter sent to Caltrans on January 23, 2014 (FHWA_2013_1220_002).

Caltrans submitted the FAE and a draft Memorandum of Agreement to SHPO in August 2017. In accordance with 36 CFR 800.6(a)(1), Caltrans notified the ACHP of the adverse effect. The proposed project does not meet any of the conditions cited in 36 CFR 800.6(a)(1)(i); therefore, the ACHP did not participate in the consultation.

On November 16, 2017 SHPO sent a letter concurring with Caltrans' finding of adverse effect for the bridge (FHWA-2013-1220-002). Caltrans, as assigned by FHWA, applied the Criteria of Adverse Effect, pursuant to 36 CFR 800.5 and the Section 106 PA Stipulation X.C., and determined that the undertaking would have an adverse effect on Bridge Number 04C-0055, regardless of which of the three build alternatives is selected. Enclosed with this response letter was the fully executed MOA between Caltrans District 1, the County, and SHPO, with the Mattole Valley Historical Society as a concurring signatory (Appendix C). The MOA stipulates the actions to be taken to minimize and mitigate for adverse effects of the bridge replacement project. The MOA will be subject to approval by ACHP prior to the start of any activities that would affect the historic bridge. Caltrans will be responsible for submitting the MOA to the ACHP and executing its terms in accordance with Section 106 of the NHPA and the ACHP's regulations.

8.2. Letters and Other Correspondence

Appendix B includes a chronology of events related to general project meetings and Section 106 coordination during the years 2013 through 2017. Also included in Appendix B are copies of consultation letters received from SHPO in 2013 and 2017.

8.2.1. LOCAL HISTORICAL SOCIETY

On May 24, 2013 JRP sent letters to the Humboldt County Historical Society, Clarke Historical Museum, Mattole Valley Historical Society, and the Eureka Heritage Society. JRP received no responses. JRP did not receive any responses from these letters. JRP did receive a response to a January 28, 2013 letter to interested parties regarding a preventative maintenance project for the Honeydew Bridge from Laura Walker Cooskey of

the Mattole Valley Historical Society. Ms. Cooskey contacted JRP via email on February 5, 2013 noting support for preservation of the Honeydew Bridge and asking about the bridge's potential replacement. This led to an exchange of emails during February 7 to February 8, 2013 between Ms. Cooskey and Mr. McMorris that included clarification that the project is for preventative maintenance with replacement of deteriorated components of the structure's timber deck and railings. These communications were provided to Humboldt County Public Works Department.

8.2.2. NATIVE AMERICAN TRIBES, GROUPS, AND INDIVIDUALS

On June 18, 2013 Mr. James Roscoe (JRP) sent a letter to the Native American Heritage Commission (NAHC) requesting a search of the Sacred Lands Inventory File and a current list of local Native American groups and individuals who may have interest or concerns with the project. The reply from the NAHC on June 18, 2013 reported that there were no Native American cultural resources listed for the immediate project area. It also included a list of Native American contacts for the project area. Mr. Roscoe sent letters to these contacts—Bear River Band of the Rohnerville Rancheria and the InterTribal Sinkyone Wilderness Council—on June 27, 2013 requesting information and help identifying and protecting cultural resources. The InterTribal Sinkyone Wilderness Council did not respond to written letter or email. Follow-up phone calls were also made. Erika Collins, the Tribal Historic Preservation Officer for the Bear River Band of the Rohnerville Rancheria requested to accompany the field crew to the project area.

8.2.3. OTHER MEMBERS OF THE PUBLIC

Humboldt County Department of Public Works held a public meeting regarding the Honeydew Bridge project on January 23, 2013 at the Honeydew Elementary School. The meeting was conducted by Chris Whitworth, Deputy Director, Humboldt County Department of Public Works and attended by about 20 people. In response to the meeting, the County received one correspondence from Scott and Tina Davies of Honeydew who expressed their preference for design Alternative 1, the steel truss bridge, because it is similar in appearance to the current bridge and for its “earthquake and flood stability.”

Also, in response to the meeting, the County received four telephone calls in January 2013. Mr. Dennis Smith of Honeydew endorsed construction of a new bridge and did not express preference for any particular design or alternative. Mr. Pete Marshal and Ms. Lois Juodika, both of Honeydew, expressed concerns that the bridge crossing would be relocated, but were mollified once informed the new bridge would be built in the same location as the old bridge. Ms. Juodika also voiced concern that the new two-lane bridge would encourage speeding. Ms. Jessica Wygal expressed concern about an old oak tree at the bridge abutment.

A Notice of Preparation (NOP) of an Environmental Impact Report/Environmental Assessment (EIR/EA) and Public Scoping Meeting for the Humboldt County Public Works Department Honeydew Bridge Replacement Project, Humboldt County, California was sent by the County to the State Clearinghouse, responsible and trustee agencies, and interested parties and organizations on February 10, 2017 to inform these parties of the proposed project and to solicit comments on the scope and content of the environmental information to be included in the CEQA/NEPA joint EIR/EA. The NOP included notification of the 30-day

public comment period (February 15–March 15, 2017) and information about an upcoming public scoping meeting.

On March 1, 2017 the County hosted a public scoping workshop to solicit public comments on the proposed project for consideration in the environmental review process. The workshop was held at the Mattole Grange hall in Petrolia and was attended by five members of the public from the Honeydew and Petrolia areas. County and Caltrans staff, as well as Morrison Structures Inc. (the project engineer) and Stantec were available to discuss the project. Comments received included concern by CalFire about emergency vehicle access during construction; public concerns for potential impacts on biological resources (i.e., bats, birds, fish, and other aquatic species); and a selection of bridge alternatives, which favored Alternative 1 because of its similarity to the historic bridge structure. Other comments supported preservation and rehabilitation of the existing bridge, and safety. Ms. Laura Cooksey, an area resident and Mattole Valley Historical Society member, was among the attendees at the scoping workshop. She shared historic photographs and historical insights of the Honeydew community and the historic bridge, and advocated memorializing the bridge.

Copies of the public participation correspondence, the 2013 public meeting documentation, and public comment letters received during the period 2013–2017 are provided in Attachment B of the FAE (see Appendix B). In addition, a table summarizing comment correspondence and public comment emails specific to the NOP and the 2017 public scoping workshop are provided as Appendix E.

Chapter 9. Least Harm Analysis

When the avoidance alternatives evaluation demonstrates there is no feasible and prudent avoidance alternatives, then a least harm analysis (Table 4) is completed that compares each build alternative in relation to the following required Section 4(f) factors:

1. Ability to mitigate adverse impacts on each Section 4(f) resource
2. Relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features
3. Relative significance of each Section 4(f) resource
4. Views of the officials with jurisdiction over each Section 4(f) property
5. Degree to which each alternative meets the purpose and need
6. After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)
7. Substantial differences in costs between alternatives

Table 4. Least Harm Analysis for the Honeydew Bridge Replacement Project

Compare alternatives relative to the following factors:	New Camelback Bridge; Remove Existing Bridge Alternative 1	New Steel Girder Bridge; Retain Existing Bridge Alternative 2 (Preferred Alternative)	New Concrete Girder Bridge; Retain Existing Bridge Alternative 3
1. Ability to mitigate adverse impacts on Section 4(f) resource	Mitigation would be the same as under Alternative 2.	Mitigation of the impacts on the Section 4(f) bridge would be implemented per the MOA including HAER-level recordation of the bridge, installation of a commemorative plaque to document historical importance, and a marketing plan to sell the bridge for purposes of restoration and preservation.	Mitigation would be the same as under Alternative 2.
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features	The project impacts would be severe because the existing bridge would be dismantled and replaced in its entirety.	The project impacts would be severe because the existing bridge would be dismantled and replaced in its entirety.	Project impacts would be the same as described under Alternative 2.

Table 4. Least Harm Analysis for the Honeydew Bridge Replacement Project

Compare alternatives relative to the following factors:	New Camelback Bridge; Remove Existing Bridge Alternative 1	New Steel Girder Bridge; Retain Existing Bridge Alternative 2 (Preferred Alternative)	New Concrete Girder Bridge; Retain Existing Bridge Alternative 3
	<p>This is the only alternative that would replicate the appearance of the existing historic bridge; however, this alternative would not meet the project's purpose and need due to limitations placed on vehicle heights.</p> <p>Historic connectivity would be retained.</p>	<p>Historic connectivity would be retained.</p>	
<p>3. Relative significance of each Section 4(f) resource;</p>	<p>The same Section 4(f) resource would be affected.</p>	<p>The same Section 4(f) resource would be affected.</p>	<p>The same Section 4(f) resource would be affected.</p>
<p>4. Views of the officials with jurisdiction over each Section 4(f) property</p>	<p>SHPO concurred with the 2019 FAE. An MOA was signed by Caltrans, SHPO, the County, and the Mattole Valley Historical Society.</p>	<p>SHPO concurred with the 2019 FAE. An MOA was signed by Caltrans, SHPO, the County, and the Mattole Valley Historical Society.</p>	<p>SHPO concurred with the 2019 FAE. An MOA was signed by Caltrans, SHPO, the County, and the Mattole Valley Historical Society.</p>
<p>5. Degree to which each alternative meets the purpose and need</p>	<p>The replacement bridge would have limited overhead clearance. This alternative would not meet the project's purpose and need.</p>	<p>This alternative would meet the project's purpose and need.</p>	<p>This alternative would meet the project's purpose and need.</p>
<p>6. After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f)</p>	<p>Project impacts would be the same as described under Alternative 2.</p>	<p>Permanent impacts would be in the existing bridge and roadway approach alignments, with the exception of the commemorative monument, which would require the take of right of way on a small part of private land adjacent to the southwest corner of the bridge. All temporary</p>	<p>Project impacts would be the same as described under Alternative 2.</p>

Table 4. Least Harm Analysis for the Honeydew Bridge Replacement Project

Compare alternatives relative to the following factors:	New Camelback Bridge; Remove Existing Bridge Alternative 1	New Steel Girder Bridge; Retain Existing Bridge Alternative 2 (Preferred Alternative)	New Concrete Girder Bridge; Retain Existing Bridge Alternative 3
		impacts would be restored to pre-project conditions.	
Other NHPA Eligible resources	N/A	N/A	N/A
Floodplain/Hydraulics	Project impacts would be the same as described under Alternative 2.	<p>The new bridge would be designed to pass a 100-year flood (Q100) and without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes. In addition, AASHTO requires at least 3 feet of freeboard (clearance) above the 50-year flood or flood of record.</p> <p>Because the replacement bridge would be in the existing alignment, no permanent modification of the floodplain would be necessary.</p> <p>Temporary impacts on the floodplain due to the detour and construction would be restored to pre-project conditions.</p>	Project impacts would be the same as described under Alternative 2.
Load-bearing capacity (weight of vehicle), geometrics (including lane & shoulder width), seismic events	Project impacts would be the same as described under Alternative 2, with the exception of limited overhead clearance on the replacement bridge proposed under Alternative 1.	The new bridge would meet geometric, load-bearing capacity, and seismic standards for all vehicle use (motorized & non-motorized).	Project impacts would be the same as described under Alternative 2.

Table 4. Least Harm Analysis for the Honeydew Bridge Replacement Project

Compare alternatives relative to the following factors:	New Camelback Bridge; Remove Existing Bridge Alternative 1	New Steel Girder Bridge; Retain Existing Bridge Alternative 2 (Preferred Alternative)	New Concrete Girder Bridge; Retain Existing Bridge Alternative 3
Facilities/Functions and/or Activities & Accessibility	Project impacts would be the same as described under Alternative 2.	<p>Bicycle, pedestrian, and motorized vehicle access on existing bridge during the first year of construction would continue. A temporary, downstream detour would be used to convey motorized and non-motorized traffic across the Mattole River during the second year of construction. Upon project completion, the new bridge would be available to all forms of traffic.</p> <p>The new bridge would have adequate land and shoulder widths to safely accommodate non-motorized and motorized vehicles.</p>	Project effects would be the same as described under Alternative 2.
Scenic Resources/Visual	<p>Alternative 1 would be the most consistent with the existing visual resource and aesthetics, but its overhead clearance limitations would make it not practicable for the purposes of the proposed project.</p> <p>Under Alternative 1, the degree of permanent impacts on visual resources and visual quality would be neutral.</p> <p>Areas temporarily affected by project construction would be</p>	<p>Alternative 2 would substantially change the current visual character by introducing new features that would be very different than those of the existing bridge. However, the lower-profile bridge structure would increase the visibility of the surrounding landscape both from the bridge and from the vicinity where the bridge would be in view.</p> <p>Areas temporarily affected by project construction would be</p>	Project impacts would be the same as described under Alternative 2.

Table 4. Least Harm Analysis for the Honeydew Bridge Replacement Project

Compare alternatives relative to the following factors:	New Camelback Bridge; Remove Existing Bridge Alternative 1	New Steel Girder Bridge; Retain Existing Bridge Alternative 2 (Preferred Alternative)	New Concrete Girder Bridge; Retain Existing Bridge Alternative 3
	restored to pre-project conditions.	restored to pre-project conditions.	
Substantial differences in costs between alternatives.	Cost estimate is \$5,700,000 (in 2015 dollars), which is 2% greater than Alternative 2 and 21% more than that for the least-costly build alternative (Alternative 3).	Cost estimate is \$5,600,000 (in 2015 dollars), which is 2% less than Alternative 1 and 20% more than that for the least-costly build alternative (Alternative 3).	Cost estimate is \$4,500,000 (in 2015 dollars), which is 21% less than Alternative 1 and 20% less than Alternative 2. This is the lowest-cost build alternative, but would require more time to construct.

9.1. Concluding Statement

There are no avoidance alternatives. Build alternatives 2 and 3 would meet the defined purpose and need to provide a safe, efficient, and cost-effective route. Alternative 1 would improve public safety, but the limited overhead clearance of the overhead trusses would continue to limit passage of some large vehicles; therefore, it would not meet the project’s purpose and need, which includes meeting modern highway design standards and accommodating local and regional transportation needs. Specifically, the need to replace the Section 4(f) historic Honeydew Bridge was determined after review of the following considerations:

- The bridge is of regional importance to the movement of motorized and non-motorized traffic in the region.
- There is a need for a structure capable of conveying emergency response equipment over the Mattole River, including sizable vehicles and equipment trailers.
- The existing bridge’s structural deficiencies jeopardize public safety.

In addition, the FHWA Highway Bridge Program mandatory design criteria for a rehabilitated or replaced bridge requires the following:

- The crossing provides adequate hydraulic capacity to pass a 50-year flood event with 3 feet of freeboard [3 feet of clearance between lowest point of the underside of the bridge (soffit) and water surface] and a 100-year flood event with no freeboard.

- It does not increase potential flood risk to upstream infrastructures (i.e., SR96 or homes/businesses).
- It meets geometric (such as lane and shoulder width), load-bearing (vehicle weight), and seismic standards for a local, rural road and bridge (i.e., eliminates load restrictions and increases the roadway width to two 11-foot lanes and two 2-foot shoulders and withstands most earthquakes).
- It considers additional design constraints associated with the steep, rocky canyon; river hydraulics; and the location and profile of SR96 in the project vicinity.

After including all possible planning to minimize harm to the Section 4(f) resource (Bridge Number 04C-0055) as described in Section 7 and completing a least harm analysis of all build options that would meet purpose and need, this evaluation concludes that Alternative 2 would best meet the purpose and need with the least environmental impacts. The reasons for selecting Alternative 2 as the preferred build alternative include the following:

- Use of the same mitigation to offset adverse effects on the Section 106 property/Section 4(f) resources as all the build alternatives
- The same area of direct impact as the other two proposed build alternatives
- Minimal disturbance in the floodplain and adjacent channel banks
- The need for minimal alteration of Mattole Road
- The fewest design modifications for correcting hydraulic capacity deficiencies
- Changes to scenic resources and aesthetics would be noticeable to those viewers familiar with the visual character of the historic bridge, but the new, lower-profile structure would increase the visibility of the surrounding natural landscape.
- The project design includes construction of a commemorative monument and plaque that would describe the history of the Section 4(f) bridge.
- The same amount of impacts on facilities, functions, or activities of the bridge during construction and the most impacts (removal of historic bridge as a transportation facility) as all alternatives after construction is completed
- The same amount of impacts on accessibility during construction
- Lesser cost than Alternative 3 (by about 20%) (Note: Although Alternative 1 would be the cheapest to construct, it would not fully meet the project's purpose and need.)
- Approximately 4 weeks less construction time than Alternative 3

Chapter 10. Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because 1) they are not publicly owned; 2) they are not open to the public; 3) they are not eligible historic properties; 4) the project would not permanently use the property and would not hinder the preservation of the property; or 5) the proximity impacts would not result in constructive use.

10.1. Honeydew Country Store and Residence

One additional property at 44670 Mattole Road (APN 107-102-013), known as the Honeydew Country Store, was evaluated for potential NRHP eligibility as a part of the project evaluation of historical resources (JRP 2013). This property does not meet the criteria for listing in the NRHP. These conclusions are pursuant with Stipulation VIII.C of the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

On January 23, 2014 SHPO sent a letter to Caltrans District 1 concurring with its determination that this property is not eligible for listing in the NRHP (Appendix B).

Chapter 11. References

- American Association of State Highway and Transportation Officials. 2017. *AASHTO Load and Resistance Factor Design Bridge Design Specifications 8th Edition*.
- Bundschuh, A. 2017. Email from A. Bundschuh, Environmental Permitting and Compliance Manager, Humboldt County Public Works to Bob Morrison, Project Engineer, Morrison Structures, Inc. August 23, 2017.
- California Department of Transportation (Caltrans). 2010. *Seismic Design Criteria Version 1.6*. Available at http://www.dot.ca.gov/hq/esc/earthquake_engineering/sdc/documents/2010-11-17_SDC_1.6_Full_Version_OEE_Release.pdf (accessed March 27, 2019).
- _____. 2019. *Caltrans Local Assistance Procedures Manual*. Available at <http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm> (accessed March 27, 2019).
- Federal Highway Administration (FHWA). 1983. *Department of Transportation, Federal Highway Administration, Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*. FHWA, Office of Environmental Policy. July 1983.
- JRP Historical Consulting (JRP). 2013a. *Historic Property Survey Report for Honeydew Bridge - Mattole Road over Mattole River, Humboldt County*. On file, Caltrans, District 1, Eureka, California. December 2013.
- _____. 2013b. *Historical Resources Evaluation Report. Honeydew Bridge Replacement Project, Humboldt County*. On file, Caltrans, District 1, Eureka, California. October 2013.
- _____. 2017. *Finding of Adverse Effect for the Honeydew Bridge Replacement Project, Honeydew Bridge on Mattole Road over Mattole River*. On file, Caltrans, District 1, Eureka, California. August 2017.
- National Park Service. 2017. HAER guidelines. Available at <https://www.nps.gov/hdp/standards/haerguidelines.htm> (accessed March 7, 2019).
- Stantec Consulting Services Inc. (Stantec). 2019a. *Visual Resources Impact Assessment for Honeydew Bridge (No. 4C-0055) Replacement Project*. Prepared for Humboldt County Public Works Department by Stantec Consulting Services Inc. Redding, California.
- _____. 2019b. *Draft Natural Environment Study for the Honeydew Bridge (No. 4C-0055) Replacement Project*. Prepared for Humboldt County Public Works Department by Stantec Consulting Services Inc. Redding, California.

Appendix A Historic Property Survey
Report/Historic Resources
Evaluation Report
(December 2013)

**Confidential -
Not Available to the Public**

Appendix B State Historic Preservation Officer
Concurrence Letters (2013, 2017)
and Finding of Adverse Effect
Including Attachments
(August 2017)



**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

November 16, 2017

VIA EMAIL

In reply refer to: FHWA_2013_1220_002

Ms. Alexandra Bevk Neeb, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Finding of Adverse Effect for the Proposed Honeydew Bridge Replacement
Project, Humboldt County, CA

Dear Ms. Bevk Neeb:

Caltrans is continuing consultation about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Humboldt County proposes to replace the Honeydew Bridge (04C0055). The bridge passes over the Mattole River, is structurally deficient, and lacks sufficient load carrying capacity for load bearing and emergency vehicles.

Identification efforts for the project found that there is one historic property, the Honeydew Bridge (04C0055) which was previously determined eligible for the National Register of Historic Places in 2003 as a part of the Caltrans Historic Bridge Survey. The bridge is eligible under Criterion C at the state level of significance as a rare example of a Camelback truss bridge. At this time, only three Camelback type bridges remain in California.

Pursuant to Stipulation X.A. of the PA, Caltrans applied the criteria of adverse effect set forth at 36 CFR 800.5(a)(1) and finds that the undertaking will a direct adverse effect on the Honeydew Bridge.

Based on my review of the submitted documentation, I have no objection to this finding.

Ms. Bevk Neeb
November 16, 2017
Page 2

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julianne Polanco', with a stylized flourish at the end.

Julianne Polanco
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

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January 23, 2014

Reply To: FHWA_2013_1220_002

Brandon Larsen
Senior, Local Assistance Branch
Caltrans District 1
PO Box 3700
Eureka, CA 95502-3700

Re: Determination of Eligibility for the Proposed Honeydew Bridge Replacement Project
(Bridge #04C0055), Humboldt County, CA

Dear Mr. Larsen:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

Caltrans has determined that 44670 Mattole Road is not eligible for the National Register of Historic Places (NRHP). Based on review of the submitted documentation, I concur with the foregoing determination.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or email at natalie.lindquist@parks.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Carol Roland-Nawi, Ph.D.".

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

FINDING OF ADVERSE EFFECT

for the

Honeydew Bridge Replacement Project, Honeydew Bridge on Mattole Road over Mattole River Bridge No. 04C0055, Humboldt County, California

Federal Aid Project No. STPLZ-5904 (024)
Caltrans District 1

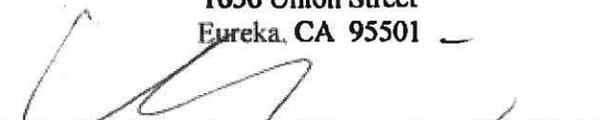
Prepared for:

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and

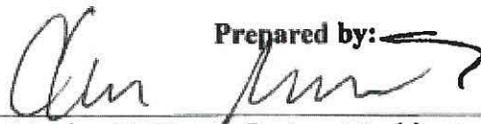


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August 2017

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ATTACHMENTS

- Attachment A: Figures
- Attachment B: Correspondence

1. INTRODUCTION

The County of Humboldt (County), in coordination with the California Department of Transportation (Caltrans), is proposing to replace the single-lane Honeydew Bridge on Mattole Road over Mattole River (Bridge No. 04C0055) with a two-lane structure. The project is located in rural Humboldt County in the community of Honeydew, as shown in the Project Vicinity and Project Location maps (**Figure 1** and **Figure 2**). The County and Caltrans District 1 established the Area of Potential Effects (APE) for the Honeydew Bridge Replacement Project. The APE map (**Figure 3**), along with Figures 1 and 2, are in Attachment A.

The purpose of this Finding of Adverse Effect (FAE) is to assist with project compliance under Section 106 of the National Historic Preservation Act (NHPA) by applying the Criteria of Adverse Effect to historic properties in the APE, as set forth in Title 36 Code of Federal Regulations (CFR) Part 800.5. This FAE has been prepared under the 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA). There is one historic property, i.e. a resource listed in or determined eligible for listing in the National Register of Historic Places (NRHP), located within the project APE. The historic property is the Honeydew Bridge (Bridge No. 04C0055). The bridge was previously identified as eligible for the NRHP by Caltrans in 2003. JRP field checked the status of the Honeydew Bridge and confirmed that the bridge retains historic integrity. Thus, the Honeydew Bridge continues to be eligible for listing in the NRHP.

Project Section 106 compliance activities to date include preparation and processing in 2013 of a Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER), and Archaeological Survey Report (ASR), along with efforts to involve the public in the Section 106 process. JRP Historical Consulting, LLC (JRP) prepared the HPSR and HRER. Archaeologist Jamie Roscoe conducted a records search at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park and conducted the Native American consultation as part of the ASR. The ASR concluded there are no archaeological resources that are listed in or eligible for listing in the NRHP within the APE. JRP and the County made efforts to contact, inform, and involve local interested parties regarding this project. Attachment B includes correspondence and records of communications from interested parties and Native Americans.

This FAE concludes that the Honeydew Bridge Replacement Project will have a direct adverse effect on the historic Honeydew Bridge (Bridge No. 04C0055). No Historic Properties Affected finding is applicable for other resources in the APE. Thus, Caltrans has determined that the undertaking as a whole will have an Adverse Effect on historic properties pursuant to the Section 106 PA Stipulation X.C. and is consulting the State Historic Preservation Officer (SHPO) regarding this finding, pursuant to the Section 106 PA Stipulation XI, 36 CFR 800.6(a), and 800.6(b)(1).

2. DESCRIPTION OF UNDERTAKING¹

The Honeydew Bridge Replacement Project is located in the southern portion of Humboldt County in Caltrans District 1. The project is on Mattole Road approximately 22 miles southwest of Exit 663 on US101. It is also approximately 32 miles northwest of Exit 639 on US101 in Garberville.

The County prepared an APE map for this project in September 2013, which includes the bridge, a portion of the river bed, adjacent roads, and Assessor Parcel Number (APN) 107-102-013. Figures 1 and 2 illustrate the Project Location and Project Vicinity. Figure 3 is the APE map. The Figures are in Attachment A.

The existing bridge poses a problem for Humboldt County in that its 1920 design was not built for modern truck weights and capacities, nor is the single lane adequate for current traffic safety. Caltrans maintenance reports indicate that the bridge is structurally deficient and lacks sufficient load carrying capacity for load bearing and emergency vehicle access. Furthermore, it is a distance of some 35 miles from Honeydew Bridge to the next river crossing upstream at Ettersburg and 14 miles to the next river crossing downstream at Petrolia.

The primary purpose and need for the proposed project are:

1. To provide a safe, efficient, and cost-effective access for the public land managers and private landowners along the Mattole River Road to Highway 101.
2. To provide a safe, efficient, and cost-effective access for fire fighters and emergency equipment to the Mattole River Road from Highway 101, in the event of a wildfire.
3. To provide safe, efficient, and cost-effective exit route for residents and visitors along Mattole River Road to Highway 101, in the event of a wildfire.

2.1. Existing Conditions

The Honeydew Bridge (Bridge No. 04C0055) was constructed in 1920 as a single-lane through-truss bridge with two steel Camelback truss spans. The bridge is supported by a reinforced concrete pier and wing abutments on spread footings. The bridge has timber decking and rails. The total bridge length is 386 feet and the vertical clearance is 14 feet. The center-to-center distance between the through trusses is 17 feet. Clear roadway width between the timber curbs is 14 feet 9 inches. The bridge is posted to limit truck and bus speeds to 15 miles per hour due to load capacity and has recently been capacity reduced.

The Honeydew Bridge is one of three bridges that crosses the Mattole River in this remote area of Humboldt County that serve as major access points in and out of the Mattole Valley. Humboldt County Department of Public Works has identified the need to have a two-lane structure in Honeydew to meet current traffic safety requirements and to ensure that there is sufficient access for emergency vehicles, along with heavy and long vehicles. The Average Daily Traffic (ADT) for the Honeydew Bridge was 500 vehicles in January 2009 and could be as high as 700 today. A current ADT count is

¹ Humboldt County Department of Public Works supplied this project description.

underway at the time of this report. ADT numbers are expected to continually rise in the near future as rural growth in the Mattole Valley is occurring at a rapid rate. AASHTO Policy on Geometric Design of Highways and Streets states that the minimum clear roadway width for this bridge to remain in place is 22 feet and carry two traffic lanes. For a new or reconstructed bridge the minimum required clear roadway width on the bridge is 26 feet.

The extant bridge is classified as functionally obsolete and structurally deficient. The structure is functionally obsolete because of geometric constraints (i.e., single lane 14 feet 9 inch clear width), and it is incompatible with modern highway use and the need for conveyance of heavy equipment and emergency vehicles. The overall sufficiency rating based on a July 15, 2014 inspection by Caltrans Structure Maintenance and Investigations was 13.3. The bridge is considered structurally deficient because of deteriorated condition, the elevated maintenance costs associated with its condition, and its seismic susceptibility.

The truss structure has repeatedly been struck and damaged by oversized vehicles. Several main truss members and portal cross frames have been replaced, typically with plug welding. The truss portion of the bridge was last painted in the mid-1970s. The County does not have funding for a bridge painting program. The maintenance needs of the bridge are high do to its age, design, and materials of construction.

Consideration of bridge replacement began in the early 1970s. Initially there was interest in re-locating the bridge to allow re-aligning the approach road on the north side, in order to bypass several hillslope curves. A total of ten alternative routes were assessed. Based on this initial assessment, the preferred location for a new bridge alignment at that time was located approximately 1,800 feet downstream of the existing alignment. The primary rationale for this selection was meeting the objective of straightening the alignment of the approach road to the north. In the late 1970s, the County acquired right-of-way for a new approach road on the north side of the Mattole River through dedication on a subdivision map. Right-of-way was not secured on the south side of the river. Funding to pursue this option was not secured and project development was discontinued.

In 1997, the Humboldt County Board of Supervisors passed a resolution stating the intent to replace the bridge based on its lowered sufficiency rating. The low rating was based on a history of incidents in which oversize vehicles had hit and damaged the structure, as well as the overall deteriorating condition of the bridge.

In 2011, the County Public Works Department initiated technical studies and retained the services of Morrison Structures, Inc. as their engineering design consultant. Based on multiple design considerations (e.g., past County alignment study, minimization of impacts to private properties in Honeydew, topographic constraints, hydraulics, line of sight for vehicles, cost-effective solution with least design modifications, etc.), the existing bridge alignment was identified as the preferred alignment for the new bridge. Three bridge type configurations were identified in Morrison Structures, Inc.'s April 12, 2013 Recommended Bridge Type memorandum: two-span, steel Camelback through truss; two-span, composite welded steel girder; and two-span, precast-pre-

stressed concrete spliced girder. The proposed project also includes a significant temporary detour road constructed across the dry river channel and short temporary bridge crossing over the low-summer-flow Mattole River located 1,300 feet downstream. The existing bridge and pier will be removed, and a new pier and bridge abutments constructed. Two construction seasons are anticipated due to the limited in-river work window (i.e., June-October). In Season 1, deep foundations for the new pier and south abutment will be constructed; the new bridge pier centerline is 11 feet north of the existing pier, which will allow for cast-in-drilled-hole (CIDH) installations without needing to close the existing bridge to through traffic. In Season 2, the downstream detour would be constructed and temporary supports installed to support both bridge demolition and new bridge construction.

2.2. Project Description

General

The existing structurally deficient and functionally obsolete bridge will be replaced with a modern structure on existing alignment that will meet present day load carrying capacity and width for traffic safety. The proposed replacement is a two-span structure with equal span lengths of 187 feet - 7 ½ inches for a total bridge length of 375 feet - 3 inches. It will carry two lanes of traffic with each lane width 10-foot plus a 3-foot shoulder, for a clear width of 26 feet.

Replacement Structure Type

Three replacement structure type alternatives have been studied and found to be feasible to construct at the Honeydew site. Structure type Alternative 1 is a steel Camelback through truss nearly identical in configuration to the existing bridge. Structure type Alternative 2 is a haunched, composite welded steel girder. The third structure type alternative is a haunched, precast, prestressed, spliced girder, similar in geometry to Alternative 2. The decision as to the selection of type has not as yet been determined. However, the County's preference at present is a haunched, composite welded steel girder (Alternative 2) due to its shorter duration construction schedule when compared to the alternative steel truss or precast girder construction duration. Regardless of which alternative structure type is finally selected, foundations will consist of pile supported concrete abutments and center pier.

Construction Sequencing

Because of the short time period of low flows for the Mattole River, two summer seasons will be required to construct the bridge replacement project regardless of the structure type alternative selected.

The first season of work will be to construct the deep foundations required for the new pier and south abutment while the existing bridge remains in place. This will involve constructing cast-in-drilled-hole (CIDH) piles alongside the existing bridge pier and constructing south abutment foundations beneath the existing south truss span near the existing abutment. The proposed new bridge pier is located 11 feet north of the existing pier centerline and the proposed new south abutment is located several feet north of the existing south abutment. This will allow for the CIDH installations without

requiring closure of the existing bridge or impacting the existing bridge supports during the first season of work.

The second season of work will be to construct a temporary detour road and short single-lane bridge about 1,300 feet downstream from the existing bridge. The detour road will connect Mattole Road via Burrel Road so the existing bridge can be closed to traffic and will also provide the main access to the bridge construction site so that the existing bridge can be removed and the new bridge abutment walls, pier, and superstructure can be constructed. The short detour bridge will cross the main low-summer-flow channel of the Mattole River and will most likely consist of a portable Bailey Bridge or other erectable bridge type. The detour bridge will be used during the second construction season only and set at an elevation with sufficient height to clear summer river flow and meet Burrel Road grade. After completion of the new bridge the detour road will be removed.

Design

The replacement structure will be designed for the HL93, Tandem, and P15 Permit Design vehicle loadings as specified in Caltrans Bridge Design Specifications (BDS), Seismic Design Criteria V1.6, and American Association of State Highway and Transportation Officials (AASHTO) 6th Ed. The new bridge will employ the hydraulic design criteria established in the Caltrans Local Procedures Manual, which prescribes that the structure be capable of conveying the base or 100-year flood and passing the 50-year flood “without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes.” In addition, AASHTO requires at least 3 feet of freeboard (clearance) above the 50-year flood or flood of record. The minimum soffit elevation required to meet these criteria is 335.41 feet.

Detour

During the bridge replacement project, a temporary detour road and short single-lane bridge is proposed to be constructed 1,300 feet downstream from the existing bridge. The detour road will connect Mattole Road via Burrel Road and will also provide the main access to the bridge construction site. Detour road construction will consist of river run gravel fill over geotextile fabric, with an aggregate base topping. The temporary detour bridge will cross the main low-summer-flow channel of the Mattole River and will most likely consist of a portable Bailey Bridge or other erectable bridge type. The temporary bridge will be used during the second construction season only and set at an elevation with sufficient height to clear summer river flow and meet Burrel Road grade.

Staging

Temporary staging areas will be available at three locations: (1) along Wilder Ridge Road, just southeast of the intersection with Mattole Road; (2) all along the south bank gravel bar near and beneath the existing bridge and; (3) at the north Mattole Road Bridge approach. The Wilder Ridge Road staging area is located along the east side of Wilder Ridge Road, approximately 300 feet south of the intersection with Mattole Road. The south bank gravel bar temporary staging area (primary construction staging area) will be located between the detour road located 1,300 feet to the west and

the private access road a few hundred feet upstream from the bridge. The north approach staging area will be located on Mattole Road, immediately north of the existing bridge north abutment.

Falsework

Based upon field observations, no problems with falsework are anticipated during the construction season. Due to the types of bridge alternatives recommended, the amount of falsework required for the construction will be a minimum. The existing truss demolition and new bridge construction will likely require gravel pads, falsework, and work trestles be constructed to dismantle and replace the existing bridge. The primary construction staging area to remove and replace the existing bridge will be along the south bank gravel bar. There will be access to this construction staging area from the downstream detour road and also from Wilder Ridge Road along an upstream existing private access road.

3. PUBLIC PARTICIPATION

A variety of means were utilized to inform and elicit public opinion regarding the County's project to replace the Honeydew Bridge. There have been letters, public meetings, and telephone calls. JRP identified potential local interested parties and sent notification letters on May 24, 2013. Recipients of the letter were the Humboldt County Historical Society, Clarke Historical Museum, Mattole Valley Historical Society, and the Eureka Heritage Society. JRP did not receive any responses from the May 24, 2013 letters. Prior to the letter being sent, JRP received an email from Laura Walker Cooskey of the Mattole Valley Historical Society in response to a letter to interested parties sent on January 28, 2013 that was from a previous preventative maintenance project on the Honeydew Bridge. Ms. Cooskey contacted JRP on February 5, 2013 noting support for preservation of the Honeydew Bridge and asking about the bridge's potential replacement. This led to an exchange of emails on February 7 to February 8, 2013 between Ms. Cooskey and JRP Partner / Architectural Historian Christopher McMorris that included clarification that the project being considered at that time was for preventative maintenance with replacement of deteriorated components of the structure's timber deck and railings. These communications were provided to Humboldt County Public Works Department.

Humboldt County Department of Public Works held a public meeting regarding the Honeydew Bridge project on January 23, 2013 at the Honeydew Elementary School. The meeting was conducted by Chris Whitworth, then Deputy Director of the Department of Public Works, and attended by about 20 people. In response to the meeting, the Department of Public Works received one correspondence from Scott and Tina Davies of Honeydew who expressed their preference for design Alternative 1, the steel truss bridge, because it is similar in appearance to the current bridge and for its "earthquake and flood stability."

Also in response to the meeting, the Department of Public Works received four telephone calls in January 2013. Dennis Smith of Honeydew endorsed construction of a new bridge and did not express preference for any particular design or alternative. Pete Marshal and Lois Juodika, both of Honeydew, expressed concerns that the bridge crossing would be relocated, but were mollified once informed the new bridge would be built in the same location as the old bridge. Juodika also voiced concern that the new two-lane bridge would encourage speeding. Jessica Wygal expressed concern about an old oak tree at the bridge abutment.

Additional outreach was conducted in 2016. JRP sent another letter via US Mail to Humboldt County Historical Society, Clarke Historical Museum, Mattole Valley Historical Society, and the Eureka Heritage Society on August 23, 2016. A follow-up email was sent to these organizations on September 6, 2016 to confirm receipt of the letter and to solicit comment. The Clarke Historical Museum responded on September 7, 2016 that they had no comment on the project. On September 21, 2016, Laura Cooskey of the Mattole Valley Historical Society replied via email with questions about the Section 106 / CEQA compliance process and suggestions regarding possible mitigation. On September 28 and October 5, 2016, JRP made telephone calls to Humboldt County Historical Society and Eureka Heritage Society to further follow up on this communication. The Humboldt County Historical Society had no comment. A voice message was left for the Eureka Heritage Society and no

further response was received. JRP responded to Ms. Cooskey on October 11, 2016 providing information about the Section 106 / CEQA process and discussing possible mitigation for this project.

The Humboldt County Department of Public Works held a second public meeting regarding the Honeydew Bridge project on March 1, 2017 at Mattole Grange No. 569 in Petrolia. The meeting was conducted by Andrew Bundschuh of the Department of Public Works. Approximately four people attended the meeting. After the meeting the Department of Public Works received 14 emails commenting on the project. Most of the comments noted the importance of the bridge to the history and character of the area, and expressed preference for keeping the existing bridge or building the steel truss alternative for the new bridge. One email expressed a preference for the composite welded girder new bridge alternative.

Copies of public participation correspondence and public meeting documentation are provided in Attachment B.

James Roscoe sent a letter to the Native American Heritage Commission (NAHC) on June 18, 2013 requesting a search of the Sacred Lands Inventory File and a current list of local Native American groups and individuals who may have interests and/or concerns with the project. The NAHC responded on June 18, 2013 that the search of the Sacred Lands file failed to indicate the presence of Native American cultural resources in the vicinity of the project areas and provided a list of Native American contacts that may have knowledge of cultural resources in the project areas. Letters requesting information and help identifying and protecting cultural resources were sent to those identified by the NAHC.

Letters requesting information and help identifying and protecting cultural resources were sent on June 27, 2013 by Jamie Roscoe to the Bear River Band of the Rohnerville Rancheria and the InterTribal Sinkyone Wilderness Council. The InterTribal Sinkyone Wilderness Council did not respond to written letter or email. Follow-up phone calls were also made. Erika Collins, the Tribal Historic Preservation Officer (THPO) for the Bear River Band of the Rohnerville Rancheria requested to accompany the field crew to the project area. See Attachment B for copies of these correspondences.

4. DESCRIPTION OF HISTORIC PROPERTIES

4.1. Summary of Steps Taken to Identify Historic Properties

JRP conducted a search of the California Historical Resources database (includes State Landmarks, California Register, and Points of Interest), National Register of Historic Places database, Caltrans State and Local Bridge Survey (1986 and updates) as well as the results of a California Historical Resources Information System records search (Northwest California Information Center File No. 12-1608 (June 21, 2013) prepared by Jamie Roscoe, in an effort to identify historic properties in the study area. The records search and review of standard sources of information on historic architectural resources identified only one historic property in the APE, the Honeydew Bridge.

JRP prepared a HRER, which evaluated one other built environment property in the APE. The HRER concluded property at 44670 Mattole Road is not NRHP eligible and SHPO concurred with this finding on January 23, 2014 (reference FHWA_2013_1220_002). Jamie Roscoe (Roscoe & Associates) prepared the ASR and concluded there are no archaeological resources that are listed in or eligible for listing in the NRHP within the APE. There are no state-owned historical resources in the APE.

4.2. Description and Significance of Historic Resources

The Honeydew Bridge was determined eligible for listing in the NRHP in 2003 as a result of a Caltrans Historic Bridge Inventory Update conducted in the early 2000s. The bridge had been previously evaluated in 1986, but found not eligible. Caltrans changed their opinion regarding the bridge because in the span of time between the two evaluations, four bridges of this type (Camelback truss) in the state had been demolished leaving only three including the Honeydew Bridge. Of the three, only the Honeydew Bridge and the Salinas River Bridge (44C0007) were built during the period when this type of bridge was popular. The Honeydew Bridge was found historically significant under Criterion C at the state level, as a rare example of a Camelback truss bridge. The bridge was also found to have retained sufficient historic integrity to convey its significance.² In 2013, JRP revisited the Honeydew Bridge and verified that the bridge still retained historic integrity and continued to meet the criteria for listing in the NRHP.

The existing Honeydew Bridge is a two-span steel Camelback truss bridge with each span measuring 190 feet and the total bridge length being 386 feet. The Camelback design is defined by an arched top chord made up of exactly five segments. Traffic is carried on a timber 17-foot wide deck flanked by timber rails. The overhead clearance is 14 feet. There is no pedestrian walkway on the bridge. The structure has undergone piecemeal repairs over the years including damaged sections cut out of the

² JRP Historical Consulting and Caltrans, "Caltrans Historic Bridge Inventory Update: Metal Truss, Moveable, and Steel Arch Bridges," (Sacramento, CA: California Department of Transportation, 2004).

bridge and new pieces welded in. Recently, the timber rails, stringers and runner boards were replaced in-kind.

The specific character-defining features of the Honeydew Bridge are 1) the Camelback truss spans; 2) timber deck and railings; 3) steel deck beams and girders; 4) timber stringers 5) and abutments. The Honeydew Bridge is shown in the photographs below.

Members of the Honeydew community have expressed appreciation for the aesthetic and historic character of the bridge. The geometric patterns of the truss structure and the bridge's rustic nature contribute to its representation of an earlier era. While the basis for the bridge's eligibility for listing on the NRHP is tied specifically to the engineering design aspects of the bridge within a state context, the community's attachment to the bridge is primarily based on aesthetics and general historical character.



Photograph 1: Honeydew Bridge, view looking south, June 25, 2013
(Photo by JRP Historical Consulting, LLC).



Photograph 2: Honeydew Bridge, view looking southeast, June 25, 2013
(Photo by JRP Historical Consulting, LLC).



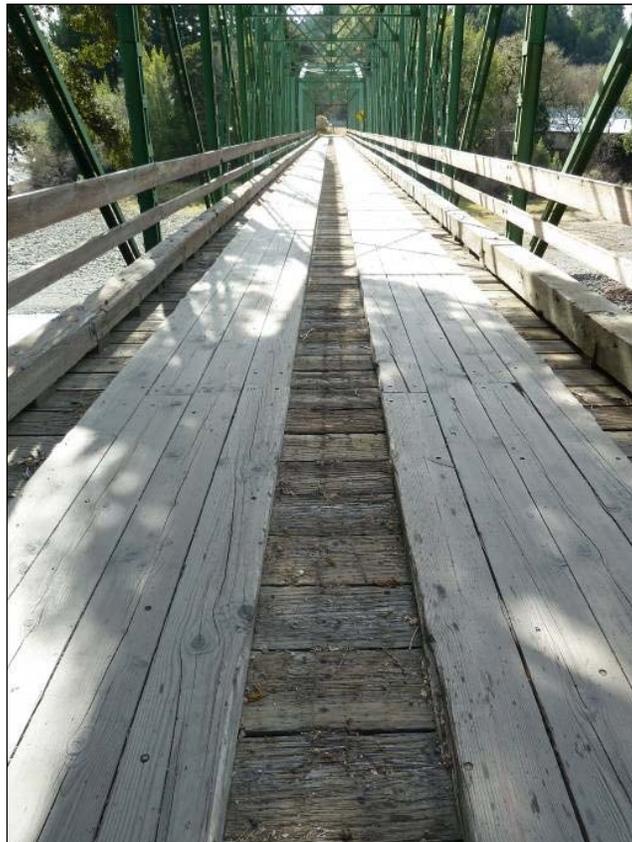
Photograph 3: Honeydew Bridge, view looking southwest, February 27, 2013 (Photo by JRP Historical Consulting, LLC).



Photograph 4: Honeydew Bridge, view looking south, February 27, 2013 (Source: JRP Historical Consulting, LLC).



Photograph 5: Honeydew Bridge, camera facing north, February 27, 2013 (Source: JRP Historical Consulting, LLC).



Photograph 6: Honeydew Bridge, south, February 27, 2013 (Source: JRP Historical Consulting, LLC).

5. APPLICATION OF CRITERIA OF ADVERSE EFFECT

The NHPA Section 106 regulations state that if there are historic properties in the APE that may be affected by a federal undertaking, the agency official shall assess adverse effects, if any, in accordance with the Criteria of Adverse Effect defined in 36 CFR 800.5. These regulations state an “adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” Application of the criteria of adverse effect is largely an assessment of an undertaking’s impacts on the historic integrity of a historic property and how an undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. Effects can be direct, indirect, and cumulative. Direct effects include physical destruction or damage. Indirect effects include the introduction of visual, auditory, or vibration impacts as well as neglect to a historic property, and cumulative effects are the impacts of this project taken into account with known past or present projects as well as foreseeable future projects.

Under the Criteria of Adverse Effect, 36 CFR 800.5(a)(2) lists examples of adverse effects. Adverse effects on historic properties include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
- (iii) Removal of the property from its historic location;
- (iv) Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

The Honeydew Bridge (Bridge No. 04C0055) is the only historic property in the APE. Of the seven effects listed above, under 36 CFR 800.5(a)(2), only (i) is applicable to this project. The Honeydew Bridge Replacement Project calls for the demolition of the Honeydew Bridge, which will result in a *direct adverse effect* on the bridge. The project will not cause an indirect or cumulative adverse effect on the historic property.

6. ALTERNATIVES CONSIDERED BUT REJECTED³

Three alternatives considered would not demolish the Honeydew Bridge (Bridge No. 04C0055) and would avoid an adverse effect to the historic property. As discussed herein, the Humboldt County Department of Public Works considered rehabilitating the existing Honeydew Bridge and building a new bridge at different locations while retaining the existing bridge. These alternatives were considered, but rejected as infeasible.

6.1. Rehabilitate the Existing Bridge

As noted in Section 2, the main purpose and need of the current project is to replace the Honeydew Bridge with a two-lane bridge at this location. While it may be possible to strengthen and increase the vertical clearance of the existing Honeydew Bridge, it is technically infeasible to widen the existing single-lane through-truss bridge to carry two traffic lanes without destruction to the historic truss. Widening the existing through-truss bridge would require extensive alteration to the character of the historic bridge and could not be accomplished in a manner that conforms to the Secretary of Interior's Standards. Virtually every element of the bridge is considered functionally obsolete and structurally deficient because of its age, deteriorated condition, narrow width, elevated maintenance costs, and seismic susceptibility. Various components of the truss structure have been repeatedly struck and damaged by oversized vehicles. Corrosion is present, several main truss members and portal cross frames have been replaced, typically installed with plug welding.

The structure exhibits the following structural and geometric issues:

- pack rust at steel connection locations
- damaged and bent portal frame members
- structural fatigue
- possesses fracture critical members
- posted for less than legal loads
- non-compliance with modern geometric and seismic standards
- contains only one travelable lane
- lacks standard shoulder width
- does not accommodate pedestrians
- long-term repair and maintenance costs are prohibitive
- inability to accommodate large permit loads because of its lane width, height, and structural limitations for weight loading.

Rehabilitating the bridge in conformance with the Secretary of Interior's Standards would not address the need for a two-lane structure at this location that would accommodate the anticipated traffic and load demands. Also, the extant bridge cannot adequately address the need for improved pedestrian

³ Data and analysis in this section is based on information provided by the Humboldt County Department of Public Works.

safety across the structure. The County has concluded that bridge has reached the end of its useful life and must be replaced with a structure that meets current design standards and highway needs.

6.2. Build a New Bridge Adjacent to the Existing, Leaving the Existing Bridge in Place for Non-Vehicular Uses

Under this alternative, the existing Honeydew Bridge would have been repaired and left in place for non-vehicular uses. The new and old bridges would have been about 10 feet apart and approximately the same deck level.

Building the new bridge located just west (downstream) of the existing bridge would require a large and significant property take from the Honeydew Store and Post Office, removal of a large tree removal, and construction of a significant retaining wall to mitigate slope impacts to the store property. Additionally, on the north side of the river, the reconstruction limits of Burrel Road are extended significantly west because of the low elevation of Burrel Road compared with the elevation of Mattole Road and the bridge.

Building the new bridge east (upstream) of the existing bridge would eliminate the need for a retaining wall, but the bridge would be very near to a dwelling to the east, there would be large tree removal, and there would be a large property take to the owner of the residence to the east. Additionally, on the north side of the river, with the alignment upstream of the existing bridge, the road cut on the east edge of the roadway would become excessive and an ancient oak tree would need to be removed. This option was deemed infeasible due to the need for very large cut bank at the ridge just west of the north abutment.

In addition to these problematic impacts to the county residents in Honeydew and their properties, locating the new bridge adjacent to the existing bridge at such a close distance would cause visual competition and diminish the historic bridge's integrity of setting, feeling, and association.

Furthermore, Federal Highways will only fund rehabilitation for non-motor traffic use up to the cost that otherwise would be spent on demolition, and the County does not have an identified source of funding to ensure that the bridge could be rehabilitated in a manner that is sufficiently safe for pedestrian-only use in the case where the existing bridge was left in place.

6.3. Retain the Existing Bridge and Build a New Bridge at an Alternative Location

Humboldt County Department of Public Works evaluated the option of retaining the existing bridge and building a new bridge at an alternative location. Potential alternative locations were screened based on topography and the constraints of existing development. One potentially feasible alternative location for the new structure was identified, aligned with previously acquired right-of-way on the

north side of the river. This location, illustrated below, is situated approximately 1,800 feet downstream from the existing bridge.



Following examination of multiple issues, however, the County concluded that construction of a bridge at this location is technically infeasible because of hydraulic issues, potential significant environmental impacts, and challenges regarding right-of-way acquisition. The alternative location for the new structure would require placement of substantial amounts of fill material within the floodplain, which would likely cause hydraulic issues resulting in increased flood damage risks. There would be significant impacts to properties on the north side of the river with the large, high, embankment fills, and Burrel Road would need to be relocated and/or significantly reconstructed to conform to the new bridge and still provide access to properties on the north side of the river. Possible significant environmental impacts within the river and on the adjacent uplands would include

permanent impacts within waters of the state and U.S. (i.e. filling of wetlands and river channel), along with aesthetic issues since the bridge at this location would be longer and more visible. Adequate mitigation measures for these environmental effects may not be feasible. Related to the environmental issues, the new structure's additional in-stream pier within this reach of the Mattole River would likely meet resistance from regulatory agencies, such as the National Marine Fisheries Service (NMFS) and the California Department of Fish & Wildlife (CDFW), because it would increase the potential of impacting listed fish species during construction and would degrade in-channel fish habitat. Also, right-of-way has not been secured south of the river, and based on previous efforts by the County, it is unclear whether such right-of-way could be secured.

In this alternative, the existing historic Honeydew Bridge would also need to be rehabilitated and maintained. While the new bridge downstream would meet the demand for a two-lane structure at this location that would accommodate the anticipated traffic demand, the existing bridge would continue to expend ongoing maintenance costs and has the potential of becoming a liability risk to the County. As noted, Caltrans will only fund a rehabilitation project up to the cost that otherwise would be spent on demolition, and the County does not have an identified source of funding to ensure that the bridge could be rehabilitated in a manner that is sufficiently safe and in conformance with the Secretary of Interior's Standards. The County also does not have a funding source for the on-going maintenance of this structure, particularly if it is only used for pedestrian and bicycle use. Furthermore, there are also concerns that if left in place the bridge would become a potential safety hazard and attractive nuisance, particularly in light of the bridge's remote location.

Preliminary engineering for a reinforced concrete bridge was prepared in order to develop an engineer's estimate of probable cost. The bridge would require a minimum length of 400 feet with a single center pier. A total of 2,500 linear feet of new approach roadway would be required, occupying an area of 1.94 acres and requiring 24,000 cubic yards of fill material. Additionally, Burrel Road would need to be raised to conform to the new bridge approaches on the north side or the new bridge would need to entirely span Burrel Road. The estimated construction cost for a new bridge downstream would range between \$11 – \$15 million dollars. This cost is more than twice as much as bridge replacement on the existing alignment.⁴

The required environmental review and permitting, along with right-of-way acquisition, could also pose substantial delays in remedying the traffic and safety issues present with retaining and/or rehabilitating the existing historic bridge.

Based on considerations for environmental impacts, liabilities, costs, and the potential for substantial delays, Humboldt County Public Works has determined that retaining the existing bridge and building a new bridge at an alternative location is not a feasible option. Removing the existing bridge and constructing a new bridge on the existing alignment is considered the only feasible option.

⁴ Morrison Structures, Inc., "Technical Memorandum, Mattole Road Bridge (No. 4C-55) Replacement Recommended Bridge Type, 2013.

7. CONCLUSIONS

This FAE provides an assessment of the effect the Honeydew Bridge Replacement Project will have on historic properties. It contains information regarding the Section 106 activities to date, including a summary of the identification of historic properties and consultation with Native Americans and other interested parties. For the proposed undertaking, Caltrans finds that there are historic properties affected pursuant to the Section 106 PA Stipulation IX.B.

One historic property, the County-owned Honeydew Bridge (Bridge No. 04C0055), is in the APE. The Honeydew Bridge was determined eligible for listing in the NRHP in 2003. The project will demolish and replace the existing Honeydew Bridge. The demolition of the bridge will be a direct adverse effect on the Honeydew Bridge.

Based on the findings of this FAE, Caltrans has determined that the undertaking as a whole will have an Adverse Effect on the Honeydew Bridge and is seeking SHPO concurrence with these findings pursuant to Section 106 PA Stipulation XI.C and 36 CFR 800.5. Caltrans will continue consultation regarding resolution of adverse effects pursuant to Section 106 PA Stipulation XI and 36 CFR 800.6 through preparation of a Memorandum of Agreement (MOA) in consultation with consulting parties.

ATTACHMENTS

Attachment A:
Figures



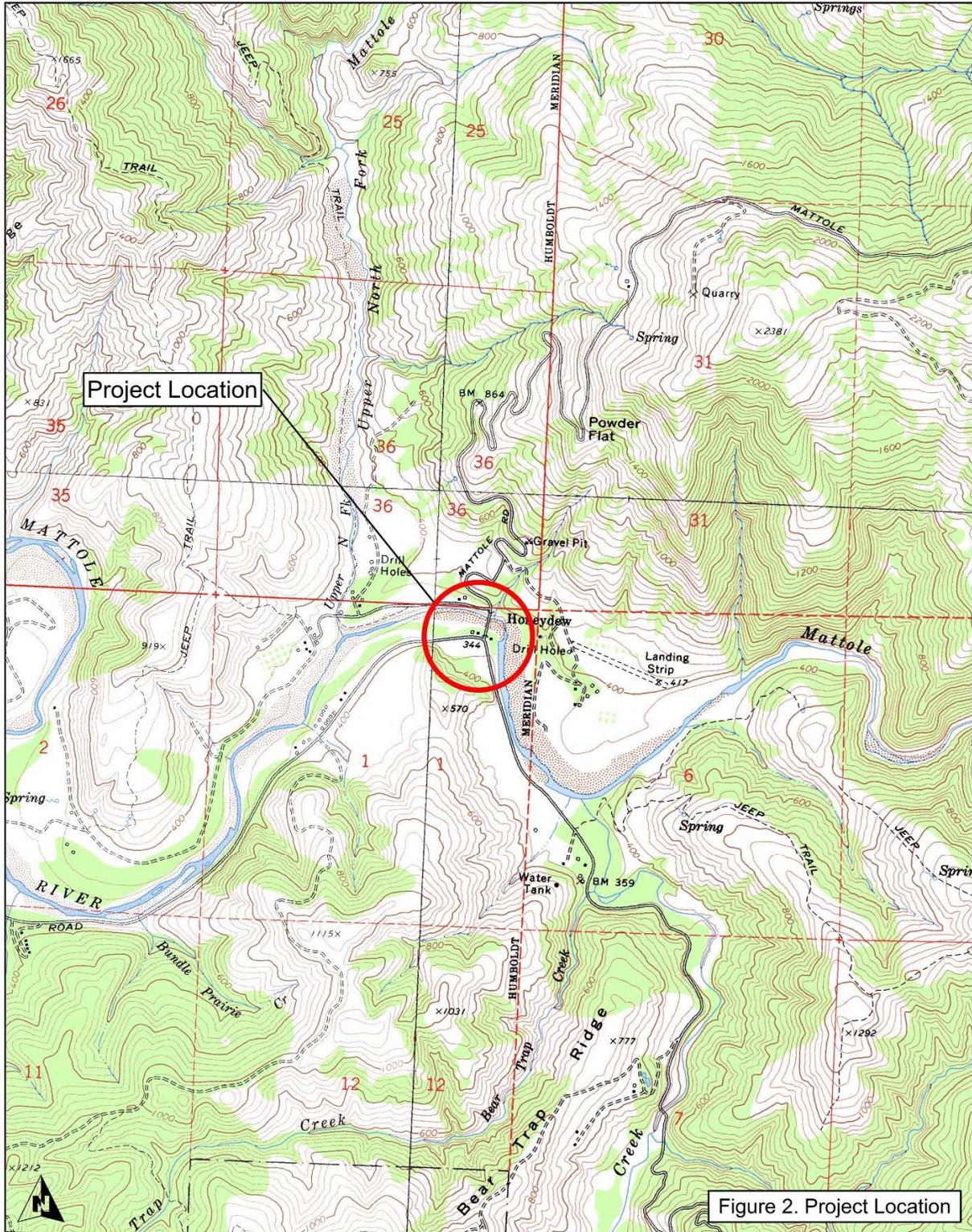
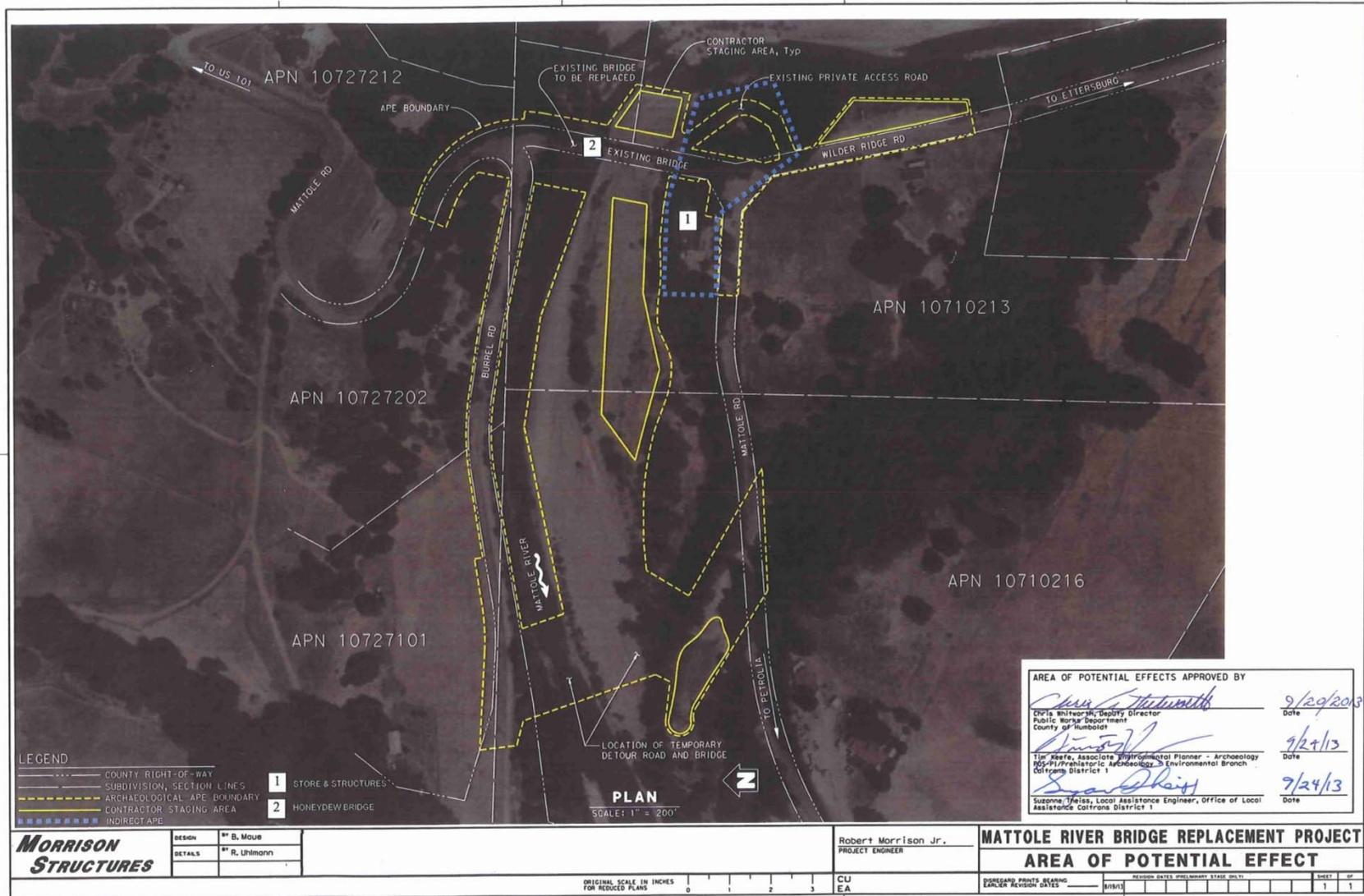


Figure 2. Project Location

Source: U.S. Geological Survey, 7.5 minute series, Buckeye Mtn., CA (1970), Bull Creek, CA (1969), Honeydew, CA (1970), and Shubrick Peak, CA (1969).



**Attachment B:
Correspondence**



Communication Log

2850 Spafford Street, Davis, CA 95618
 Phone (530) 757.2521 / Fax (530) 757-2566

Project: Finding of Effect, Honeydew Bridge Replacement Project, Honeydew Bridge on Mattole Road over Mattole River, Bridge No. 04C0055, Humboldt County, CA

Client: Humboldt County

Prepared By: Steven J. "Mel" Melvin, Staff Architectural Historian, JRP Historical Consulting, LLC

Date: March 2017

Interested Party	Communication
Historical – Conducted by JRP Historical Consulting, LLC	
Humboldt County Historical Society 703 8 th Street Eureka, CA 95501 (707) 445-4342 info@humboldthistory.org	<ul style="list-style-type: none"> • Letter sent on May 24, 2013 soliciting comments or concerns. • No responses received. • Second letter sent on August 23, 2016 soliciting comments or concerns because of changes to the project. • Follow-up email sent September 6, 2016. • Follow-up phone call made September 28, 2016. JRP staff spoke with Jim Garrison who indicated the Humboldt County Historical Society had no comment.
Mattole Valley Historical Society P.O. Box 144 Petrolia, CA 95558 (707) 629-3684 mattolehistory@frontiernet.net	<ul style="list-style-type: none"> • Letter sent May 24, 2013 soliciting comments or concerns. • Laura Walker Cooskey of the Mattole Valley Historical Society contacted JRP via email on February 5, 2013 regarding another project: a preventative maintenance project for the Honeydew Bridge. Ms. Cooskey was informed that the Honeydew Bridge Replacement Project was a different project and her communications were forwarded to the Humboldt County Public Works Department. • No other communications were received from representatives of the Mattole Valley Historical Society. • Second letter sent on August 23, 2016 soliciting comments or concerns because of changes to the project. • Follow-up email sent September 6, 2016. • Laura Walker Cooskey of the Mattole Valley Historical Society replied to JRP via email on September 21, 2016. Ms. Cooskey had questions regarding the NRHP Section 106 and CEQA compliance process, among other comments. • JRP responded to Ms. Cooskey via email on October 11, 2016 providing information regarding Section 106 and CEQA compliance process, including a brief discussion of possible mitigation that could be considered for this project.

<p>Clarke Historical Museum 240 E. Street Eureka, CA 95501 (707) 443-1947 clarkehistorical@att.net</p>	<ul style="list-style-type: none"> • Letter sent May 24, 2013 soliciting comments or concerns. • No responses received. • Second letter sent on August 23, 2016 soliciting comments or concerns because of changes to the project. • Follow-up email sent September 6, 2016. • Reply received via email September 7, 2016 with no comment on the project.
<p>Eureka Heritage Society P.O. Box 1354 Eureka, CA 95502 (707) 445-8775 eurekaheritagesociety@gmail.com</p>	<ul style="list-style-type: none"> • Letter sent May 24, 2013 soliciting comments or concerns. • No responses received. • Second letter sent on August 23, 2016 soliciting comments or concerns because of changes to the project. • Follow-up email sent September 6, 2016. • Follow-up phone call made on October 5, 2016. There was no answer and a message was left. • Mary Ann McCulloch, President of the Eureka Heritage Society, called JRP on October 17, 2016 and indicated the organization had no comment on the project.
<p>Native American – Conducted by Roscoe and Associates</p>	
<p>Native American Heritage Commission</p>	<ul style="list-style-type: none"> • Fax sent June 18, 2013 requesting a search of the Sacred Lands Inventory File and a list of interested parties. • Responded by fax on June 18, 2013 that the search of the Sacred Lands file did not indicate the presence of Native American cultural resources in the vicinity of the project. A list of interested parties was also sent.
<p>Bear River Band of Rohnerville Rancheria 266 Keisner Road Loleta, CA 95551</p>	<ul style="list-style-type: none"> • Letter sent June 27, 2013 soliciting comments or concerns. • Erika Collins, the Tribal Historic Preservation Officer for the Bear River Band of Rohnerville Rancheria responded with a request to accompany the field survey crew to the project area.
<p>InterTribal Sinkiyone Wilderness Council Hawk Rosales, Executive Dir. P.O. Box 1523 Ukiah, CA 95482</p>	<ul style="list-style-type: none"> • Letter sent June 27, 2013 soliciting comments or concerns. • Follow up email sent. • Follow up phone call made. • No response received.
<p>Public Meetings – Conducted by the Humboldt County Department of Public Works</p>	
<p>The Humboldt County Department of Public Works held a public meeting regarding the Honeydew Bridge project on January 23, 2013 at the Honeydew Elementary School. The meeting was conducted</p>	

by Chris Whitworth, Deputy Directory, Department of Public Works. Approximately twenty people attended the meeting. In response to the meeting, the Department of Public Works received one correspondence from Scott and Tina Davies of Honeydew who expressed their preference for design Alternative 1, the steel truss bridge, because it is similar in appearance to the current bridge and for its "earthquake and flood stability."

Also in response to the meeting, the Department of Public Works received four telephone calls in January 2013. Dennis Smith of Honeydew endorsed construction of a new bridge and did not express preference for any particular design or alternative. Pete Marshal and Lois Juodika, both of Honeydew, expressed concerns that the bridge crossing would be relocated, but were mollified once informed that the county intends to construct the new bridge in the same location as the old bridge. Juodika also voiced concern that the new two-lane bridge would encourage speeding. Jessica Wygal expressed concern about an old oak tree at the bridge abutment.

The Humboldt County Department of Public Works held a second public meeting regarding the Honeydew Bridge project on March 1, 2017 at Mattole Grange No. 569 in Petrolia. The meeting was conducted by Andrew Bundschuh of the Department of Public Works. Approximately four people attended the meeting. After the meeting the Department of Public Works received 14 emails commenting on the project. Most of the comments noted the importance of the bridge to the history and character of the area, and expressed preference for keeping the existing bridge or building the steel truss alternative for the new bridge. One email expressed a preference for the composite welded girder new bridge alternative. All of these emails are attached below.



Stephen R. Wee, Principal / President
Rand F. Herbert, Principal / Vice President
Meta Bunse, Partner
Christopher D. McMorris, Partner

May 24, 2013

Humboldt County Historical Society
703 8th Street
Eureka, CA 95501

Eureka Heritage Society
P.O. Box 1354
Eureka, CA 95502-1354

Clarke Historical Museum
240 E. Street
Eureka, CA 95501

Mattole Valley Historical Society
P.O. Box 144
Petrolia, CA 95558

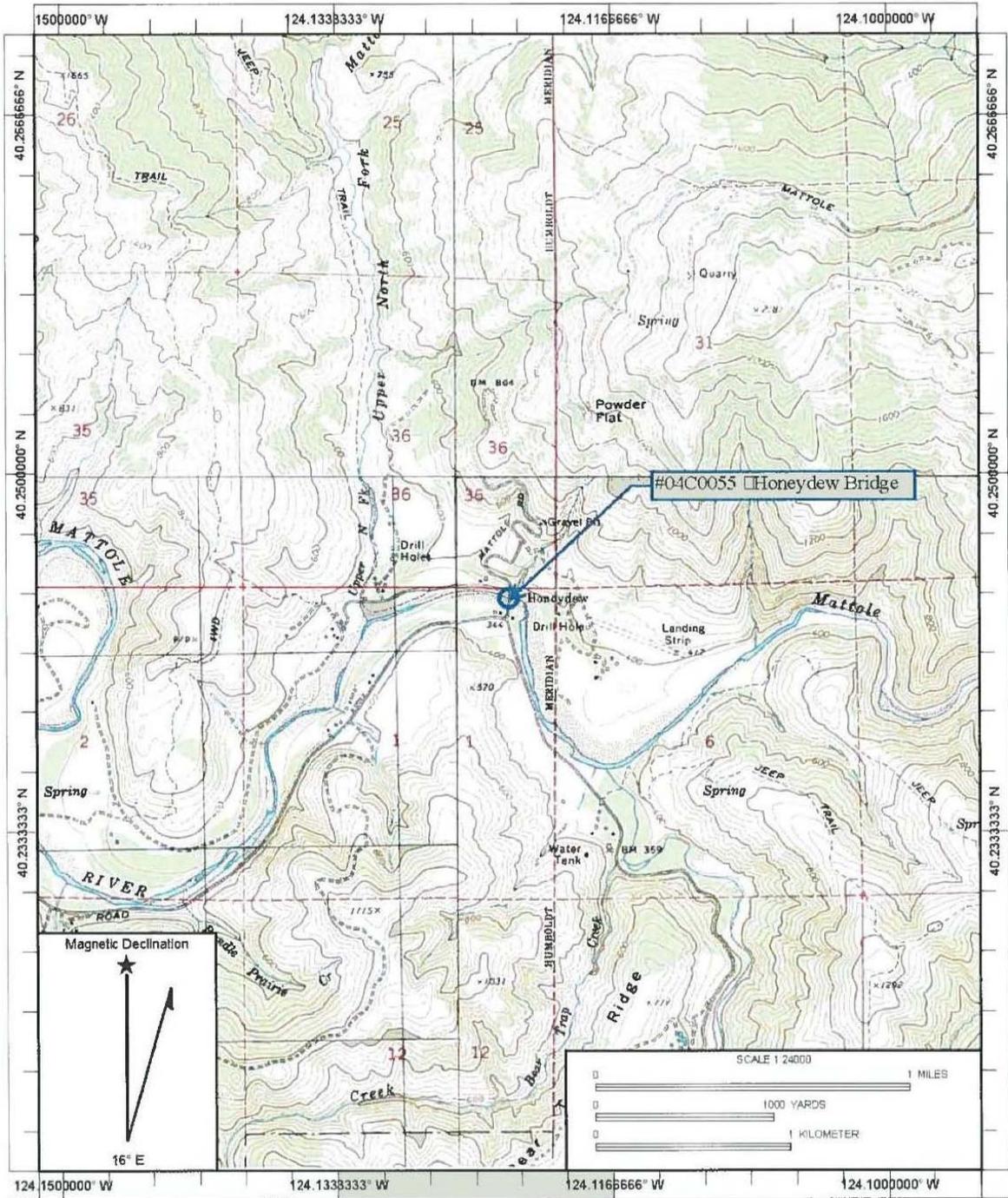
To Whom It May Concern:

The Humboldt County Department of Public Works is planning to replace the Honeydew Bridge on Mattole Road over the Mattole River (Bridge No. 04C0055) (see enclosed map) within the next few years. This project is currently in the engineering design and environmental review phase. The project will require construction of a temporary bridge downstream from the extant structure, and thus the project area includes the bridge, a portion of the river bed, adjacent roads, and properties adjacent to the bridge. This project is receiving federal funding through the Caltrans local assistance program, making it subject to compliance with Section 106 of the National Historic Preservation Act, and its regulations in Title 36 Code of Federal Regulations Part 800, as well as other environmental laws / regulations. It is also subject to compliance with the California Environmental Quality Act (CEQA), as it pertains to historical resources. The Honeydew Bridge is a camelback through truss bridge built in 1920 and has been determined eligible for listing in the National Register of Historic Places. JRP Historical Consulting, LLC has been retained to assist the County with Section 106 compliance and CEQA compliance for historical resources.

If you or your organization has any information or concerns regarding historic resources that could be affected by this project, please respond in writing to the address provided above, or via email at cmcmorris@jrphistorical.com, within the next thirty days. Thank you.

Sincerely,

Christopher McMorris
Partner / Architectural Historian



Name: HONEYDEW
 Date: 2/6/2012
 Scale: 1 inch equals 2000 feet

Location: 040.2440322° N 124.1229472° W NAD 83
 Caption: BPMP 2012
 #04C0055 - Honeydew Bridge

Chris McMorris

From: Meta Bunse
Sent: Friday, February 01, 2013 4:50 PM
To: Chris McMorris
Subject: Telephone message regarding Mattole Road Bridge

Chris –

Yesterday evening (January 31st) at about 6pm, Linda of the Humboldt County Historical Society (HCHS) called in response to an interested parties letter she received from you regarding the Mattole Road Bridge over the Mattole River in Humboldt County. She left a message for you with me. Her message was that although HCHS does not have a specific comment regarding that bridge, she thought that it would be better to contact the Eureka Heritage Society and left their phone number: 707-445-8775.

Thanks,
Meta

Meta Bunse, Partner
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
Tel 530.757.2521 / Fax 530.757.2566
www.jrphistorical.com

Chris McMorris

From: Mattole History [mailto:mattolehistory@frontiernet.net]
Sent: Friday, February 08, 2013 10:00 AM
To: Chris McMorris
Subject: Re: regarding Honeydew Bridge

Thank you, Chris. This is what I was afraid of... maintenance is not a way to avoid replacement, apparently.

I think the question has been raised of what if it were declared a National Historic Site, and the county had to save it. The problem was they would still have to move and replace it because it's basically doomed, and they don't have the funding to be able to do that (to preserve it by moving it to another spot) --and we probably don't have a citizen or group able to afford it, either.

Thank you for your reply.
~Laura Cooskey

From: [Chris McMorris](#)
Sent: Thursday, February 07, 2013 11:03 AM
To: [Mattole History](#)
Cc: [Seemann, Hank](#)
Subject: RE: regarding Honeydew Bridge

Laura Walker Cooskey
Mattole Valley Historical Society

Thank you for your email. I forwarded your communication to the Humboldt County Department of Public Works. Attached is the map that did not get included with the letter I sent.

The current project on the Honeydew Bridge is preventive maintenance that includes replacement of deteriorated components of the structure's timber deck and railings. Replacement of the bridge would be a separate project.

Chris

Christopher McMorris
Partner



2850 Spafford Street
Davis, California 95618
530-757-2521 ext. 30
530-757-2566 fax
www.jpshistorical.com

From: Mattole History [mailto:mattolehistory@frontiernet.net]
Sent: Tuesday, February 05, 2013 8:48 PM
To: Chris McMorris
Subject: regarding Honeydew Bridge

Christopher McMorris, JRP Historical Consulting, LLC

February 5, 2013

Dear Mr. McMorris,

I recently received a letter, addressed to the Mattole Valley Historical Society (whom I represent) and two other historical organizations in Humboldt County, regarding preservation and preventive maintenance for the Honeydew Bridge.

The letter mentioned an enclosed map, but there was none in the envelope. Still, I assume the bridge in question is the one next to the Honeydew Store, which has been slated for replacement by the county. Locals are fervently devoted to keeping the old bridge. There has been a flurry of messaging on our local electronic bulletin board about its fate, and the consensus seems to be that the county says they are open to comments, but that they most likely will tear down the bridge to make room for a replacement.

I wasn't able to attend the community meeting, but given the general thrust of the comments about it—upset about the plans—your letter is puzzling. Are you indeed saying that preservation, rather than replacement, is planned?

Thank you,
Laura Walker Cooskey

for the Mattole Valley Historical Society
P.O. Box 144, Petrolia, CA 95558
mattolehistory@frontiernet.net

FAX COVER SHEET

DATE: June 18, 2013

TO: Debbie Pilas-Treadway
Native American Heritage Commission

FAX: 916-373-5471
FROM: James Roscoe, M.A.

SUBJECT: Native American Contact List and Sacred Lands Database Search:
Mattole River Bridge Replacement Project, Honeydew, Humboldt County, CA

PAGES: 2 (cover and 1 map)

Dear Debbie,

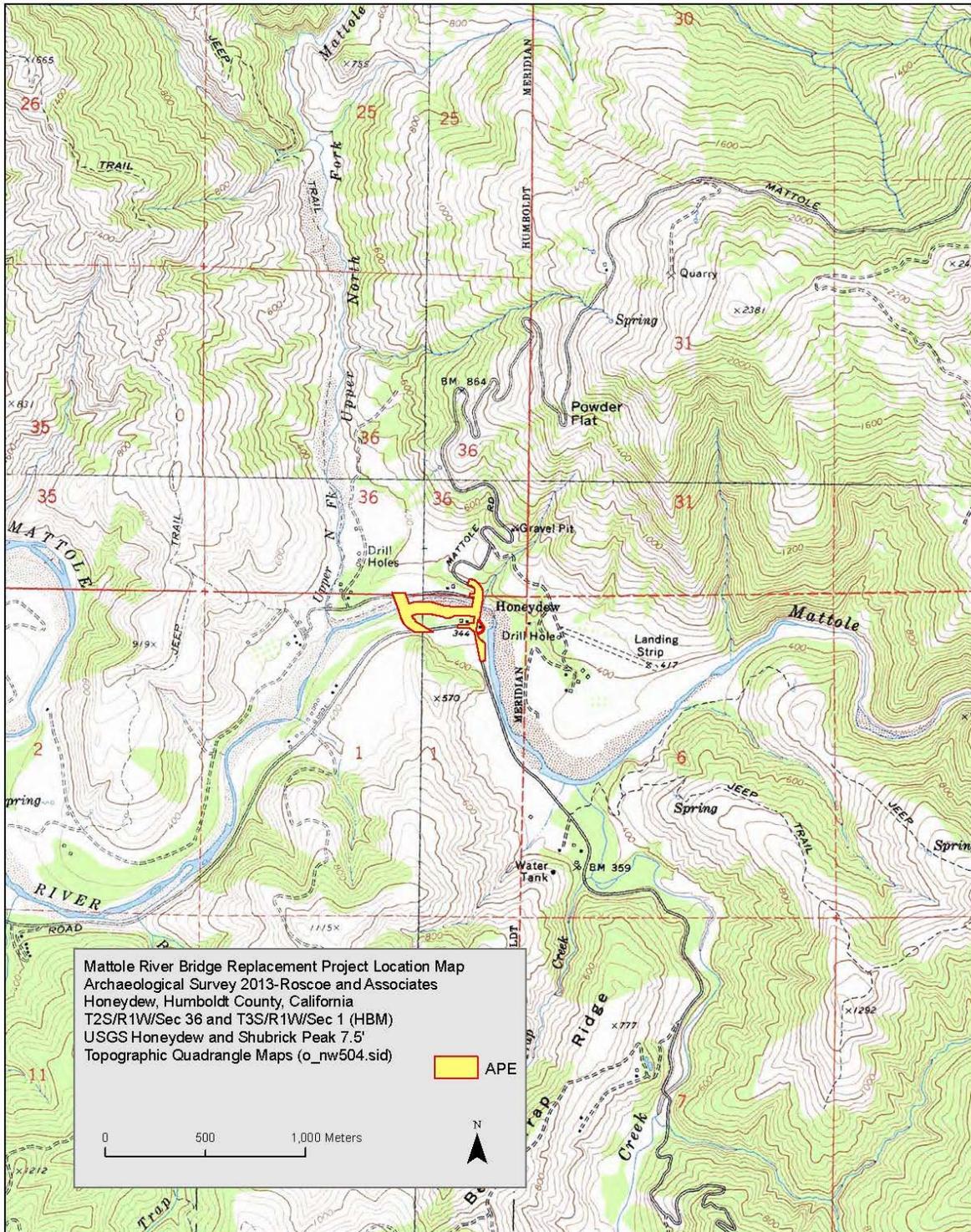
Roscoe and Associates will be conducting a cultural resources investigation for the Honeydew Bridge Replacement project located near the community of Honeydew in Section 1, Township 3 South, Range 1 West, and Section 36, Township 2 South and Range 1 West. The location is shown on the accompanying Honeydew and Shubrick Peak 7.5' USGS quadrangle map.

I would greatly appreciate a list of Native American contacts and a search of the sacred lands database for previously identified sites of concern within the project area or a one-half mile radius.

Thank you for your assistance.

Sincerely,

James Roscoe, M.A.
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95524
Voice (707) 845-5239
Fax (707) 826-4336



June 27, 2013

Distribution List

1. Bear River Band of Rohnerville Rancheria –Chairperson; Edwin Smith, Environmental Coordinator/Cultural; Erika Collins, THPO
2. InterTribal Sinkyone Wilderness Council – Hawk Rosales, Executive Director

Dear Tribal Representative,

Under contract with the Humboldt County Public Works Department, Roscoe and Associates is conducting an archaeological cultural resources investigation for the Mattole River Bridge Replacement Project. This project is located in the community of Honeydew, in Section 1, Township 3 South, Range 1 West, and Section 36, Township 2 South and Range 1 West. The location is shown on the accompanying Honeydew and Shubrick Peak 7.5' USGS quadrangle map.

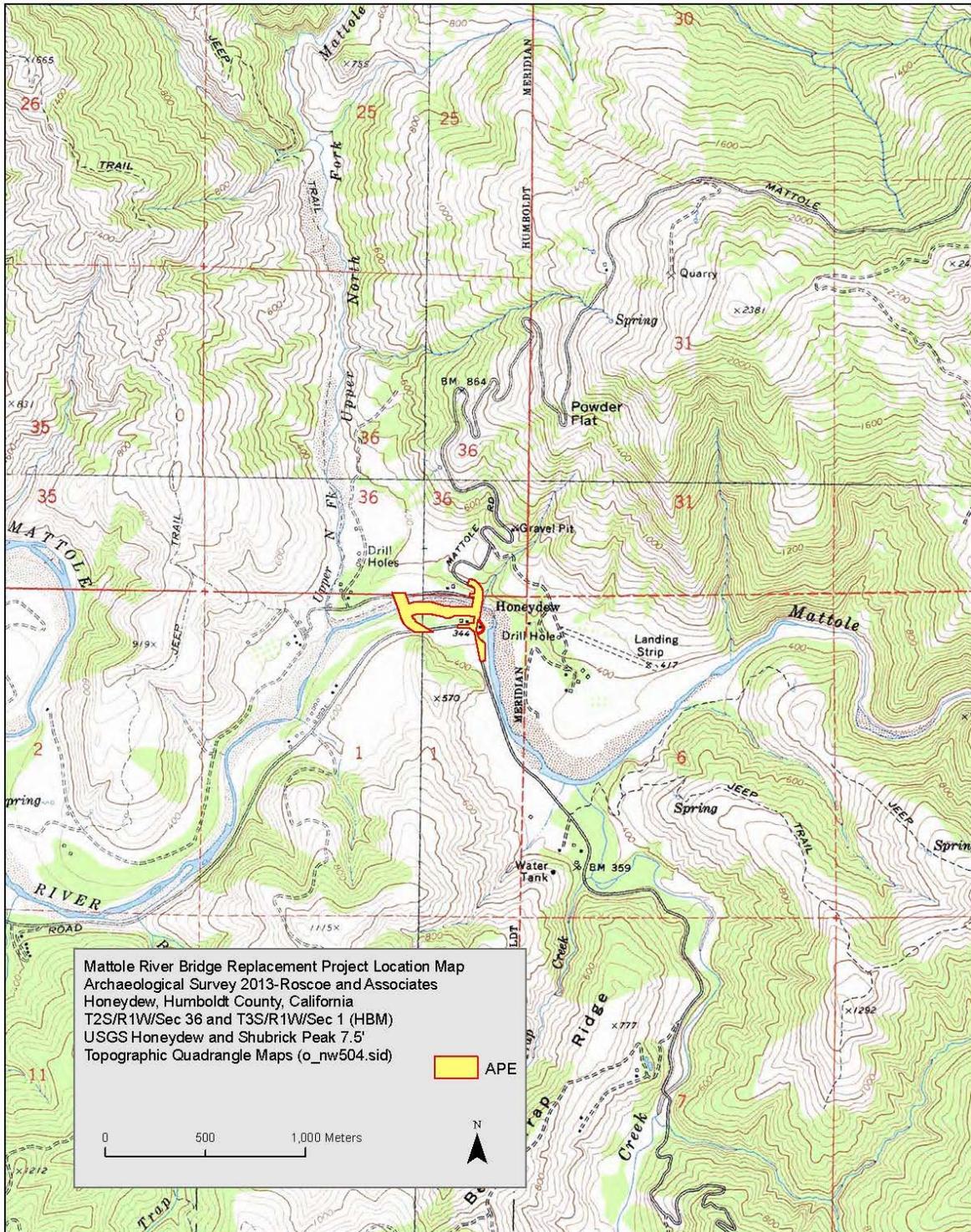
This project action is to replace the existing steel truss bridge (Bridge No. 04C0055) which was evaluated in May 2013 by JRP consulting and found eligible for listing in the National Register of Historic Places. Because the project will be funded by Caltrans, a project Area of Potential Effects (APE) has been delineated. The horizontal limits of this area are aligned with the existing roadway and measure approximately 1000 feet long, with varying width between 35, 85 and 110 feet. This APE includes the bridge replacement and staging areas and is aligned with the existing roadway.

We plan to conduct a cultural resources investigation of the APE in June and July and would appreciate any information the tribe may have regarding the protection of Native American cultural resources in or near to this project area. If you have any information, concerns or questions regarding this investigation, please contact James Roscoe.

Sincerely,

James Roscoe, M.A.

Enclosures (1)



STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

1650 Harbor, Suite 100
WEST SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



June 18, 2013

James Roscoe
Roscoe and Associates
3781 Brookwood Drive
Bayside, CA 95525

Sent by Fax. 707-826-4336

Number of Pages: 2

Re: Mattole River Bridge Replacement Project, Honeydew, Humboldt County

Dear Mr. Roscoe:

A search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the presence of Native American traditional cultural places or sites in the APE. Enclosed is a list of Native American individuals/organizations who may have knowledge of traditional cultural places in your project area. This list should provide a starting place in locating any areas of potential adverse impact.

The NAHC makes no recommendation or preference of any single individual, or group over another. All of those on the list should be contacted, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

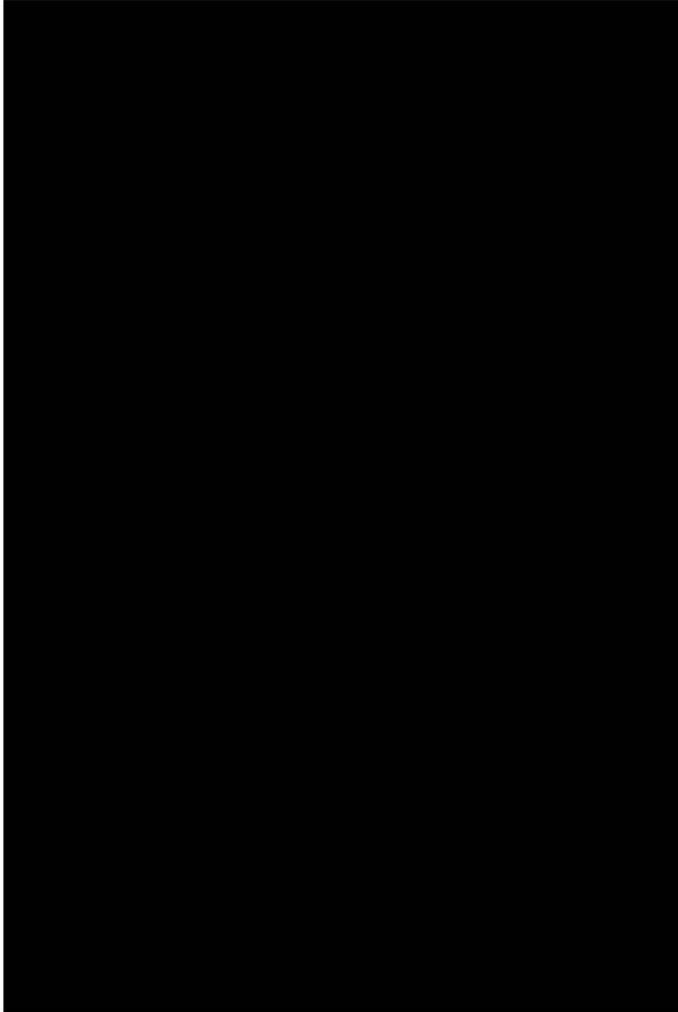
If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: rw_nahc@pacbell.net

Sincerely,

A handwritten signature in black ink that reads "Robert Wood".

Robert Wood
Associate Government Program Analyst

**Native American Contact List
Humboldt County
June 18, 2013**



This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Mattole River Bridge Replacement Project, Honeydew, Humboldt County



**COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
1106 Second St. Eureka, CA 95501**

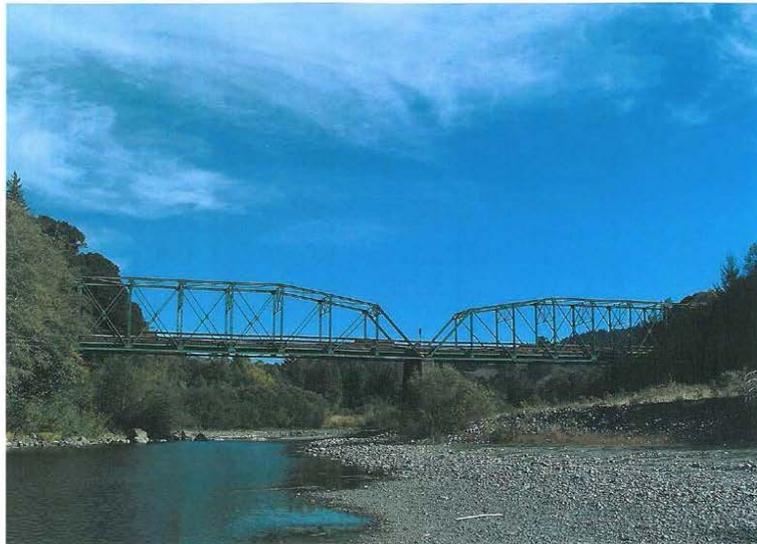
NOTICE OF PUBLIC MEETING

Honeydew Bridge Replacement Project

WHEN: JANUARY 23 – 7:00 PM

WHERE: HONEYDEW ELEMENTARY SCHOOL

The Humboldt County Department of Public Works is holding a public meeting to discuss the proposed bridge replacement alternatives on Mattole Road at Honeydew



If you are unable to attend the meeting and have questions or comments, please mail them to:

Engineering
Humboldt County Department of Public Works
1106 2nd Street
Eureka, CA 95501

or contact Chris Whitworth, at (707) 445-7377. We hope that you can attend the meeting to provide input on the proposed project.

Chris Whitworth

MATTOLE UNIFIED SCHOOL DISTRICT
COMMUNITY REQUEST FOR SCHOOL FACILITIES USE

Name of Organization: County Public Works Date: 1-23-13 ^{12/27/12}

Address: _____ Phone: 445-7377

Purpose of Use: Meeting for Honeydew Bridge Admission Fee: - 0 -

Number Expected: 75 approx Materials to be sold? [] Yes [X] No

Dates and Times of Requested Use:

1-23-13 From 7PM To 9:PM

From _____ To _____

From _____ To _____

Please check the facilities which are being requested for use. If audio/visual equipment is requested, specify on the lines next to "Other". There is an additional charge for use of equipment.

Site Honeydew School

Multi-Purpose Room _____ Cafeteria _____

_____ Classroom # _____ Other _____

_____ Staff Lounge _____

ashmoorekaren@
yahoo.com

The applicant agrees that the use of Mattole Unified School District's facilities shall be in accordance with the rules and regulations of the Board of Trustees and Laws of the State of California. Note: Any conflict in use of facilities will be resolved with school use taking priority over all requests by outside applicants.

Signature of Applicant: Chris Whitworth

Phone: 445-7377

APPROVED: Lauren Shurts
Superintendent/Principal

Date: 12/27/12

FOR BUSINESS OFFICE ONLY: No Charge Facility Fee \$ _____
Equipment Fee \$ _____
Labor Fee \$ _____
Total Fees \$ _____

**HOLD HARMLESS AND INDEMNIFICATION AGREEMENT
"HIGH RISK ACTIVITY"**

Notwithstanding any insurance coverage which may be in effect, and in addition to any additional undertakings referred to herein, Applicant agrees at all times to protect, indemnify, and hold Mattole Unified School District, its Board of Trustees, officers, members, representatives, agents, guests, invitee, and/or employees free and harmless, and to provide legal defense, from any and all liabilities, claims, losses, judgments, damage, demands or expenses resulting from the Applicant's use or occupancy of the District's facilities and /or the active or passive negligence of the Applicant or of the District, its Board of Trustees, officers, members, representatives, agents, guests, invitee, and /or employees, specifically including, without limitation, any liability, claim, loss, judgment, damage, demand, or expense, arising by reason of

1. the loss of or damage to any of the District's facilities including any building, structure, or improvement thereon, or any equipment to be used therein;
2. the injury to or death of any person including, but not limited to, the officers, members, representatives, agents, guests, invitee, and /or employees of the Applicant or of the District; or
3. damage to any property arising from the use, possession, selection, delivery, return, condition or operation of the District's facilities. Applicant further agrees to reimburse the District for all liabilities, claims, losses, judgments, damage, demands, expenses, fines, penalties, including reasonable attorneys' fees imposed or incurred by the because of the Applicant's use or occupancy of the District's facilities and/or active or passive negligence of the Applicant or of the District, its Board of Trustees, officers, members, representatives, agents, guests, invitee, and/or employees

Applicant agrees to defend, indemnify and hold harmless the Mattole Unified School District, its Board of Trustees, Officer, Employees and Agents from any and all losses or injuries arising from, or allegedly arising from, the negligence of the Applicant, its Employees and /or Agents while Participating and or Teaching Aikido in the MUSD multi-purpose room.

CHRIS WILKINSON
Name

12/27/2012
Date

Chris Wilkinson
Signature

**HONEYDEW BRIDGE REPLACEMENT STUDY
PUBLIC MEETING**

Name

Contact Information (address, phone, email)

Jessica Wygal	629-3560
Scott & Tina Davies	499-5410 ougwest@suddenlink.net (48000 Mattole Rd)
Karen Ashmore	629-3230 ashmorekaren@gmail.com
Jason Evans	629-3560
PETER MARSHALL	petermarshall47@gmail.com
Hope Wright	hoperaserite@hotmail.com
Dylan Mattole	599-1467
Maureen Catalina	catalinaranch@aol.com
Bob Shurin	44670 Mattole Rd P.O. Box 27
Jami Dohler	7076299994
Linn + Bert Lundby	P.O. Box 29 Honeydew
Clair Troner	4062 Winder Ridge Rd. Garberville 95542
SUBEE McCANTS	PO 132 Honeydew CA 95545
Raymond M Etter	P.O. Box 61 Honeydew, CA 95545 707-429-2420 matter90@hotmail.com
DELORES J. ROSCOE	255 ROSCOE RD. PETROLIA, CA 95558
Mary Otter	P.O. Box 57 Honeydew 95545
Jona Kavanaugh	Eureka CA 3709 Seale St 95503
Jean For Wilson	6825 Vista Rd Eureka CA 95503

Honeydew Bridge Replacement Project
Summary of Phone Calls received in January 2013 regarding the
proposed project

Dennis Smith – Honeydew

“Just build the bridge”. He does not think that public opinion should change our plans

Pete Marshal – Honeydew

Was concerned about rumors that the bridge was going to be moved. Once he was told that the new bridge would go back on the same alignment he was fine with it.

Lois Juodika – Honeydew

Was concerned about rumors that the bridge was going to be moved. She felt somewhat better once she knew that the bridge would go back in the same location.

Spoke with her again later – she wanted to express her concerns that a two lane bridge would encourage people to speed.

Jessica Wygal – Honeydew

Concerned about the old oak tree at the abutment.



2850 Spafford Street • Davis, CA 95618 • (530) 757-2521 • (530) 757-2566 Fax • www.jrphistorical.com

Stephen R. Wee, Principal / President
Rand F. Herbert, Principal / Vice President
Meta Bunse, Partner
Christopher D. McMorris, Partner
Bryan T. Larson, Partner

August 23, 2016

Humboldt County Historical Society
703 8th Street
Eureka, CA 95501

Eureka Heritage Society
P.O. Box 1354
Eureka, CA 95502-1354

Clarke Historical Museum
240 E. Street
Eureka, CA 95501

Mattole Valley Historical Society
P.O. Box 144
Petrolia, CA 95558

To Whom It May Concern:

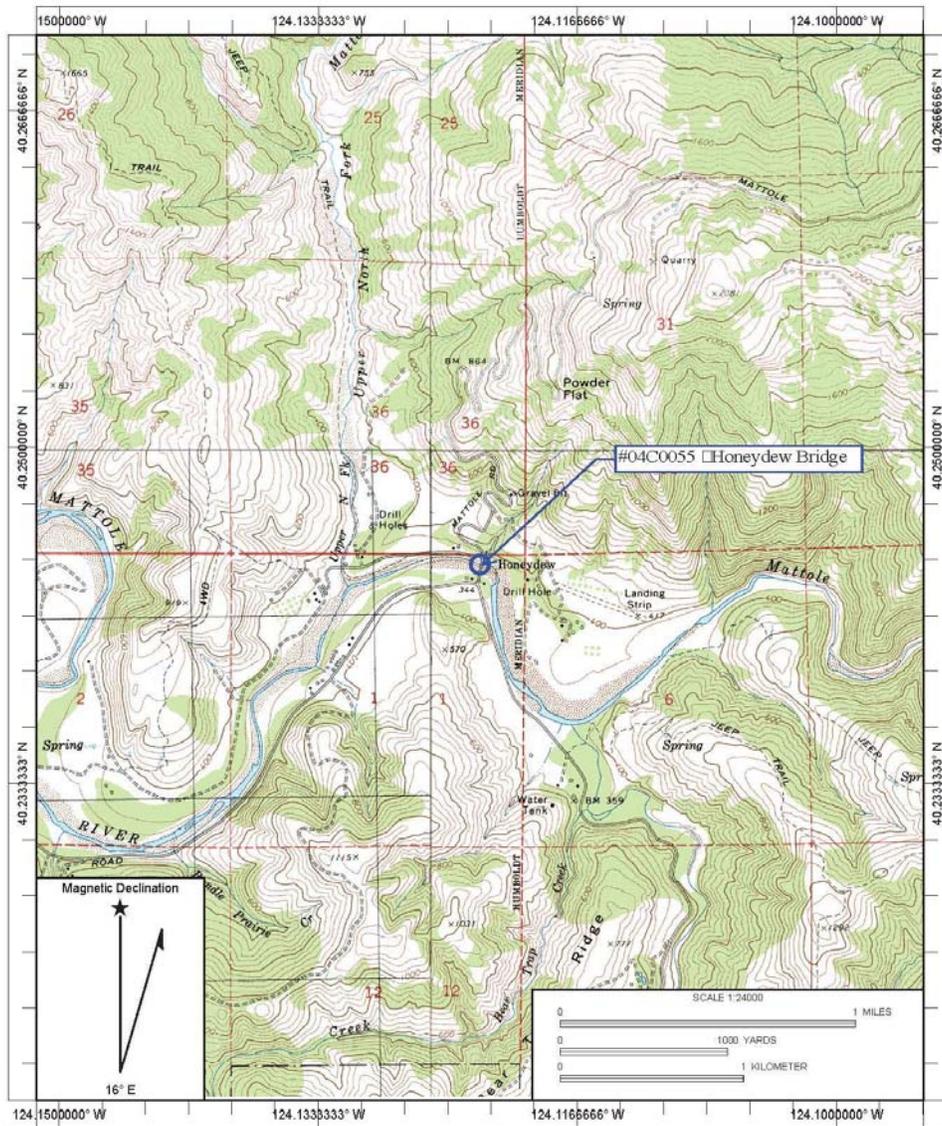
The Humboldt County Department of Public Works is planning to replace the Honeydew Bridge on Mattole Road over the Mattole River (Bridge No. 04C0055) (see enclosed map). The engineering design and environmental review phase of the project are in progress. The project will require construction of a temporary bridge downstream from the existing structure, and thus the project area includes the bridge, a portion of the river bed, adjacent roads, and properties adjacent to the bridge. This letter is part of the public outreach effort for this project.

This project is receiving federal funding through the Caltrans local assistance program, making it subject to compliance with Section 106 of the National Historic Preservation Act, and its regulations in Title 36 Code of Federal Regulations Part 800 (36 CFR 800), as well as other environmental laws / regulations. It is also subject to compliance with the California Environmental Quality Act (CEQA), as it pertains to historical resources. The Honeydew Bridge is a camelback through truss bridge built in 1920 and has been determined eligible for listing in the National Register of Historic Places. Demolition of this historic bridge would be considered an adverse effect as defined under 36 CFR 800. JRP Historical Consulting, LLC has been retained to assist the County with Section 106 compliance and CEQA compliance for historical resources.

JRP previously sent a letter to your organization about this project in 2013. This current letter is being sent to further solicit information or concerns regarding historic resources that could be affected by this project. If you have information or comments, please respond in writing to the address provided above, or via email at cmcmorris@jrphistorical.com, within the next thirty days. Thank you.

Sincerely,

Christopher McMorris



Name: HONEYDEW
 Date: 2/6/2012
 Scale: 1 inch equals 2000 feet

Location: 040.2440322° N 124.1229472° W NAD 83
 Caption: BPMP 2012
 #04C0055 - Honeydew Bridge

Copyright (C) 1997, Maptech, Inc.

From: [Steven Melvin](#)
To: ["clarkehistorical@att.net"](mailto:clarkehistorical@att.net)
Subject: Honeydew Bridge
Date: Tuesday, September 06, 2016 11:14:34 AM
Attachments: Honeydew Bridge - Interested Parties Letter 08 23 16.pdf

Greetings,

On August 23, 2016, JRP Historical Consulting, LLC sent your organization a letter regarding the Humboldt County Department of Public Works' plan to replace the Honeydew Bridge on Mattole Road over the Mattole River (see attached letter). The letter was soliciting any concerns or comments you might have regarding historic resources that could be affected by this project. I'm following up with this email to ensure that said letter was received and to ask if you had any concerns or comments at this time.

Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

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From: [Clarke Museum](#)
To: [Steven Melvin](#)
Subject: Re: Honeydew Bridge
Date: Wednesday, September 07, 2016 8:48:59 AM

Hi Mel,

letter was received and no comment is our reply.

Thanks,

Ben Brown
Director/Curator
Clarke Historical Museum
Phone - 707-443-1947
Fax - 707-443-0290
240 E. Street Eureka, CA 95501
www.clarkemuseum.org

From: Steven Melvin <SMelvin@jrphistorical.com>
To: ""clarkehistorical@att.net"" <clarkehistorical@att.net>
Sent: Tuesday, September 6, 2016 11:14 AM
Subject: Honeydew Bridge

Greetings,

On August 23, 2016, JRP Historical Consulting, LLC sent your organization a letter regarding the Humboldt County Department of Public Works' plan to replace the Honeydew Bridge on Mattole Road over the Mattole River (see attached letter). The letter was soliciting any concerns or comments you might have regarding historic resources that could be affected by this project. I'm following up with this email to ensure that said letter was received and to ask if you had any concerns or comments at this time.

Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

From: [Steven Melvin](#)
To: ["eurekaheritagesociety@gmail.com"](mailto:eurekaheritagesociety@gmail.com)
Subject: Honeydew Bridge
Date: Tuesday, September 06, 2016 11:15:01 AM
Attachments: [Honeydew Bridge - Interested Parties Letter 08 23 16.pdf](#)

Greetings,

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Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

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From: [Steven Melvin](#)
To: ["info@humboldthistory.org"](mailto:info@humboldthistory.org)
Subject: Honeydew Bridge
Date: Tuesday, September 06, 2016 11:13:04 AM
Attachments: [Honeydew Bridge - Interested Parties Letter 08 23 16.pdf](#)

Greetings,

On August 23, 2016, JRP Historical Consulting, LLC sent your organization a letter regarding the Humboldt County Department of Public Works' plan to replace the Honeydew Bridge on Mattole Road over the Mattole River (see attached letter). The letter was soliciting any concerns or comments you might have regarding historic resources that could be affected by this project. I'm following up with this email to ensure that said letter was received and to ask if you had any concerns or comments at this time.

Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

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From: [Steven Melvin](#)
To: ["mattlehistory@frontiernet.net"](mailto:mattlehistory@frontiernet.net)
Subject: Honeydew Bridge
Date: Tuesday, September 06, 2016 11:13:55 AM
Attachments: [Honeydew Bridge - Interested Parties Letter 08 23 16.pdf](#)

Greetings,

On August 23, 2016, JRP Historical Consulting, LLC sent your organization a letter regarding the Humboldt County Department of Public Works' plan to replace the Honeydew Bridge on Mattole Road over the Mattole River (see attached letter). The letter was soliciting any concerns or comments you might have regarding historic resources that could be affected by this project. I'm following up with this email to ensure that said letter was received and to ask if you had any concerns or comments at this time.

Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

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From: matttolehistory@frontiernet.net
To: [Steven Melvin](#)
Subject: Re: Honeydew -use this email
Date: Wednesday, September 21, 2016 9:08:57 AM

Dear Mr. Melvin (Mel),

[I sent this email to you late last night and forgot my signature. I'm sorry—delete earlier email, use this one—thank you!]

Thank you for the letter and this follow-up email. I did receive the paper copy in late August.

Re-reading the letter, I see again that it is not about preventing or delaying the work. I have spoken with our Humboldt County Public Works Dept. and found that the work really must go on... the fact that the Honeydew Bridge is eligible for listing in the National Register of Historic Places doesn't mean it can be saved. So, since that information was passed on to the good people of Honeydew, I have not gotten feedback—people seem to be resigned to the loss of this unique one-lane bridge.

However, you could clarify for me what “CEQA compliances” or “compliance with Section 106 of the National Historic Preservation Act” might look like. All the mitigations to damaged historical resources as mentioned in the middle paragraph of the letter must suggest some kind of possible actions to preserve the bridge's history.

What might these actions be... and is there funding to help out the locals in pursuing them? I'm thinking of: more research with Honeydew people and in county records to make some sort or memorial publication about the bridge. Or a big party on the bridge with plenty of photo-ops, the weekend before work is to begin. Or a durable plaque set up at the beginning to the new bridge. Or advertising the bridge to some local rich pot-growers who could afford to buy it and use it on their private property, as long as they allowed the public to come visit the attraction (only for foot, bicycle, horse, or motorbike/ATV traffic). Probably not! But really... can the bridge be re-used? Could it be given away to a location really needing a bridge, if those people could afford to install it? After removing all the dangerous old paint, of course.

There is nothing to compare to just keeping the old bridge. At the very least, the County might rebuild with another one-lane bridge. It's symbolic of our preferred isolation in the Mattole Valley. Why would we live here if we didn't like being somewhat distant from the outside world? They could save a lot of money building a smaller bridge, too! And if they considered that too archaic and dangerous, they could add a modern safety solution such as red and green lights on each end, activated by motion detectors on the other end.

Now maybe you think I'm getting a little silly, but... we have been told there is nothing we can do to save the bridge as it is. Maybe you can give some more serious answers as to where we go from here in terms of assuring historical preservation.

Thank you very much!
~Laura Cooskey

Mattole Valley Historical Society
PO Box 144
Petrolia, CA 95558

707-601-7300 (message)

email: mattolehistory@frontiernet.net

blog: www.mattolehistory.wordpress.com

From: Steven Melvin
Sent: Tuesday, September 06, 2016 11:13 AM
To: 'mattolehistory@frontiernet.net'
Subject: Honeydew Bridge

Greetings,

On August 23, 2016, JRP Historical Consulting, LLC sent your organization a letter regarding the Humboldt County Department of Public Works' plan to replace the Honeydew Bridge on Mattole Road over the Mattole River (see attached letter). The letter was soliciting any concerns or comments you might have regarding historic resources that could be affected by this project. I'm following up with this email to ensure that said letter was received and to ask if you had any concerns or comments at this time.

Thank you,
Mel

Steven J. "Mel" Melvin
Staff Historian
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618
smelvin@jrphistorical.com
Office: 530.757.2521x12
Fax: 530.757.2566

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Chris McMorris

From: Chris McMorris
Sent: Tuesday, October 11, 2016 3:08 PM
To: 'matttolehistory@frontiernet.net'
Cc: Steven Melvin; 'Bundschuh, Andrew'
Subject: Honeydew Bridge

Ms. Cooskey,

Mel passed along your email to me for response. I am a Partner and Architectural Historian at JRP. We appreciate receiving your email regarding the Honeydew Bridge project. I am copying Andrew Bundschuh on this email. Andrew is the Environmental Permitting and Compliance Manager in the Humboldt County Public Works, Natural Resources Division. JRP is working with Andrew on the historic resources compliance documentation for this project. At this point in the process, I am responding to you based on my knowledge of the process and experience with past projects.

You asked about the compliance process under Section 106 and CEQA. The letter sent to you was specifically part of the process for project compliance under Section 106. This is part of the project outreach to potentially interested parties. It is also used as part of the process for project compliance with CEQA. As you are likely aware, the County is receiving funding from Caltrans for the Honeydew project. This is referred to as a local assistance project. Caltrans, in turn, receives federal funding. This federal funding requires the project to comply with Section 106. The steps for Section 106 compliance include identification of historic properties, i.e., properties eligible for listing in the National Register of Historic Places, and assessment of project effects to historic properties. If a project is going to have an adverse effect on a historic property, then there is a process by which steps are taken to avoid and/or mitigate that adverse effect. Mitigation measures to address an adverse effect can vary depending on the type of property affected and the effect the project is having. Mitigation measures need to be commensurate to the scope of the project, the effects, and the type / significance of the historic property affected. Caltrans enters into a Memorandum of Agreement (MOA) with the State Historic Preservation Officer (SHPO) to formally stipulate the agreed upon mitigation measures. In the case of local assistance project, the County would be involved with the MOA and be responsible for carrying out the mitigation.

The Honeydew Bridge is considered as a historic property under Section 106. Demolition of the historic bridge would be considered an adverse effect. While I am aware that the issues of avoiding this adverse effect have been under consideration, so is the process of possible mitigation. Your input is helpful. One standard mitigation measure that is performed for historic bridge replacement projects is the preparation of a formal documentation of the structure following the standards of the Historic American Engineering Record (HAER) (established by the National Park Service). This includes a written report regarding the history of the bridge, accompanied by archive-quality photographs. The HAER report is then distributed to appropriate repositories so that it can be made available to the public. Other mitigation measures I've seen employed for historic bridges being replaced depended on input from interested parties, but all were commensurate with the project. Mitigation measures are not usually compensatory in a way that does not directly relate to the bridge. In the past, I've seen mitigation measures that include other sorts of public history type publications, plaques, and salvaged materials from the historic bridge. I recall one project where the historic bridge was moved, but that was a much smaller bridge than the Honeydew Bridge and it wasn't moved far. Sometimes design elements of the replacement bridge can also be considered to be part of the mitigation. As the process continues, JRP will assist the County to identify feasible mitigation measures and your further input will be welcome.

I suggest contacting the County directly regarding the project's CEQA compliance process.

Thanks again for your input.

Chris

Christopher McMorris
Partner

JRP
HISTORICAL
CONSULTING, LLC
2850 Spafford Street
Davis, California 95618
530-757-2521 ext. 30
530-757-2566 fax
www.irphistoric.com

From: [Ellen E Taylor](#)
To: [Bundsuh, Andrew](#)
Cc: [Lauracooskey](#); lauracooskie@frontiernet.net; [Mattole History](#)
Subject: Honeydew Bridge
Date: Wednesday, March 08, 2017 8:49:08 PM

I am a Petrolia resident. I use the Honeydew Bridge frequently. I enjoy crossing it, hearing the sounds the planks make, watching the river through the trusses.

I am not in favor of replacing it. I was against the Willets bypass and am against widening the road through Richardson Grove. From the paragraph description of the project part of the problem is that the bridge hasn't been maintained.

When I don't maintain my house I pay for it, in expensive repairs at a later time. The bridge has certainly withstood the test of time unlike other bridges across the Mattole.

What is the heavy equipment that can't pass? If it's really too big to cross the bridge can't it come in one of the other ways?

Infrastructure tends to be condemned and replaced far too frequently. Take the Mattole school building, replaced 40 or so years ago by far less sturdy buildings. Or houses after the earthquake of 1992, same thing. It means more money for corporations who get the contracts, rather than local people caring for their own infrastructure (the circumstances under which this bridge was undoubtedly built 97 years ago).

Let people slow down, drive smaller rigs, avoid bumping into the sides (this happens on lots of bridges of course) and reinforce and maintain this beautiful and nostalgic old bridge.

Yours

Ellen Taylor

From: [Kris Schuster](#)
To: [Bundschuh, Andrew](#)
Subject: Honey dew bridge
Date: Thursday, March 09, 2017 7:50:07 AM

Hello,

Thanks for hearing us country folk out on what we would like our bridge to be. The old Honey Dew bridge is such an institution in this valley, I know it doesn't seem much but when there isn't much infrastructure to begin with what little you have you hold very dear.

I have only one request as far as the bridge goes. Can we name it after William Etter senior? He was a valley patriarch for decades and built many of the roads to people's homesteads. He passed last year, which was a huge loss felt by all in the Mattole. I feel after all he's done for Honey Dew the bridge should bear his name.

Thanks for your time.

Kris Schuster
39803 Mattole rd
Honey Dew
707.629.3662

From: [Claire Trower](#)
To: [Bundschuh, Andrew](#)
Subject: I vote for Design #1 for the new Honeydew Bridge
Date: Thursday, March 09, 2017 8:13:18 AM

...and I remember there were photos of the 3 choices that were sent out where we voted previously. Could you please provide those pictures again...and perhaps the results of that vote? I seem to remember that #1 was the 'fav' at the time.

I also remember that a person could vote repeatedly for their favorite (of course this wasn't widely known), so perhaps there should be a better voting method provided. I couldn't attend the meeting due to Wilder Ridge Road being closed between me and the 'Dew.

Thanks for holding the meeting.

Best regards,

Claire Trower
4062 Wilder Ridge Road
Garberville, CA 95542
(actually should be getting my mail from 95545)

From: [Marcia](#)
To: [Bundschuh, Andrew](#); [Toomey, Douglas](#)
Subject: Honeydew bridge design
Date: Thursday, March 09, 2017 10:00:40 AM

Aesthetically I prefer the #2 option, with the welded girder and low guard rail. I like to look over the river as I cross it.

However more importantly I feel the design that best can withstand a 9.0 earthquake is preferable. The third option with an exclusively concrete underpinning could be vulnerable to a really huge quake. And the first option has quite a superstructure, which would behave how in a huge quake?

The recent failure of the Oroville Dam with state representatives saying Who could have guessed that California would have so much rain? Well California has a history of just such super wet periods and there was no guessing necessary, just a quick double check of historical records. Yes rare but definitely written about.

Scientists say our area is vulnerable to 9.0 earthquakes although more likely high 8's at the southern end of the Gorda fault. The Honeydew Bridge should be built to a standard that can withstand the slight possibility of such extreme stress.

Contact Doug Toomey at the University of Oregon, who studies earthquakes in our region, if you need up to date information. His email is: drt@uoregon.edu

Thanks for presenting three designs for review by the communities affected. Good luck with your decision.

Sincerely,

Marcia Ehrlich

Petrolia 95558

From: [brianna owens](#)
To: [Bundschuh, Andrew](#)
Subject: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project
Date: Thursday, March 09, 2017 10:28:33 AM

To whom it may concern,

My husband and I were unable to attend the meeting and weigh in on this project, I hope this email will suffice.

Given options for the replacement bridge, we (my family and I) agree it should keep the historical feel. With that, we choose/ Vote for the first option, # **1. Two-span steel camelback through truss bridge.**

It is what our friends and family think of when driving through Honeydew to visit us, The truss bridge the connects us is symbolic to Honeydew.... Please choose the 1st option. For our consideration, thank you.

Warmly,
Jason & Brianna

www.briannaowens.com

From: [brianna_owens](#)
To: [Bundschuh, Andrew](#)
Subject: Re: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project
Date: Wednesday, March 15, 2017 10:38:15 AM

Thanks you Andrew for getting back to us.

I would like to add, What we would really like to see, is the current bridge to stay put, and be maintained, .

If that was an option, that would be our 1st choice... leave the Honeydew bridge where its at... Theres something nostalgic about it, & as i said before, its symbolic to the area. It has been through floods and earthquakes and remains still. Its still a great bridge, and we would love to see I remain.

thanks again...

~Brianna

www.briannaowens.com

On Mar 9, 2017, at 11:40 AM, abundschuh@co.humboldt.ca.us wrote:

Jason and Brianna,

Thank you for your email/comment regarding the Honeydew Bridge Replacement Project.

First, the County and our environmental consultant (North State Resources, Inc.) take every comment seriously and we appreciate that you have taken the time to submit comments and bring forward your ideas, concerns and/or recommendations. Once the comment period has ended (March 15, 2017), the County along with North State Resources will consider all comments received within the public scoping period when preparing the EIR/EA. There will be another public scoping meeting and chance for public input when the draft EIR/EA is completed. The tentative timetable for the draft EIR/EA is late 2017.

Regarding voting for the bridge alternative. We are currently accepting all comments, whether it be for a preferred alternative bridge type or relating to potential impacts to the environment. What I plan to do while we go through the draft EIR/EA process is post a survey/poll online that people can "vote" as it pertains to the preferred alternative. At this point the County is not deciding on the preferred alternative. So you will have time to "officially" place your

vote. However, I will mark your comment down now as a vote for alternative #1 - the steel truss alternative.

FYI, I have attached a PDF showing the alternatives to this email. They will also be posted on the project website at:<http://www.humboldt.gov/HoneydewBridge>

Additional information about the project can also be found on the website.

Again, thank you for your comments and interest in the Honeydew Bridge Replacement Project.

Sincerely,

Andrew Bundschuh

Environmental Permitting and Compliance Manager

Natural Resources Division

Humboldt County Public Works

(707) 445-7741

abundschuh@co.humboldt.ca.us

From: brianna owens [<mailto:bowensphoto@gmail.com>]

Sent: Thursday, March 09, 2017 10:28 AM

To: Bundschuh, Andrew <ABundschuh@co.humboldt.ca.us>

Subject: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project

To whom it may concern,

My husband and I were unable to attend the meeting and weigh in on this project, I hope this email will suffice.

Given options for the replacement bridge, we (my family and I) agree it should keep the historical feel. With that, we choose/ Vote for the first option, # **1. Two-span steel camelback through truss bridge.**

It is what our friends and family think of when driving through Honeydew to visit us, The truss bridge the connects us is symbolic to Honeydew.... Please choose the 1st option. For our consideration, thank you.

Warmly,
Jason & Brianna

www.briannaowens.com

From: [Roxy Kennedy](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge
Date: Thursday, March 09, 2017 10:41:34 AM

Hello Andrew Bundschuh,

I am sorry neither my husband, nor I were able to make the bridge meeting, and do appreciate the request for public input. I have seen the three photos and feel the steel truss one is the most visually appealing and like the historical bridge.

I have not studied the info, but feel that safety should be first priority, and cost second priority. Visual would be last priority. If cost and safety are similar or close, the steel truss would be best bet.

Thank you very much,

Roxanne Kennedy

Jim Bowdoin

hnydew@gmail.com

P O Box 153, Honeydew, CA 95545

650 Old Hindley Ranch Road

From: [dan_rathbun](#)
To: [Bundschuh, Andrew](#)
Subject: honeydew bridge
Date: Thursday, March 09, 2017 10:46:20 AM

i am a 40 year resident of the mattole valley and my preference would be for the truss type bridge.

thanks

little danny rathbun
thbun@mac.com
510-459-7320

From: [dan_rathbun](#)
To: [Bundschuh, Andrew](#)
Subject: Re: honeydew bridge
Date: Thursday, March 09, 2017 10:49:26 AM

of course i forgot to mention that i am 100% in favor of keeping the existing one.

little danny rathbun
thbun@mac.com
510-459-7320

On Mar 9, 2017, at 10:46 AM, dan rathbun <thbun@mac.com> wrote:

i am a 40 year resident of the mattole valley and my preference would be for the truss type bridge.

thanks

little danny rathbun
thbun@mac.com
510-459-7320

From: [Robert Yosha](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Design
Date: Thursday, March 09, 2017 11:45:37 AM

Hello, Mr. Andrew Bundschuh, Environmental Permitting and Compliance Manager.

Sorry I was not able to make it to the Grange for a recent meeting held there devoted to this topic.

I'm writing you today to indicate my strong support for:

Bridge Design Number 1, the camelback through-truss bridge.

I'll leave it at that.

Thanks,
Robert Yosha
28 year full-time Mattole resident/landowner.

From: [Ken Carpenter](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Project
Date: Saturday, March 11, 2017 3:35:16 PM

Dear Mr. Bundschuh:

I live within sight and the sounds of the Honeydew Bridge so am very interested in what is to be done at that site. I would much prefer that the present structure not be replaced because it serves its function well, slows traffic down and is aesthetically pleasing. However, I will not impede "progress".

My preference among the three designs presented is the one with the overhead truss. I find it to be much more aesthetically pleasing than the other two. It fits the environs very well. The concrete structures are too sterile for my tastes.

The only environmental concern I have pertains to the large oak tree next to the northeast end of the bridge. Care should be taken to ensure that it not be damaged.

Thank you,

Ken Carpenter
125 Old Hindley Ranch Rd.
Honeydew

From: [Corbett Petersen](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge replacement
Date: Wednesday, March 15, 2017 5:20:36 PM

Dear Sir,

I'm writing in regards to the Honeydew Bridge replacement project. I must say that I am disappointed that there seems to be only three options put on the table, rather than a fourth; rehabilitate the current bridge. The bridge is nearly a century old, and like nearby Fernbridge, has considerable historical value, is still in continuous daily use, and provides a vital link to interior areas of the county. I would much prefer to see the current structure rehabilitated rather than replaced. However, if it is absolutely impossible for that to happen, I would prefer that it be replaced with the truss design, if only for aesthetic "old world charm" reasons.

The bridge is nearly a century old and in some recent CalTrans documents is eligible for Landmark registration. I urge the county to consider allowing that to happen and allow various other groups to ally with the county in an effort to save the bridge. It is nearly a century old and is a testament to design and strength of other bridges (much like Fernbridge) throughout the state that have been gone for decades. However again if it is absolutely impossible to save, being that funding for a new structure is going to be difficult as one consideration, why not then build a replacement to the east of the current Honeydew Bridge? Or perhaps allow it to stand, maintenance permitting, to be used as a pedestrian/bicyclist bridge as others in the country (e.g. Bridgeville, Avenue of the Giants)?

Please consider a rehabilitation option for the bridge. There is much history to be saved here as well as in an unusual way provides a "traffic calming" device, being it is a single lane thoroughfare. There are a good number of folks that would like to see it remain, especially those that have had families in the area since the 19th century, like myself. We'd hate to see it go.

Cordially,

Corbett Petersen
Eureka

From: [Peter Marshall](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Comments
Date: Wednesday, March 15, 2017 6:08:35 PM

Dear Mr. Bundschuh,, Thank you for the opportunity to comment on the bridge project. Alternative #1 (double camelback truss) is preferred due to its mitigation of the cultural diminishment resulting from the removal of "the old bridge."

Mention of Western Pond Turtle, et al. prompts me to urge utmost care for their survival and well being during harsher phases of construction such as pile driving/drilling.

Thank you.

Peter Marshall

Honeydew

From: [Margaret Fraser](#)
To: [Bundschuh, Andrew](#)
Subject: Please preserve the Honeydew Bridge!
Date: Wednesday, March 15, 2017 6:38:51 AM

Hello,

I am a Petrolia resident and residential property owner. I use the Honeydew Bridge frequently, and crossing it is always one of my favorite parts of my drive in and out of the Mattole Valley.

I am not in favor of replacing it. The bridge I feel can be saved/restored cheaper than a replacement. What is the heavy equipment that can't pass? If a vehicle/equipment is really too big to cross the bridge, then it is likely that it is unsafe for them to drive the many switchbacks between Honeydew and HWY 101. There are alternate routes to take.

The Honeydew bridge has considerable historical and aesthetic value. Please preserve this nostalgic piece of Humboldt County "back country", and reinforce and maintain this beautiful old bridge.

Thank you,

Margaret Fraser

Appendix C Memorandum of Agreement
(Fully Executed December 27,
2017)

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA**

WHEREAS, the Federal Highway Administration (FHWA) has assigned and California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and

WHEREAS, pursuant to the January 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of "agency official" to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR 800 and is responsible for oversight of District environmental responsibilities. To provide for effective compliance, day-to-day responsibilities and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and

WHEREAS, Caltrans and the County of Humboldt Department of Public Works (County) propose to implement the federally funded Honeydew Bridge Replacement Project (Undertaking) on Mattole Road in Humboldt County as described in detail in Attachment A, which would replace the Honeydew Bridge (Bridge No. 04C0055), including demolition of the existing structurally deficient and functionally obsolete one-lane structure and construction of replacement two-lane structure on existing alignment; and

WHEREAS, the Undertaking's Area of Potential Effects includes the maximum existing proposed right-of-way, easements, improved properties subject to temporary or permanent changes in access (ingress and egress), and areas where visual or audible changes could occur outside the required right-of-way, as depicted in Attachment B; and

WHEREAS, Caltrans has determined that the Undertaking will have an adverse effect on Honeydew Bridge, a property determined eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion C, as a rare example of a Camelback truss bridge (with concurrence from the California State Historic Preservation Officer), and therefore a historic property as defined in 36 CFR §800.16(I)(1); and

WHEREAS, Caltrans has consulted with the California State Historic Preservation Officer (SHPO) pursuant to stipulation X.C and XI of the Section 106 PA, and where the Section 106 PA so directs, in accordance with 36 CFR Part 800, the regulation that implements Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. 470f), as amended, regarding the Undertaking's effects on historic properties, has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to 36 CFR §800.6(a)(1), and will file a copy of this Memorandum of Agreement (MOA) with the ACHP in accordance with Stipulation X.C.3.b of the Section 106 PA; and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking in consultation with the SHPO, has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the treatments set forth in Stipulation II of this MOA will take into account the Undertaking's adverse effects on the historic property; and

WHEREAS, Caltrans District 1 and the County have a responsibility to fulfill terms of this MOA, and County is participating as an invited signatory; and

WHEREAS, Caltrans has consulted with the Humboldt County Historical Society, Clarke Historical Museum, Mattole Valley Historical Society, and Eureka Heritage Society on the Undertaking and its possible effects on historic properties pursuant to Stipulations V, VIII, and X of the Section 106 PA; will continue to consult with them and afford them, should they so desire, the opportunity to actively participate in the implementation of the Undertaking itself and this MOA and

WHEREAS, Caltrans has invited the Mattole Valley Historical Society to sign this MOA as a concurring party; and

WHEREAS, Caltrans, has initiated consultation with individuals and groups identified by the Native American Heritage Commission (NAHC) regarding the Undertaking and its effects on historic properties. To date, no Native American individual or group has expressed interest in participating in project efforts. Consultation has been ongoing and Caltrans will continue to consult with identified parties and afford them, should they desire, the further opportunity to actively participate in the Undertaking; and

WHEREAS, the County, in coordination with Caltrans, held public meetings regarding the Undertaking on January 23, 2013 and March 1, 2017, and received responses from the public; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on

historic properties, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated:

STIPULATIONS

Caltrans shall ensure that the following stipulations are implemented:

I. AREA OF POTENTIAL EFFECTS

- A. The Undertaking's Area of Potential Effects (APE) was designed in accordance with Stipulation VIII.A of the Section 106 PA and is depicted in Attachment A of this MOA. The APE includes the maximum existing or proposed right-of-way for all alternatives under consideration, easements (temporary and permanent), all improved properties subject to temporary or permanent changes in access (ingress and egress), and areas where visual or audible changes could occur outside the require right-of-way.
- B. If modifications to the Undertaking subsequent to the execution of this MOA necessitate the revision of the APE, District 1 and Humboldt County will consult with Caltrans and the SHPO for no more than 15 days to reach agreement on the proposed revisions. If Caltrans, District 1, Humboldt County and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with Stipulation IV.C below. If Caltrans, District 1, Humboldt County and the SHPO reach mutual agreement on the proposed revisions, then District 1 and Humboldt County will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the Section 106 PA no later than 30 days following such agreement. Any additional required identification and evaluation efforts necessitated due to changes to the APE will be undertaken consistent with the requirements of Stipulation VIII.B and VIII.C of the Section 106 PA. Amendment of the APE will not require an amendment to the MOA. The revised APE and supporting documentation shall be incorporated into Attachment A to this MOA.

II. TREATMENT OF HISTORIC PROPERTIES

- A. RECORDATION. Caltrans District 1 shall ensure that the County shall record and document the Honeydew Bridge following the Level 1 standards of the Historic American Engineering Record (HAER). This recordation and documentation will be conducted as follows:
 - 1. Prior to commencement of any work that could adversely affect characteristics of the Honeydew Bridge that qualify it as an historic property, the County shall ensure that the Honeydew Bridge shall be the subject of recordation by photography following the standards of the HAER. Large format photographs taken of the bridge

that will display the bridge in context, as well as its character-defining features. Photographs will be processed for archival permanence standards in accordance with HAER photographic specifications. Photographic views will include:

- a. Contextual views of bridge in its setting
 - b. Elevation views
 - c. Significant engineering and design elements
 - d. Piers and abutments
2. The County shall make a reasonable and good-faith effort to locate historic construction drawings of the Honeydew Bridge. If these drawings are located, the County shall photographically reproduce plans, elevations, and selected details from these drawings in accordance with HAER photograph specifications. If they are legible in this format, reduced size (8-1/2" by 11") copies of construction drawings may be included as pages of the report cited in Section A.3 of this stipulation rather than photographed and included as photographic documentation. The County shall promptly notify Caltrans if historic construction drawings for the Honeydew Bridge cannot be located. In that event, the requirements of this paragraph shall not apply.
 3. The County shall ensure completion of a written report that describes the physical characteristics of the Honeydew Bridge, discusses its construction history, and details its significance under NRHP criteria. The report will follow the guidelines as promulgated according to the *Historic American Engineering Record Guidelines for Historical Reports* (United States Department of Interior, National Park Service, 2008, updated 2015) or updated equivalent guidelines.
 4. Upon completion of the photographs and accompanying documentation as described in Sections A.1, A.2, and A.3, a copy will be retained by Caltrans District 1 and the County, and copies provided to the Caltrans Library and History Center, Sacramento; the California Office of Historic Preservation; and the Caltrans Cultural Studies Office. Additional copies will be offered to the Humboldt County Historical Society, Clarke Historical Museum, Mattole Valley Historical Society, Eureka Heritage Society, and the Northwest Information Center at Sonoma State University.

B. INTERPRETATION.

1. Caltrans District 1 shall ensure that the County will design, produce, and install a permanent metal plaque on a concrete or boulder mount that provides a brief history of the historic Honeydew Bridge, its engineering features, and its significance. SHPO and Caltrans shall have 30 days to review and comment on the design and text of the new plaque before it is produced and installed. The plaque will be installed at a publicly accessible site in close, visual proximity to the Honeydew Bridge crossing. It may be installed at a pullout area on the north side of the bridge crossing, near the Burrell Road and Mattole Road intersection. Alternatively, the

County may locate the plaque on the property of the Honeydew Store, southwest of the bridge crossing.

2. Caltrans District 1 shall ensure that the County will prepare and produce a booklet on the Honeydew Bridge and its use within the broader contextual history of Mattole Valley. The booklet shall be paperback not to exceed 10 pages and shall include high quality black and white images of the Honeydew Bridge, copies of historic photographs and/or drawings, as appropriate, and text describing the Honeydew Bridge, its design, construction, and use. Data for the booklet will be culled from the HAER report prepared under Stipulation A of this MOA and other relevant historical reports or documentary sources. The County shall submit a draft copy to Caltrans District 1 for review and approval prior to making the booklet available to recipients. Following approval by Caltrans District 1, the County shall produce hardcopies for distribution to local libraries, as well as local historical societies, organizations, and museums, including but not limited to the Mattole Valley Historical Society, Humboldt County Historical Society, Clarke Historical Museum, and Eureka Heritage Society. One copy shall be submitted to Caltrans Transportation Library and History Center in Sacramento. The County shall maintain the camera-ready master booklet for up to five years and produce additional copies within that time frame if there is demand.

3. Caltrans District 1 shall ensure that the County, working in coordination with Mattole Valley Historical Society, will produce high-quality, large-format photographic prints, high-quality, large-format reproductions of historical documents, and/or textual historical and descriptive information of the Honeydew Bridge for use in a display or curated exhibit by Mattole Valley Historical Society in its future museum. Photographs may be culled from HAER recordation of the bridge. If historical photographs are available, efforts should be made to reproduce high-quality prints. Reproduction historical documents will be limited to those sources that directly relate to or depict the design, construction, and use of the Honeydew Bridge. Data for the textual historical and descriptive information will be taken from the HAER report prepared under Stipulation A of this MOA and other relevant historical reports or documentary sources. The County shall produce the documents described herein within one year following the removal of the historic Honeydew Bridge.

C. OFFER FOR SALE. Caltrans District 1 shall ensure that the County offers the Honeydew Bridge for sale for reuse in an alternate location to interested private entities, public agencies, or non-profits, including the Historic Bridge Foundation located in Austin, Texas. The County shall ensure the preparation of a marketing plan for the sale of the bridge, including: a notification letter, fact sheet, list of intended recipients, as well as provisions for the salvage of smaller components in the case that there is no interest in reuse of the bridge. Advertisements shall be placed in appropriate newspapers of record.

The offer shall run for 6 months. If no acceptable bids are received after 6 months, this stipulation shall be deemed to have been met. The above shall be done in accordance with the U.S. Department of Transportation Historic Bridge Program 23 U.S.C. 144(o)(4)(A) and (B).

III. DISCOVERIES AND UNANTICIPATED EFFECTS

- A. As legally mandated, human remains and related items discovered during the implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)-(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the California Native American Heritage Commission, are taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.
- B. If Caltrans determines, during implementation of the terms of this MOA or after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the NRHP or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with 36 CFR Section 800.13(b)(3). Caltrans at its discretion may hereunder assume any discovered property to be eligible for the NRHP in accordance with 36 CFR Section 800.13.

IV. ADMINISTRATIVE PROVISIONS

- A. STANDARDS
 - 1. **Definitions.** The definitions provided at 36 CFR §800.16 are applicable throughout this MOA.
 - 2. Parties to this agreement are defined as follows:
 - a. **Signatory parties** have the sole authority to execute, amend, or terminate the MOA.
 - b. **Invited signatories** have the authority to amend or terminate the MOA.
 - c. **Concurring parties** signing the MOA do so to acknowledge their agreement or concurrence with the MOA, but they have no legal authority under the MOA to terminate or amend the MOA. Concurring with the terms of the MOA does not constitute their agreement with the Undertaking.
 - 3. **Professional Qualifications.** Caltrans will ensure that only individuals meeting the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44738-39) (PQS) as defined in Attachment 1 of the Section 106 PA, in the

relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulations I through III in this MOA. However, nothing in the stipulation may be interpreted to preclude Caltrans or any agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

4. **Documentation Standards.** Written documentation of activities prescribed by Stipulation I.B, II.A and II.B of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.
5. **Curation and Curation Standards.** If legal owner(s) of materials resulting from the activities presented by this MOA choose to curate those materials, Caltrans shall ensure that, to the extent permitted under § 5097.98 and §5097.991 of the California Public Resources Code and the Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001-3013] and its implementing regulations (43 CFR § 10), the materials and records resulting from the activities prescribed by this MOA are curated in accordance with 36 CFR §79. Caltrans shall ensure that the views of the consulting parties are taken into consideration prior to decisions being made about the final disposition of archaeological materials resulting from activities prescribed by this MOA.

B. CONFIDENTIALITY

The MOA parties acknowledge that the historic properties covered by this MOA are subject to the provisions of § 304 of the NHPA and § 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this MOA are consistent with said sections.

C. RESOLVING OBJECTIONS

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection. Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.
2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If, at the end of the 30-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans'

proposed response to the objection, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation:

- a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or
 - b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
 - c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR §800.7(c)(4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.
4. Should ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may proceed to implement its proposed response. The objection shall thereby be resolved.
 5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with the stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all actions under this MOA that are not subjects of the objection shall remain unchanged.
 6. At any time during the implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans during a comment period of not less than 15 days following receipt of the notification, unless agreed upon by signatories. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. A copy of all comments will be provided to the SHPO before final decision by Caltrans. Within 15 days following closure of the comment period, Caltrans will render a decision regarding the objection and response to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the response to the objecting party. Caltrans' decision regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.
 7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and any parties that have objected pursuant to section B.7 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
 8. Caltrans may authorize any action subject to objection under this Stipulation to proceed after the objection has been resolved in accordance with the terms of this Stipulation.

D. AMENDMENTS

1. Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than 30 days to consider such an amendment. The amendment will be effective on the date a copy is signed by all the original signatories. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation IV.E, below.
2. The Attachment to this MOA may be amended through consultation as prescribed in Stipulation I, as appropriate, without amending the MOA proper.

E. TERMINATION

1. If this MOA is not amended as provided for Section D of this stipulation, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition in 36 CFR §800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.
3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, Caltrans shall comply with the requirements of Stipulations III through XI of the Section 106 PA, or request the comments of the ACHP, pursuant to 36 CFR §800.

F. DURATION OF THE MOA

The duration of this MOA shall be no more than 5 (five) years following the date of the execution by the SHPO and Caltrans, or upon completion of the Undertaking (whichever comes first). If the terms are not satisfactorily fulfilled at that time, Caltrans shall consult with the signatories and concurring parties to extend it or reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Stipulations III through XI of Section 106 PA if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

G. REPORTING REQUIREMENTS AND RELATED REVIEWS

Caltrans shall provide the parties to this agreement an annual update. Such updates shall include status of work to date, any scheduling changes proposed, any problems encountered, failures to adopt proposed mitigation measures, and any disputes and

objections received in Caltrans' efforts to carry out the terms of this MOA. The update will be due no later than December 31 of each year, beginning the year this MOA is signed and continuing annually thereafter throughout the duration of this MOA. At the request of any party to this MOA, or if deemed necessary at least on an annual basis, Caltrans shall ensure that one or more meetings are held to facilitate review and comments, and to resolve questions and comments.

H. EFFECTIVE DATE

This MOA will take effect on the date that it has been executed by the Signatory Parties.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR §800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR §800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(1) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA**

SIGNATORY PARTIES:

California Department of Transportation

By 
Jeremy Ketchum, Acting Chief
Division of Environmental Analysis

21 December 2018
Date

California State Historic Preservation Officer

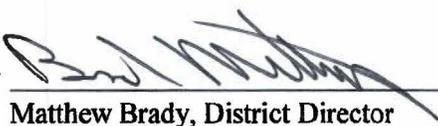
By 
for Julianne Polanco
State Historic Preservation Officer

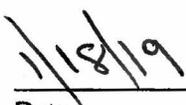
12/27/18
Date

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA**

INVITED SIGNATORY:

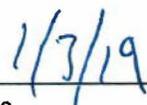
California Department of Transportation, District 1

By  _____
AOK Matthew Brady, District Director
District 1

 _____
Date

County of Humboldt, Department of Public Works

By  _____

 _____
Date

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA

CONCURRING PARTIES

Mattole Valley Historical Society

By Gary D. Peterson - President MVHS 01/17/2019
Name, title Date

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
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REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA**

Attachment A

Project Description

The Honeydew Bridge Replacement Project is located in the southern portion of Humboldt County in Caltrans District 1. The project is on Mattole Road approximately 22 miles southwest of Exit 663 on US101. It is also approximately 32 miles northwest of Exit 639 on US101 in Garberville.

The County prepared an APE map for this project in September 2013, which includes the bridge, a portion of the river bed, adjacent roads, and Assessor Parcel Number (APN) 107-102-013. Figures 1 and 2 illustrate the Project Location and Project Vicinity. Figure 3 is the APE map. The Figures are in Attachment A.

The existing bridge poses a problem for Humboldt County in that its 1920 design was not built for modern truck weights and capacities, nor is the single lane adequate for current traffic safety. Caltrans maintenance reports indicate that the bridge is structurally deficient and lacks sufficient load carrying capacity for load bearing and emergency vehicle access. Furthermore, it is a distance of some 35 miles from Honeydew Bridge to the next river crossing upstream at Ettersburg and 14 miles to the next river crossing downstream at Petrolia.

The primary purpose and need for the proposed project are:

1. To provide a safe, efficient, and cost-effective access for the public land managers and private landowners along the Mattole River Road to Highway 101.
2. To provide a safe, efficient, and cost-effective access for fire fighters and emergency equipment to the Mattole River Road from Highway 101, in the event of a wildfire.
3. To provide safe, efficient, and cost-effective exit route for residents and visitors along Mattole River Road to Highway 101, in the event of a wildfire.

Existing Conditions

The Honeydew Bridge (Bridge No. 04C0055) was constructed in 1920 as a single-lane through-truss bridge with two steel Camelback truss spans. The bridge is supported by a reinforced concrete pier and wing abutments on spread footings. The bridge has timber decking and rails. The total bridge length is 386 feet and the vertical clearance is 14 feet. The center-to-center distance between the through trusses is 17 feet. Clear roadway width between the timber curbs is 14 feet 9 inches. The bridge is posted to limit truck and bus speeds to 15 miles per hour due to load capacity and has recently been capacity reduced.

The Honeydew Bridge is one of three bridges that crosses the Mattole River in this remote area of Humboldt County that serve as major access points in and out of the Mattole Valley. Humboldt County Department of Public Works has identified the need to have a two-lane structure in Honeydew to meet current traffic safety requirements and to ensure that there is sufficient access for emergency vehicles, along with heavy and long vehicles. The Average Daily Traffic (ADT) for the Honeydew Bridge was 500 vehicles in January 2009 and could be as high as 700 today. A current ADT count is

¹ Humboldt County Department of Public Works supplied this project description.

underway at the time of this report. ADT numbers are expected to continually rise in the near future as rural growth in the Mattole Valley is occurring at a rapid rate. AASHTO Policy on Geometric Design of Highways and Streets states that the minimum clear roadway width for this bridge to remain in place is 22 feet and carry two traffic lanes. For a new or reconstructed bridge the minimum required clear roadway width on the bridge is 26 feet.

The extant bridge is classified as functionally obsolete and structurally deficient. The structure is functionally obsolete because of geometric constraints (i.e., single lane 14 feet 9 inch clear width), and it is incompatible with modern highway use and the need for conveyance of heavy equipment and emergency vehicles. The overall sufficiency rating based on a July 15, 2014 inspection by Caltrans Structure Maintenance and Investigations was 13.3. The bridge is considered structurally deficient because of deteriorated condition, the elevated maintenance costs associated with its condition, and its seismic susceptibility.

The truss structure has repeatedly been struck and damaged by oversized vehicles. Several main truss members and portal cross frames have been replaced, typically with plug welding. The truss portion of the bridge was last painted in the mid-1970s. The County does not have funding for a bridge painting program. The maintenance needs of the bridge are high do to its age, design, and materials of construction.

Consideration of bridge replacement began in the early 1970s. Initially there was interest in re-locating the bridge to allow re-aligning the approach road on the north side, in order to bypass several hillslope curves. A total of ten alternative routes were assessed. Based on this initial assessment, the preferred location for a new bridge alignment at that time was located approximately 1,800 feet downstream of the existing alignment. The primary rationale for this selection was meeting the objective of straightening the alignment of the approach road to the north. In the late 1970s, the County acquired right-of-way for a new approach road on the north side of the Mattole River through dedication on a subdivision map. Right-of-way was not secured on the south side of the river. Funding to pursue this option was not secured and project development was discontinued.

In 1997, the Humboldt County Board of Supervisors passed a resolution stating the intent to replace the bridge based on its lowered sufficiency rating. The low rating was based on a history of incidents in which oversize vehicles had hit and damaged the structure, as well as the overall deteriorating condition of the bridge.

In 2011, the County Public Works Department initiated technical studies and retained the services of Morrison Structures, Inc. as their engineering design consultant. Based on multiple design considerations (e.g., past County alignment study, minimization of impacts to private properties in Honeydew, topographic constraints, hydraulics, line of sight for vehicles, cost-effective solution with least design modifications, etc.), the existing bridge alignment was identified as the preferred alignment for the new bridge. Three bridge type configurations were identified in Morrison Structures, Inc.'s April 12, 2013 Recommended Bridge Type memorandum: two-span, steel Camelback through truss; two-span, composite welded steel girder; and two-span, precast-pre-

stressed concrete spliced girder. The proposed project also includes a significant temporary detour road constructed across the dry river channel and short temporary bridge crossing over the low-summer-flow Mattole River located 1,300 feet downstream. The existing bridge and pier will be removed, and a new pier and bridge abutments constructed. Two construction seasons are anticipated due to the limited in-river work window (i.e., June-October). In Season 1, deep foundations for the new pier and south abutment will be constructed; the new bridge pier centerline is 11 feet north of the existing pier, which will allow for cast-in-drilled-hole (CIDH) installations without needing to close the existing bridge to through traffic. In Season 2, the downstream detour would be constructed and temporary supports installed to support both bridge demolition and new bridge construction.

Project Description

General

The existing structurally deficient and functionally obsolete bridge will be replaced with a modern structure on existing alignment that will meet present day load carrying capacity and width for traffic safety. The proposed replacement is a two-span structure with equal span lengths of 187 feet - 7 ½ inches for a total bridge length of 375 feet - 3 inches. It will carry two lanes of traffic with each lane width 10-foot plus a 3-foot shoulder, for a clear width of 26 feet.

Replacement Structure Type

Three replacement structure type alternatives have been studied and found to be feasible to construct at the Honeydew site. Structure type Alternative 1 is a steel Camelback through truss nearly identical in configuration to the existing bridge. Structure type Alternative 2 is a haunched, composite welded steel girder. The third structure type alternative is a haunched, precast, prestressed, spliced girder, similar in geometry to Alternative 2. The decision as to the selection of type has not as yet been determined. However, the County's preference at present is a haunched, composite welded steel girder (Alternative 2) due to its shorter duration construction schedule when compared to the alternative steel truss or precast girder construction duration. Regardless of which alternative structure type is finally selected, foundations will consist of pile supported concrete abutments and center pier.

Construction Sequencing

Because of the short time period of low flows for the Mattole River, two summer seasons will be required to construct the bridge replacement project regardless of the structure type alternative selected.

The first season of work will be to construct the deep foundations required for the new pier and south abutment while the existing bridge remains in place. This will involve constructing cast-in-drilled-hole (CIDH) piles alongside the existing bridge pier and constructing south abutment foundations beneath the existing south truss span near the existing abutment. The proposed new bridge pier is located 11 feet north of the existing pier centerline and the proposed new south abutment is located several feet north of the existing south abutment. This will allow for the CIDH installations without

requiring closure of the existing bridge or impacting the existing bridge supports during the first season of work.

The second season of work will be to construct a temporary detour road and short single-lane bridge about 1,300 feet downstream from the existing bridge. The detour road will connect Mattole Road via Burrel Road so the existing bridge can be closed to traffic and will also provide the main access to the bridge construction site so that the existing bridge can be removed and the new bridge abutment walls, pier, and superstructure can be constructed. The short detour bridge will cross the main low-summer-flow channel of the Mattole River and will most likely consist of a portable Bailey Bridge or other erectable bridge type. The detour bridge will be used during the second construction season only and set at an elevation with sufficient height to clear summer river flow and meet Burrel Road grade. After completion of the new bridge the detour road will be removed.

Design

The replacement structure will be designed for the HL93, Tandem, and P15 Permit Design vehicle loadings as specified in Caltrans Bridge Design Specifications (BDS), Seismic Design Criteria V1.6, and American Association of State Highway and Transportation Officials (AASHTO) 6th Ed. The new bridge will employ the hydraulic design criteria established in the Caltrans Local Procedures Manual, which prescribes that the structure be capable of conveying the base or 100-year flood and passing the 50-year flood “without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes.” In addition, AASHTO requires at least 3 feet of freeboard (clearance) above the 50-year flood or flood of record. The minimum soffit elevation required to meet these criteria is 335.41 feet.

Detour

During the bridge replacement project, a temporary detour road and short single-lane bridge is proposed to be constructed 1,300 feet downstream from the existing bridge. The detour road will connect Mattole Road via Burrel Road and will also provide the main access to the bridge construction site. Detour road construction will consist of river run gravel fill over geotextile fabric, with an aggregate base topping. The temporary detour bridge will cross the main low-summer-flow channel of the Mattole River and will most likely consist of a portable Bailey Bridge or other erectable bridge type. The temporary bridge will be used during the second construction season only and set at an elevation with sufficient height to clear summer river flow and meet Burrel Road grade.

Staging

Temporary staging areas will be available at three locations: (1) along Wilder Ridge Road, just southeast of the intersection with Mattole Road; (2) all along the south bank gravel bar near and beneath the existing bridge and; (3) at the north Mattole Road Bridge approach. The Wilder Ridge Road staging area is located along the east side of Wilder Ridge Road, approximately 300 feet south of the intersection with Mattole Road. The south bank gravel bar temporary staging area (primary construction staging area) will be located between the detour road located 1,300 feet to the west and

the private access road a few hundred feet upstream from the bridge. The north approach staging area will be located on Mattole Road, immediately north of the existing bridge north abutment.

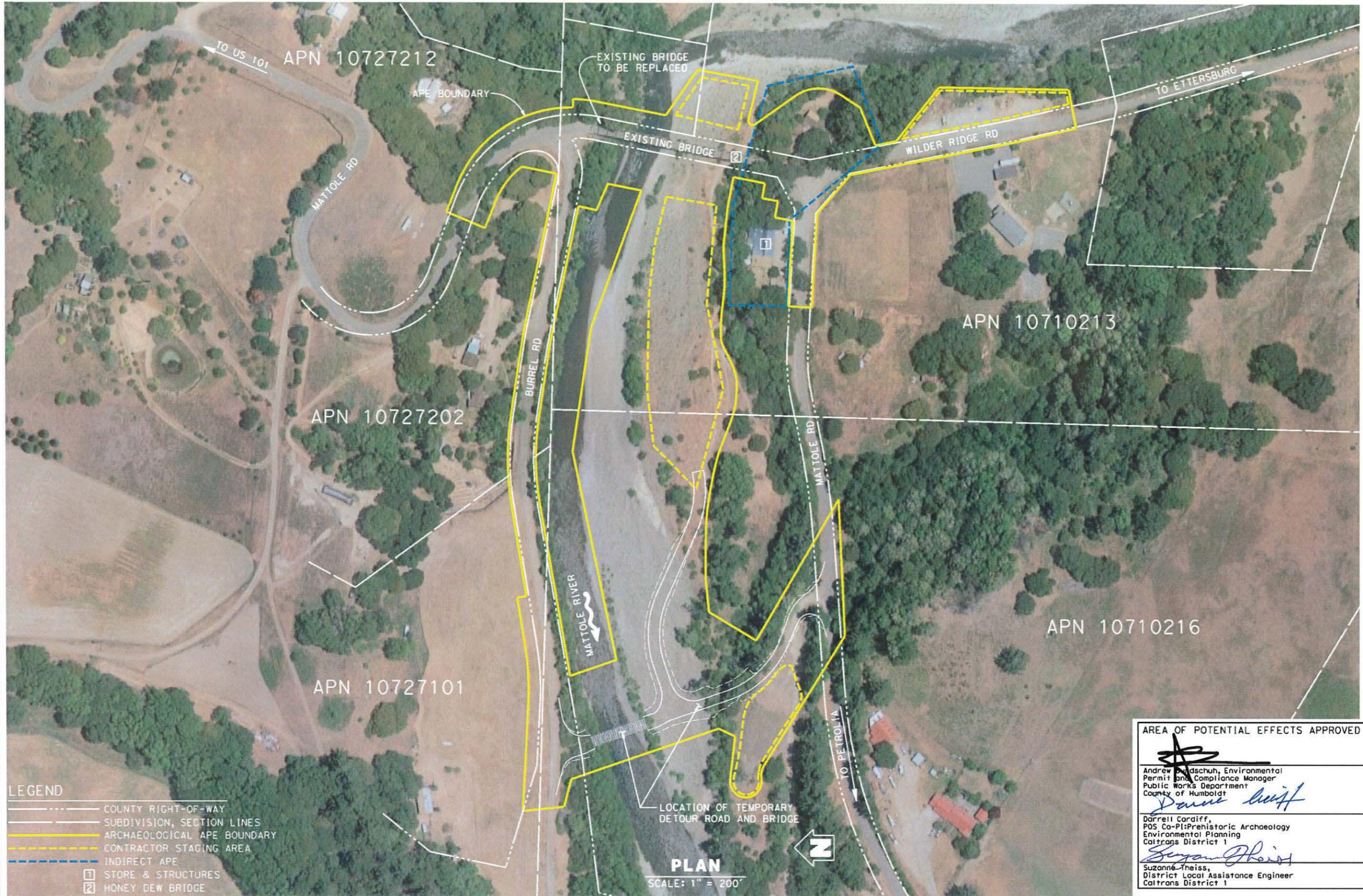
Falsework

Based upon field observations, no problems with falsework are anticipated during the construction season. Due to the types of bridge alternatives recommended, the amount of falsework required for the construction will be a minimum. The existing truss demolition and new bridge construction will likely require gravel pads, falsework, and work trestles be constructed to dismantle and replace the existing bridge. The primary construction staging area to remove and replace the existing bridge will be along the south bank gravel bar. There will be access to this construction staging area from the downstream detour road and also from Wilder Ridge Road along an upstream existing private access road.

**MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE HONEYDEW BRIDGE REPLACEMENT PROJECT
HUMBOLDT COUNTY, CALIFORNIA**

Attachment B

Area of Potential Effects (APE) Map



- LEGEND**
- COUNTY RIGHT-OF-WAY
 - SUBDIVISION, SECTION LINES
 - ARCHAEOLOGICAL APE BOUNDARY
 - CONTRACTOR STAGING AREA
 - INDIRECT APE
 - 1 STORE & STRUCTURES
 - 2 HONEY DEW BRIDGE

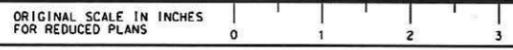
AREA OF POTENTIAL EFFECTS APPROVED BY	
	12-20-2018 Date
<i>Andrew Sandschuh, Environmental Permit and Compliance Manager Public Works Department County of Humboldt</i>	
	12/20/18 Date
<i>Darrell Cardiff, POS Co-PI/Prehistoric Archaeology Environmental Planning Caltrans District 1</i>	
	12/20/18 Date
<i>Suzanne Theiss, District Local Assistance Engineer Caltrans District 1</i>	

MORRISON STRUCTURES

DESIGN	BY B. Maue
DETAILS	BY R. Uhlmann

Robert Morrison Jr.
PROJECT ENGINEER

**MATTOLE RIVER BRIDGE REPLACEMENT PROJECT
AREA OF POTENTIAL EFFECT**



CU
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET	OF
	8/14/13 12/7/18	1	1

Appendix D Project Alternatives Figures

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STEEL TRUSS - ALTERNATIVE 1

Honeydew Bridge Replacement
County of Humboldt Public Works

*MORRISON STRUCTURES, INC.
REDDING, CALIFORNIA*



Honeydew Bridge Replacement Project

Appendix D-2
Alternative 1 – Camelback Truss Bridge

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COMPOSITE WELDED GIRDER - ALTERNATIVE 2

Honeydew Bridge Replacement
County of Humboldt Public Works

*MORRISON STRUCTURES, INC.
REDDING, CALIFORNIA*



Honeydew Bridge Replacement Project

Appendix D-3
Alternative 2 – Steel Girder Bridge (Preferred Alternative)

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PRECAST PRESTRESSED CONCRETE SPLICED GIRDER - ALTERNATIVE 3

Honeydew Bridge Replacement
County of Humboldt Public Works

MORRISON STRUCTURES, INC.
REDDING, CALIFORNIA



Honeydew Bridge Replacement Project

Appendix D-4
Alternative 3 – Concrete Girder Bridge

Appendix E Notice of Preparation and 2017
Public Scoping Workshop
Correspondence



NOTICE OF PREPARATION

Date:	February 10, 2017
To:	State Clearinghouse, Responsible Agencies, Trustee Agencies, Interested Parties, and Organizations
Subject:	Notice of Preparation of an Environmental Impact Report/Environmental Assessment and Public Scoping Meeting for the Humboldt County Public Works Department Honeydew Bridge Replacement Project, Humboldt County, California
Contact:	Mr. Andrew Bundschuh, Environmental Permitting & Compliance Manager Humboldt County Public Works Department – Natural Resources Division 1106 Second Street Eureka, California 95501 Phone: (707) 445-7741 E-mail: abundschuh@co.humboldt.ca.us
Public Comment Period:	February 15, 2017 to March 15, 2017
Scoping Meeting:	March 1, 2017, 5-7 p.m., Mattole Grange #569

Purpose of the Notice

Humboldt County (County) is the lead agency for preparation of an environmental impact report (EIR) under the California Environmental Quality Act (CEQA) for the Honeydew Bridge Replacement Project. Since the project is receiving federal funding through the Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA), the environmental document must also comply with the National Environmental Policy Act (NEPA). FHWA is the NEPA lead agency. To comply with NEPA, an Environmental Assessment (EA) will be prepared to allow FHWA to make a determination on whether the project would constitute a major federal action that would significantly affect the human environment. The two lead agencies have agreed to prepare a joint EIR/EA which satisfies the requirements of both CEQA and NEPA. In its role as the NEPA agency, FHWA will participate in the environmental review in a manner that satisfies federal requirements under NEPA and ensures that the EIR/EA, and underlying administrative record supports FHWA's decision on the proposed project. The Draft EIR/EA will include elements to ensure it is fully compliant with FHWA NEPA requirements and Federal executive orders.

The purpose of this Notice of Preparation (NOP; 14 CCR 15082) is to inform responsible and trustee agencies and interested parties about the proposed project and to solicit comments on the scope and content of the environmental information to be included in the EIR/EA. We are seeking your views on any significant environmental issues or concerns you may have about the project or project area, reasonable alternatives to the proposed project, and mitigation measures that may alleviate significant impacts. Please contact Andrew Bundschuh at the number or e-mail listed above for any questions about the project or environmental review process.

Project Location

The project is located on Mattole Road where it crosses the Mattole River near the community of Honeydew, Humboldt County, CA (refer to Figure 1 – Project Location and Vicinity). The project study area consists of approximately 25 acres of rural residential lands located within the boundaries of unincorporated Humboldt County (refer to Figure 2 – Project Study Area). The project study area includes the following zoning: AG-B-6 (Agricultural General – Special Building Site); AE-U (Agricultural Exclusive - Unclassified); C-2 (Community Commercial); and FR-B-5 (2.5) (Forestry Recreation – Special Building Site). Additional details are presented below:

Adjacent Roadways:	Wilder Ridge Road, Burrel Road
APNs:	107-272-012; 107-271-001, -002; 107-102-016; and 107-102-013
USGS Quad:	Section 1, Township 3 South, Range 1 West, HB&M, <i>Honeydew 7.5'</i> USGS quadrangle map
Lat./Long.:	Centroid of project site - 40.2438982° N / -124.1230673°W
Elevation:	360 feet above mean sea level

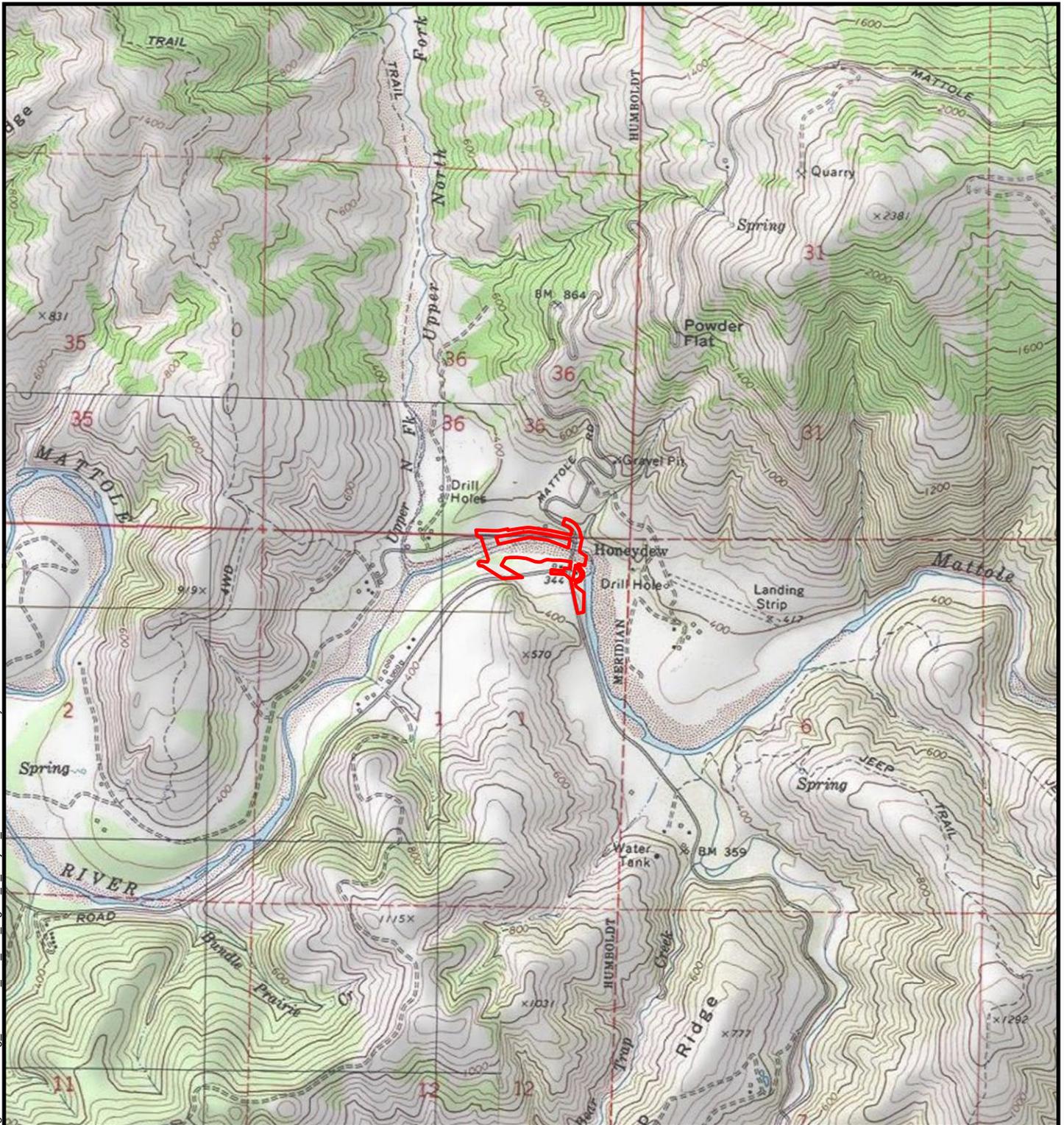
Project Background

The County is in the preliminary design and environmental approval phase for proposed replacement of the Honeydew Bridge (Bridge No. 04C-0055) along Mattole Road over the Mattole River, near the community of Honeydew. This bridge provides a critical transportation link across the Mattole River. The bridge is a single-lane structure comprised of two steel Camelback truss spans that was constructed in 1920; it was determined eligible for listing in the National Register of Historic Places in 2003 following a Caltrans Historic Bridge Inventory, under Criterion C (excellent example of its type, period, and method of construction as a rare Camelback truss).

In 1997, the County Board of Supervisors passed a resolution stating that the bridge needed to be replaced due to a local sufficiency rating identified as part of a Caltrans Structure Maintenance inspection. Funding was secured through the federal Highway Bridge Program (HBP) that is administered by Caltrans. In 2011, the County Public Works Department initiated technical studies and retained the services of Morrison Structures, Inc. as their engineering design consultant. Work completed to date includes the hydraulic analysis, geotechnical evaluation, and preliminary design for the bridge and road approaches. A public meeting was held in the Honeydew community on January 23, 2013 to discuss bridge alternatives. In reviewing some of the public meeting comments provided as an attachment to the Section 106 documentation, it appears there was a high level of local interest in the project, with concerns primarily associated with locating the bridge on the existing alignment and potential for speeding with a new, two-lane bridge.

Based on multiple design considerations (e.g., hydraulics, line of sight for vehicles, etc.), the existing bridge alignment was identified as the preferred alignment for the new bridge. Three bridge type configurations were identified in Morrison Structures, Inc.'s April 12, 2013 Recommended Bridge Type memorandum: two-span, steel Camelback through truss; two-span, composite welded steel girder; and two-span, precast-pre-stressed concrete spliced girder. The proposed project also includes a temporary detour crossing over the Mattole River located 1,300 feet downstream, removal of the existing bridge and pier, and construction of a new pier and bridge abutments. Two construction seasons are anticipated due to the limited in-river work window (i.e., June-October). In Season 1, deep foundations for the new pier and south abutment will be constructed; the new bridge pier centerline is 11 feet north of the existing pier, which will allow for cast-in-drilled-hole (CIDH)

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 Study Area (15.93 acres)

Public Land Survey:
T02S, R01W, Sec. 36
T03S, R01W, Sec. 1

USGS 7.5 Quad:
Honeydew 1970
Shubrick Peak 1969

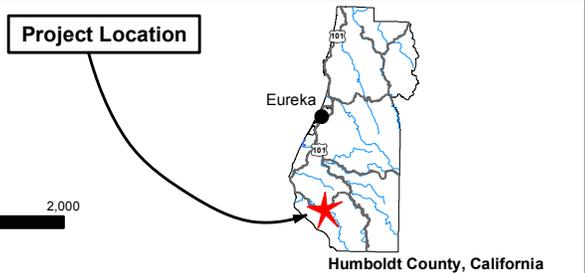
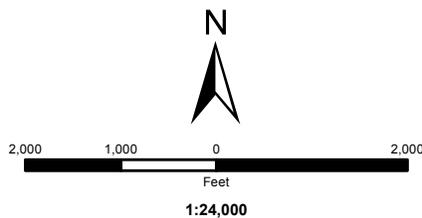
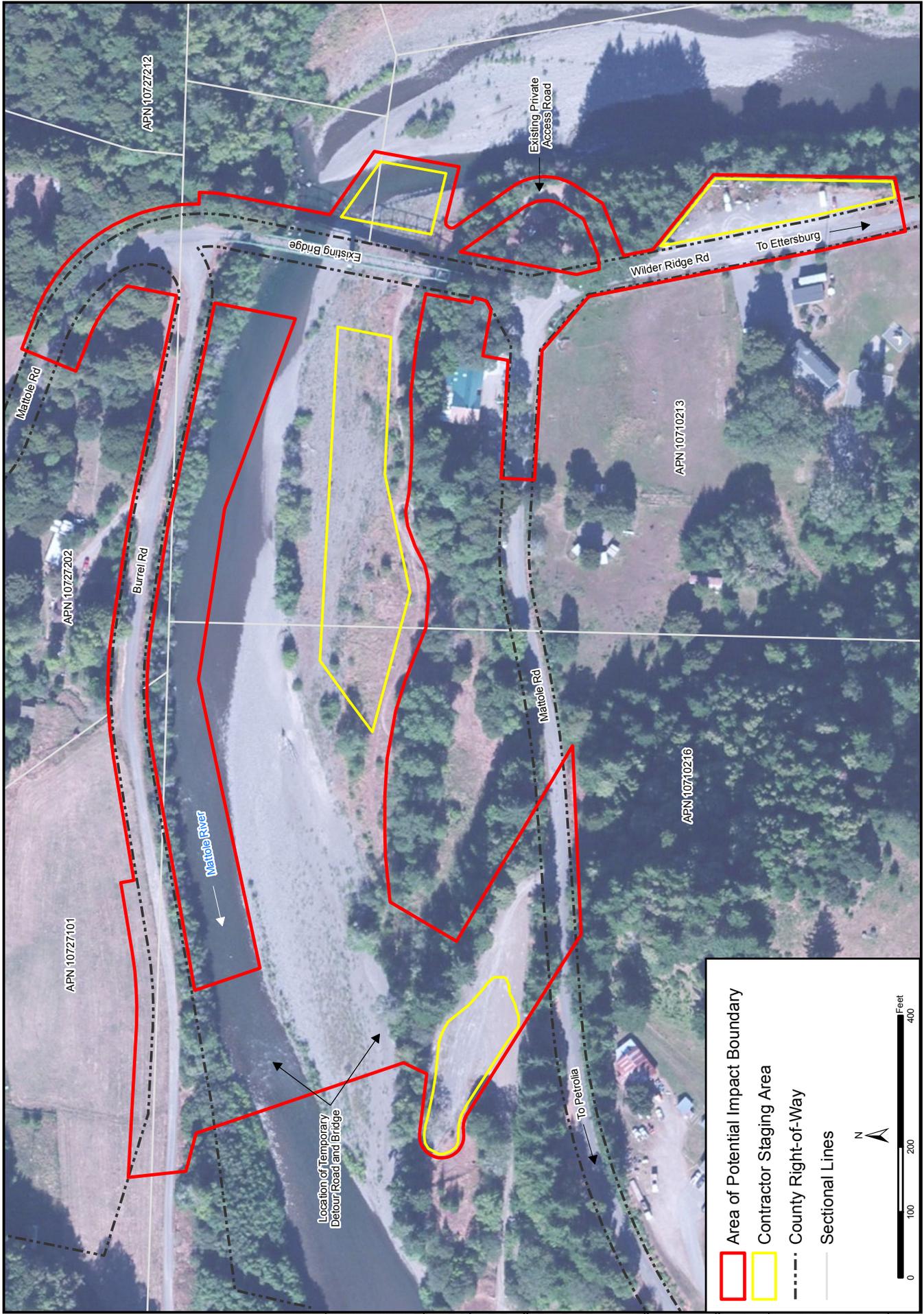


Figure 1
Project Location



Area of Potential Impact Boundary
 Contractor Staging Area
 County Right-of-Way
 Sectional Lines

0 100 200 400 Feet
 N

Figure 2
Project Study Area

installations without needing to close the existing bridge to through traffic. In Season 2, the downstream detour would be constructed and temporary supports installed to support both bridge demolition and new bridge construction.

Purpose and Need

The purpose of the project is to provide a road crossing that meets modern highway design standards, accommodates local and regional transportation needs, and provides an increased level of public safety (vehicles, pedestrians, and cyclists). The existing Honeydew Bridge was constructed in 1920 and is at or near the end of its service life. The bridge exhibits signs of significant structural fatigue; does not comply with modern geometric and seismic standards; contains only one travelable lane; lacks standard shoulder width; is unsafe for pedestrians; is cost prohibitive in terms of long term life cycle maintenance and repair costs; and cannot accommodate large permit loads due to lane width, height and structural limitations for weight loading. The County of Humboldt resolves that:

- Honeydew Bridge (4C-055) is critically needed for emergency vehicle access for local residents and for fire access to forested areas.
- Honeydew Bridge (4C-055) is critically needed since there is no available detour nor alternate access route to serve the needs of existing residences.
- Honeydew Bridge (4C-055) is significant to the local economy in that it provides access to important timber and agricultural lands.
- Honeydew Bridge (4C-055) has restricted vertical clearance which prohibits the transport of critically-needed heavy equipment to repair and reopen roads during severe storms and disasters. The replacement of the bridge will alleviate this problem and improve the response time during emergencies.

Over the last few decades, the population density in the Mattole Valley has steadily increased. Current ADT numbers at the bridge crossing are estimated around 350-400 with an anticipated increase to 500 near 2020. These traffic numbers on a one-lane bridge contribute to the unsafe nature of the bridge. The lack of a pedestrian lane makes travel across the bridge by both pedestrians and bicyclists unsafe. Although interim improvements have been conducted on the bridge since 1980; however, the bridge still presents safety concerns for pedestrians and vehicular traffic.

Logical Termini and Independent Utility

The Federal Highway Administration (FHWA) regulations outline three general principles in Title 23 CFR 771.111(f) that are to be used to frame a highway project. In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, a project must meet these three criteria:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements are made in the area.
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Identification of Logical Termini

This project connects at logical termini and is of sufficient length to address environmental matters on a broad scope. Logical termini for a project are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. Mattole Road, 200 feet west and 200 feet east of the Mattole River, are rational end points since the project, as contained within these limits, fully addresses the identified need for improving public safety along Mattole Road at the Mattole River crossing.

Independent Utility of the Project

This project will be usable and be a reasonable expenditure even if no additional transportation improvements are made in the area. The project will provide substantial benefits to the public (i.e., improve public safety), regardless of whether or not other transportation improvement projects are implemented.

Effect on Other Reasonably Foreseeable Transportation Projects

The Honeydew Bridge Replacement Project would not prevent or obstruct implementation of other transportation projects in the area. The schedule for the project allows for three phases of design and construction to space out the activities. The project will not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in the project area.

Project Description

General

The existing structurally deficient and functionally obsolete bridge will be replaced with a modern structure that will meet current design criteria. The proposed bridge types are all two-span structures with equal span lengths of 187 feet - 7 ½ inches for a total bridge length of 375 feet - 3 inches. It will carry two lanes of traffic with each lane width 11-foot plus a 2-foot shoulder, for a clear width of 26 feet.

Alternatives

Three replacement structure alternatives have been considered. Each of the three alternative configurations will be on existing alignment and consist of two equal spans. Additionally, all three alternatives will likely consist of a steel H-pile supported north abutment, and cast-in-drilled-hole (CIDH) supported pier and south abutment. Alternative 1 is a steel Camelback through truss similar in configuration to the existing bridge. Alternative 2 is a haunched, composite welded steel girder. The third alternative is a haunched, precast, prestressed, spliced girder, similar in geometry to Alternative 2.

Design

The replacement structure will be designed for the HL93, Tandem, and P15 Permit Design vehicle loadings as specified in Caltrans Bridge Design Specifications (BDS), Seismic Design Criteria V1.6, and AASHTO 6th Ed. The hydraulic Design Criteria established in the Caltrans Local Procedures Manual prescribe that the structure be capable of conveying the base or 100-year flood (Q100) and passing the 50-year flood (Q50) “without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes.” In addition, AASHTO requires at least 3 feet of freeboard (clearance) above the 50-year flood or flood of record. The minimum soffit elevation required to meet these criteria is 335.41 feet.

Detour

During the bridge replacement project, a temporary detour road and temporary bridge is proposed to be constructed 1,300 feet downstream from the existing bridge. The detour road will connect Mattole Road via Burrel Road and will also provide the main access to the bridge construction site. Detour road construction will consist of river run gravel fill over geotextile fabric, with an aggregate base topping. The temporary detour bridge will cross the main thalweg of the Mattole River and will most likely consist of a Bailey bridge or other erectable bridge type. The temporary bridge will be installed at an elevation with sufficient freeboard so that small fluctuations in river levels can be accommodated. Figure 2 depicts the locations and extents of the planned detour route, staging areas, access routes, and work area boundaries (bridge and roadway).

Transportation Access

The existing bridge will be temporarily supported, disassembled, match marked, and transferred to the County for storage. Access to the bridge site is available from: (1) Highway 101 directly, (2) Highway 101 via Ettersburg, and (3) Highway 101 via Petrolia. Direct access from Highway 101 along Mattole Road passes through a state park, is a distance of 22 miles, and roadway geometry limits vehicular length to approximately 50 feet. Access via Ettersburg is along Wilder Ridge Road and Briceland Thorne Road, and is a total distance of 33 miles from Highway 101. Access along this route is limited by road geometry, but it provides a better alternative than the direct access from Highway 101. Using steerable trailers, bridge member lengths of up to 90 feet can likely be accommodated. The bridge site can also be accessed from the northwest, through Ferndale and Petrolia. Construction equipment and materials have historically been transported into the Honeydew area through this route, and the transport of bridge member lengths up to 90 feet may be possible. The George Lindley Memorial Bridge (4C-78) and the Dry Creek Bridge (4C-241) capacities will prevent permit trucks from using this third route.

Staging

Temporary staging areas will be available at three locations: (1) along Wilder Ridge Road, just southeast of the intersection with Mattole Road; (2) all along the south bank gravel bar near and beneath the existing bridge and; (3) at the north Mattole Road Bridge approach. The Wilder Ridge Road staging area is located along the east side of Wilder Ridge Road, approximately 300 feet south of the intersection with Mattole Road. The south bank gravel bar temporary staging area (primary construction staging area) will be located between the detour road located 1,300 feet to the west and the private access road a few hundred feet upstream from the bridge. The north approach staging area will be located on Mattole Road, immediately north of the existing bridge north abutment.

Falsework

Based upon field observations, no problems with falsework are anticipated during the construction season. Due to the types of bridge alternatives recommended, the amount of falsework required for the construction will be a minimum compared to that required for a standard cast-in-place concrete box girder. The existing truss demolition and new bridge construction will likely require clean gravel pads or work trestles in the active streambed. These trestles and work platforms will likely require H piles, probably in the 14x89 size range and driven about 30 feet deep, based on typical falsework requirements. Clean gravel pads will be placed as necessary in the channel margins in the active stream to provide work trestle access or work pads for construction equipment and temporary supports during bridge removal and construction. The trestle and gravel work pads will be removed prior to the October work deadline, and in-stream areas temporarily affected by construction will be returned to their pre-construction condition. The primary construction staging area to

remove and replace the existing bridge will be along the south bank gravel bar. There will be access to this construction staging area from the downstream detour road and also from Wilder Ridge Road along an upstream existing private access road.

Construction Sequencing

Because of the short time period of low flows for the Mattole River, two summer seasons will be required to construct the bridge replacement project regardless of the structure type alternative selected.

The first season of work will be to construct the deep foundations required for the new pier and south abutment. This will involve either using the private access road or constructing the portion of the detour road necessary to provide construction access. Large diameter CIDH pile foundations will likely be used for each alternative, at both the center pier and south abutment. The new bridge pier centerline is located 11 feet north of the existing pier centerline. This will allow for the CIDH installations without requiring closure of the existing bridge or impacting the existing bridge support.

The second season of work will be to construct the detour, temporary supports, dismantle and remove the old bridge and construct the pier wall, abutments, retaining walls, superstructure, and approaches. Temporary supports used to remove the existing bridge trusses could also be used to erect the new bridge. After completion of the second season of work, the detour bridge and roadbed material from the detour road, construction access road, and private access road will be removed.

Adequate de-watering at the pier location during construction will be achieved by means of diking/diversion of surface water and sump pumping. Imported embankment material will be required for the approach roadway at the south end of the bridge. This fill will be located outside of the ordinary high water channel of the Mattole River. The contractor will provide temporary water pollution control measures, including but not limited to, dikes, basins, and ditches, which may become necessary as a result of the construction process.

New rock slope protection (RSP), 1/4 to 1/2 ton method B, will be installed. The locations and extents are not yet decided. This will be placed by an excavator with a bucket/thumb attachment that would pick and place/fit together the RSP.

Construction Criteria and Methods

Construction specifications will be in accordance with the Special Provisions and the current Caltrans Standard Plans, Standard Specifications, and Standard Special Provisions at the time the construction contract is awarded. Equipment and materials will be staged in the three designated staging areas only and traffic will be maintained through the area during the first season on the existing bridge and during the second season on the detour bypass.

Temporary work platforms and detour route will be constructed of river run gravel fill or properly sized salmon spawning gravel “fish rock.” Gravel will be uncrushed, rounded, natural river rock with no sharp edges. It will be washed at least once and have a cleanliness value of 85 or higher based on Caltrans Test No. 227. Gravel will also be completely free of oils, clay, debris, and organic material.

Because fish rock does not stay together under pressure of heavy equipment, clean crushed angular gravel will be placed on top of the fish rock with geotextile fabric to separate the crushed angular gravels from the fish

rock. Once the new bridge is completed, the crushed rock atop the gravel work platforms and temporary detour will be removed and disposed of offsite.

Final design has not been completed at this time, and the exact construction for the work pads and falsework trestles has not been selected. The actual number, size, types, and depth of piles to be driven for the complete project is indeterminate. The most likely option for the north abutment will be HP 10X57 driven about 30 feet. The pier will most likely be two 7-foot diameter CIDH. The south abutment will most likely be two 48-inch CIDH. In addition, sheet piles may be required for the construction of the pier cap.

Potential Environmental Effects and Scope of the EIR/EA

The EIR/EA to be prepared for the proposed project will provide a project-level analysis of the impacts pertaining to the resources area identified below. The EIR/EA will be prepared in accordance with CEQA Statutes, CEQA Guidelines, Caltrans' NEPA guidelines, and other applicable regulatory requirements. The impact analysis will consider impacts resulting directly from the proposed project, both direct and indirect, as well as the proposed project's contribution to cumulative impacts in the project area. The EIR/EA will identify feasible mitigation measures to reduce or avoid project-specific and cumulative impacts. To ensure the EIR/EA adequately addresses the full range of issues and alternatives to the proposed project and that all significant issues are addressed, comments and suggestions are invited from all interested parties during the NOP scoping process.

- **Aesthetics** – Potential impacts to the visual character of the project site and surrounding public view areas along the Mattole River and adjacent roadways, including the removal of a historic bridge. The County and their consultant team will prepare a Visual Impact Assessment report, the results of which will be incorporated into the EIR/EA.
- **Air Quality/Greenhouse Gas Emissions** – Potential impacts from fugitive dust emissions and equipment/vehicle emissions during construction.
- **Biological Resources** – Potential impacts on special-status species, including threatened and endangered species and associated critical habitat (i.e., Northern California steelhead Distinct Population Segment [DPS], California Coastal Evolutionarily Significant Unit [ESU] Chinook salmon, and Southern Oregon/Northern California ESU coho salmon), nesting migratory birds and raptors, riparian vegetation, and waters of the state/United States as a result of proposed project construction activities. The County and their consultant team will be conduct a floristic inventory, special-status species habitat assessment, aquatic habitat characterization, and a delineation of waters of the state and United States. Technical reports include a wetland delineation report (if jurisdictional waters are present); northern spotted owl habitat assessment; Biological Assessment/Essential Fish Habitat Assessment, including a hydroacoustic analysis of proposed pile-driving activities, to evaluate potential impacts of the proposed project on listed salmonids and to support Section 7 Endangered Species Act consultation; and a Natural Environment Study report that will evaluate potential impacts to all biological resources.
- **Cultural Resources** – Potential impacts to cultural resources, including the proposed removal of a historic bridge eligible for listing in the National Register of Historic Places, as a result of proposed project construction activities. The EIR/EA will also address potential impacts to tribal cultural resources in accordance with AB 52. The County retained Roscoe & Associates to complete an

Archaeological Survey Report/Historic Property Survey Report and JRP Historical Consulting LLC to complete the Historic Resources Evaluation Report (HRER) and Finding of Adverse Effect (FOAE) document. The FOAE needs to be approved by Caltrans and the State Historic Preservation Officer (SHPO), along with a Memorandum of Agreement (MOA) that will identify measures to mitigate adverse effects on the historic bridge. This information will be summarized in the EIR/EA.

- **Geology and Soils** – Potential impacts to soils, including soil erosion during construction, and the level of geologic and seismic risks. The level of risk to people and property will be determined based on analysis of the project study area soil properties and seismic hazard potential conducted as part of the geotechnical investigation.
- **Hazards/Hazardous Materials** – Given the age of the existing bridge, there is potential for potentially hazardous materials such as lead-based paint, treated wood, and asbestos-containing materials to be present. If present, these would pose a risk to the construction workers and public during construction of the proposed project. The County and their consultant team will be conducting an Initial Site Assessment to determine if potentially hazardous materials are present. If they are, additional testing will be conducted to determine levels present and appropriate avoidance and minimization measures and mitigation measures. This information will be incorporated into the EIR/EA. Other potential hazards to be addressed include increased risk of fire and impediment to emergency routes during construction.
- **Hydrology and Water Quality** – Potential impacts to water quality and associated beneficial uses within the Mattole River due to erosion/sedimentation and potential for accidental spills from construction equipment/vehicles during construction. Potential impacts to the hydrology of the Mattole River as a result of in-river construction activities.
- **Recreation** – Potential impacts to recreational users along the Mattole River during the construction phase.
- **Noise/Vibration** – Potential impacts on ambient noise levels during construction of the proposed project, including pile-driving activities, which may impact sensitive receptors (e.g., local residents).
- **Traffic and Circulation** – Potential impacts to adjacent roadways due to increased construction vehicle and equipment traffic during the proposed project construction phase.
- **Growth-Inducing and Cumulative Impacts** – Potential growth-inducing and cumulative impacts resulting from the proposed project pursuant to CEQA Guidelines 15126(d) and 15130.

For this project, the County identifies the baseline as the environmental conditions in within the project study area and vicinity as they exist at the time the NOP is issued (CEQA Guidelines, Section 15125).

NEPA Compliance

Since Caltrans will use the EIR/EA document to demonstrate compliance with NEPA, the EIR/EA will include additional elements to ensure it is fully compliant with Caltrans/FHWA NEPA requirements and Federal executive orders. These include:

- Purpose and Need Statement

- Environmental Justice
- Socio/Economics
- Section 4(f)
- Short-term uses and Long-term Productivity
- Irreversible and Irretrievable Commitments of Resources

Comments provided during the scoping process may identify additional environmental issues to be evaluated.

Discussion of Alternatives

CEQA Guidelines 15126.6(a) requires that an EIR describe a range of reasonable alternatives for the project. The EIR/EA will evaluate the comparative merits of the alternatives, which will include a No-Project/No-Action Alternative and may include alternative bridge type selections. The alternatives will be determined, in part, by public input received during the NOP comment period. To ensure that the EIR/EA adequately addresses the full range of issues and alternatives related to the proposed project and that all significant issues are identified, comments and suggestions are invited from all interested parties.

Responsible and Trustee Agencies

The following agencies may have statutory responsibilities in connection with approval of the proposed project:

- California Department of Fish & Wildlife (Region 1)
- California Regional Water Quality Control Board (North Coast Region)
- California Department of Transportation (District 1)
- California State Lands Commission
- State Historic Preservation Officer
- National Marine Fisheries Service (Santa Rosa Field Office)
- U.S. Army Corps of Engineers (San Francisco District)
- U.S. Fish & Wildlife Service (Arcata Field Office)

Public Scoping Meeting

A public scoping meeting will be held on Wednesday, March 1, 2017 at 5:00 P.M., until 7:00 P.M. The meeting will occur at the following location:

Mattole Grange #569
 36512 Mattole Road
 Petrolia, CA 95558

Note: Do not mail NOP comments to the above address.

The purpose of the scoping meeting is to present information about the proposed project, describe the State's CEQA process and the associated Caltrans NEPA process and timelines, and solicit input, including written comments, on the scope and content of the EIR/EA. The format of the meetings will be an open house style with stations set up for attendees to obtain information about the project and environmental process and discuss their concerns with the project staff. Comment forms will be available for those who wish to submit written comments at the meeting.

Interested parties, including public agencies, are encouraged to attend the meeting to learn more about the proposed project and the environmental review process and to express any concerns about the proposed project and offer suggestions regarding the environmental impacts, including any mitigation measures and alternatives. The public scoping meeting information has also been published in local newspapers.

Public Review Period

The Notice of Preparation is being circulated for public review and comment for a period of 30 days beginning February 15, 2017. Written comments will be accepted by the County through 5:00 P.M. on March 15, 2017. This information will be considered when preparing the EIR/EA.

You may submit comments in three ways: (1) by U.S. mail, (2) by electronic mail (e-mail), or (3) by attending the public scoping meeting and submitting written comments at that time. Comments provided by e-mail should include "Honeydew Bridge Replacement Project NOP Scoping Comments" in the subject line, and the name and physical address of the commenter should be contained in the body of the email.

Please send all comments via mail to:

Mr. Andrew Bundschuh, Environmental Permitting and Compliance Manager
Humboldt County Public Works Department
Natural Resources Division
1106 Second Street
Eureka, California 95501

OR via e-mail to:

abundschuh@co.humboldt.ca.us

Your views and comments on how the project may affect the environment are welcomed and will be used to identify the issues to be analyzed in depth in the EIR/EA.

Sincerely,



Andrew Bundschuh
Environmental Permitting and Compliance Manager

Honeydew Bridge Replacement Project Public Comment Tracking Sheet

Date Received	Name	Received by:	In response to:	Comment Saved?	Bridge Alternative #?	Comments
2/22/2017	Ron/CalFire	Phone call	NOP	Server Project Folder	N/A	Calfire wanted to insure that a detour would be present whenever the bridge was closed
3/8/2017	Jennifer/CDFW	Email	NOP	Server Project Folder	N/A	Considerations to include are potential impacts to: bats, flycatcher, frogs & CESA fish
3/9/2017	Ellen Taylor	Email	Public Meeting*	Server Project Folder	N/A	Does not want bridge replaced and wants it to be reinforced and maintained
3/9/2017	Kris Schuster	Email	Public Meeting*	Server Project Folder	N/A	Wants bridge to be named after Ray Etter
3/9/2017	Robert Yosha	Email	Public Meeting*	Server Project Folder	1	Bridge Alternative 1 - Steel Truss
3/9/2017	Dan Rathbun	Email 1 & 2	Public Meeting*	Server Project Folder	1	Bridge Alternative 1 - Steel Truss; Would rather keep existing bridge though
3/9/2017	Roxy Kennedy	Email	Public Meeting*	Server Project Folder	1; 2	#1 based on aesthetics, but wants new bridge to safest option, more than aesthetics
3/9/2017	Brianna Owens	Email	Public Meeting*	Server Project Folder	1	Bridge Alternative 1 - Steel Truss; symbolic to Honeydew
3/9/2017	Claire Trower	Email	Public Meeting*	Server Project Folder	1	Bridge Alternative 1 - Steel Truss
3/9/2017	Marcia Ehrlich	Email	Public Meeting*	Server Project Folder	2	Comments regarding seismic and new bridge
3/13/2017	Ken Carpenter	Email	Public Meeting*	Server Project Folder	1	Bridge Alternative 1 - Steel Truss; Preserve the Oak Tree
3/14/2017	Margaret Fraser	Email	Public Meeting*	Server Project Folder	N/A	Preserve the existing bridge
3/15/2017	Brianna Owens	Email #2	Public Meeting*	Server Project Folder	N/A	Preserve the existing bridge
3/15/2017	Corbett Petersen	Email	Public Meeting*	Server Project Folder	1	Preserve and Rehabilitate the existing bridge
3/15/2017	Peter Marshall	Email	Public Meeting*	Server Project Folder	1	Western pond turtle protection

Public Meeting* -- Laura Cooskey probably informed these folks via Mattole History website

**Humboldt County Public Works Department
Honeydew Bridge Replacement Project EIR/EA**

Attendance Sheet

4	Name	Sonny Anderson
	Company	
	Address	Box 224
	City/State/Zip	Petaluma, CA 95558
	Please choose one: <input type="checkbox"/> I would like to receive a copy of the Draft EIR/EA on CD <input type="checkbox"/> I would like to view/download the Draft EIR/EA via the internet. My email address is:	

5	Name	William Etter
	Company	William J Etter Cont
	Address	P.O. 61
	City/State/Zip	Honeydew CA 95595
	Please choose one: <input type="checkbox"/> I would like to receive a copy of the Draft EIR/EA on CD <input type="checkbox"/> I would like to view/download the Draft EIR/EA via the internet. My email address is:	

6	Name	
	Company	
	Address	
	City/State/Zip	
	Please choose one: <input type="checkbox"/> I would like to receive a copy of the Draft EIR/EA on CD <input type="checkbox"/> I would like to view/download the Draft EIR/EA via the internet. My email address is:	

From: [Wirt Lanning](#)
To: [Bundschuh, Andrew](#)
Cc: [Seghetti, Tony](#); [Bob Morrison](#)
Subject: RE: NOP question from CalFire
Date: Wednesday, February 22, 2017 10:21:52 AM

Thanks Andrew, a legitimate concern, but as you state, something that the County will be able to adequately accommodate during construction.

Wirt H. Lanning
CEQA/NEPA Program Manager/Senior Environmental Analyst
North State Resources, Inc.
5000 Bechelli Lane, Suite 203
Redding, California 96002
Phone: (530) 222-5347 ext. 128
Fax: (530) 222-4958
E-mail: lanning@nsrnet.com
Web: www.nsrnet.com

From: ABundschuh@co.humboldt.ca.us [mailto:ABundschuh@co.humboldt.ca.us]
Sent: Wednesday, February 22, 2017 10:20 AM
To: Wirt Lanning <lanning@nsrnet.com>
Cc: TSeghetti@co.humboldt.ca.us
Subject: NOP question from CalFire

Wirt,

Just received a phone call from Ron @ CalFire. He had a question regarding the detour and wanted to make sure that there would be a detour in place for emergency services. I told him the project is being planned for 2 summer seasons with the detour only being needed during the 2nd phase. I also told him that we are looking at providing a baily bridge or other bridge structure to insure that services are maintained in the event the construction season drags into the early Fall. Ron said he would submit his comments to Clearinghouse – just that CalFire wants to insure that a detour is in place for emergency and fire services because the alternative detour would add hours to service response.

Andrew Bundschuh
Environmental Permitting and Compliance Manager
Natural Resources Division
Humboldt County Public Works
(707) 445-7741
abundschuh@co.humboldt.ca.us

Bundschuh, Andrew

From: Olson, Jennifer@Wildlife <Jennifer.Olson@wildlife.ca.gov>
Sent: Wednesday, March 08, 2017 8:43 AM
To: Bundschuh, Andrew
Subject: comments on Honedew Bridge Replacement NOP

Good morning Andrew,

Thank you for referring the Notice of Preparation for an Environmental Impact Report for the Honeydew Bridge Replacement Project (SCH 2017022027, Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Project consists of replacing the existing Honeydew Bridge over the Mattole river over two summer seasons, including construction of a temporary detour. CDFW offers the following comments on this Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are informal comments intended to assist the Lead Agency in making informed decisions early on (pre-consultation).

In addition to the biological resources identified in the NOP:

- The EIR should consider whether the bridge contains habitat for bats, particularly any significant maternity roost habitat. A qualified bat biologist should assess the structure during the appropriate seasons to determine whether bats are using the structure.
- The EIR should address and propose avoidance measures for potential impacts to the State endangered willow flycatcher (*Empidonax traillii*).
- The EIR should address potential impacts to breeding foothill yellow legged frogs (a State Species of Special Concern). It may be necessary for a qualified biologist to relocate egg masses early in the season to avoid impacts to tadpoles during the construction season. CDFW can provide information, and possibly assistance, in this process.
- State incidental take coverage may be required for coho salmon pursuant to the California Endangered Species Act. Therefore, it is essential to consult with and involve CDFW during the federal Section 7 consultation in order to meet the requirements for a federal Consistency Determination. More information is available here: <https://www.wildlife.ca.gov/Conservation/CESA/Consistency-Determinations>. Specifically, CDFW staff will need to be put in contact with NOAA staff to ensure the Biological Assessment and subsequent Biological Opinion include information about the mitigation and financial assurances required for CESA consistency. Please contact me if you need more information about this process.

Thank you for the opportunity to comment on this Project. Please contact me if you need additional information.

Sincerely,

Jennifer Olson

Jennifer Olson
Environmental Scientist – Coastal Conservation Planning
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 445-5387
jennifer.olson@wildlife.ca.gov

From: [Ellen E Taylor](#)
To: [Bundschuh, Andrew](#)
Cc: [Lauracooskey](#); lauracooskie@frontiernet.net; [Mattole History](#)
Subject: Honeydew Bridge
Date: Wednesday, March 08, 2017 8:49:08 PM

I am a Petrolia resident. I use the Honeydew Bridge frequently. I enjoy crossing it, hearing the sounds the planks make, watching the river through the trusses.

I am not in favor of replacing it. I was against the Willets bypass and am against widening the road through Richardson Grove. From the paragraph description of the project part of the problem is that the bridge hasn't been maintained.

When I don't maintain my house I pay for it, in expensive repairs at a later time. The bridge has certainly withstood the test of time unlike other bridges across the Mattole.

What is the heavy equipment that can't pass? If it's really too big to cross the bridge can't it come in one of the other ways?

Infrastructure tends to be condemned and replaced far too frequently. Take the Mattole school building, replaced 40 or so years ago by far less sturdy buildings. Or houses after the earthquake of 1992, same thing. It means more money for corporations who get the contracts, rather than local people caring for their own infrastructure (the circumstances under which this bridge was undoubtedly built 97 years ago).

Let people slow down, drive smaller rigs, avoid bumping into the sides (this happens on lots of bridges of course) and reinforce and maintain this beautiful and nostalgic old bridge.

Yours

Ellen Taylor

From: [Kris Schuster](#)
To: [Bundschuh, Andrew](#)
Subject: Honey dew bridge
Date: Thursday, March 09, 2017 7:50:07 AM

Hello,

Thanks for hearing us country folk out on what we would like our bridge to be. The old Honey Dew bridge is such an institution in this valley, I know it doesn't seem much but when there isn't much infrastructure to begin with what little you have you hold very dear.

I have only one request as far as the bridge goes. Can we name it after William Etter senior? He was a valley patriarch for decades and built many of the roads to people's homesteads. He passed last year, which was a huge loss felt by all in the Mattole. I feel after all he's done for Honey Dew the bridge should bear his name.

Thanks for your time.

Kris Schuster
39803 Mattole rd
Honey Dew
707.629.3662

From: [Claire Trower](#)
To: [Bundschuh, Andrew](#)
Subject: I vote for Design #1 for the new Honeydew Bridge
Date: Thursday, March 09, 2017 8:13:18 AM

...and I remember there were photos of the 3 choices that were sent out where we voted previously. Could you please provide those pictures again...and perhaps the results of that vote? I seem to remember that #1 was the 'fav' at the time.

I also remember that a person could vote repeatedly for their favorite (of course this wasn't widely known), so perhaps there should be a better voting method provided. I couldn't attend the meeting due to Wilder Ridge Road being closed between me and the 'Dew.

Thanks for holding the meeting.

Best regards,

Claire Trower
4062 Wilder Ridge Road
Garberville, CA 95542
(actually should be getting my mail from 95545)

From: [Marcia](#)
To: [Bundschuh, Andrew](#); [Toomey Douglas](#)
Subject: Honeydew bridge design
Date: Thursday, March 09, 2017 10:00:40 AM

Aesthetically I prefer the #2 option, with the welded girder and low guard rail. I like to look over the river as I cross it.

However more importantly I feel the design that best can withstand a 9.0 earthquake is preferable. The third option with an exclusively concrete underpinning could be vulnerable to a really huge quake. And the first option has quite a superstructure, which would behave how in a huge quake?

The recent failure of the Oroville Dam with state representatives saying Who could have guessed that California would have so much rain? Well California has a history of just such super wet periods and there was no guessing necessary, just a quick double check of historical records. Yes rare but definitely written about.

Scientists say our area is vulnerable to 9.0 earthquakes although more likely high 8's at the southern end of the Gorda fault. The Honeydew Bridge should be built to a standard that can withstand the slight possibility of such extreme stress.

Contact Doug Toomey at the University of Oregon, who studies earthquakes in our region, if you need up to date information. His email is: drt@uoregon.edu

Thanks for presenting three designs for review by the communities affected. Good luck with your decision.

Sincerely,

Marcia Ehrlich

Petrolia 95558

From: [brianna owens](#)
To: [Bundschuh, Andrew](#)
Subject: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project
Date: Thursday, March 09, 2017 10:28:33 AM

To whom it may concern,

My husband and I were unable to attend the meeting and weigh in on this project, I hope this email will suffice.

Given options for the replacement bridge, we (my family and I) agree it should keep the historical feel. With that, we choose/ Vote for the first option, # **1. Two-span steel camelback through truss bridge.**

It is what our friends and family think of when driving through Honeydew to visit us, The truss bridge the connects us is symbolic to Honeydew.... Please choose the 1st option. For our consideration, thank you.

Warmly,
Jason & Brianna

www.briannaowens.com

From: [brianna owens](#)
To: [Bundschuh, Andrew](#)
Subject: Re: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project
Date: Wednesday, March 15, 2017 10:38:15 AM

Thanks you Andrew for getting back to us.

I would like too add, What we would really like to see, is the current bridge to stay put, and be maintained, .

If that was an option, that would be our 1st choice... leave the Honeydew bridge where its at... Theres something nostalgic about it, & as i said before, its symbolic to the area. It has been through floods and earthquakes and remains still. Its still a great bridge, and we would love to see I remain.

thanks again...

~Brianna

www.briannaowens.com

On Mar 9, 2017, at 11:40 AM, abundschuh@co.humboldt.ca.us wrote:

Jason and Brianna,

Thank you for your email/comment regarding the Honeydew Bridge Replacement Project.

First, the County and our environmental consultant (North State Resources, Inc.) take every comment seriously and we appreciate that you have taken the time to submit comments and bring forward your ideas, concerns and/or recommendations. Once the comment period has ended (March 15, 2017), the County along with North State Resources will consider all comments received within the public scoping period when preparing the EIR/EA. There will be another public scoping meeting and chance for public input when the draft EIR/EA is completed. The tentative timetable for the draft EIR/EA is late 2017.

Regarding voting for the bridge alternative. We are currently accepting all comments, whether it be for a preferred alternative bridge type or relating to potential impacts to the environment. What I plan to do while we go through the draft EIR/EA process is post a survey/poll online that people can "vote" as it pertains to the preferred alternative. At this point the County is not deciding on the preferred alternative. So you will have time to "officially" place your

vote. However, I will mark your comment down now as a vote for alternative #1 - the steel truss alternative.

FYI, I have attached a PDF showing the alternatives to this email. They will also be posted on the project website at:<http://www.humboldt.gov/HoneydewBridge>

Additional information about the project can also be found on the website.

Again, thank you for your comments and interest in the Honeydew Bridge Replacement Project.

Sincerely,

Andrew Bundschuh

Environmental Permitting and Compliance Manager

Natural Resources Division

Humboldt County Public Works

(707) 445-7741

abundschuh@co.humboldt.ca.us

From: brianna owens [<mailto:bowensphoto@gmail.com>]

Sent: Thursday, March 09, 2017 10:28 AM

To: Bundschuh, Andrew <ABundschuh@co.humboldt.ca.us>

Subject: 1. Two-span steel camelback through truss bridge. Honeydew bridge Project

To whom it may concern,

My husband and I were unable to attend the meeting and weigh in on this project, I hope this email will suffice.

Given options for the replacement bridge, we (my family and I) agree it should keep the historical feel. With that, we choose/ Vote for the first option, # **1. Two-span steel camelback through truss bridge.**

It is what our friends and family think of when driving through Honeydew to visit us, The truss bridge the connects us is symbolic to Honeydew.... Please choose the 1st option. For our consideration, thank you.

Warmly,
Jason & Brianna

www.briannaowens.com

From: [Roxy Kennedy](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge
Date: Thursday, March 09, 2017 10:41:34 AM

Hello Andrew Bundschuh,

I am sorry neither my husband, nor I were able to make the bridge meeting, and do appreciate the request for public input. I have seen the three photos and feel the steel truss one is the most visually appealing and like the historical bridge.

I have not studied the info, but feel that safety should be first priority, and cost second priority. Visual would be last priority. If cost and safety are similar or close, the steel truss would be best bet.

Thank you very much,

Roxanne Kennedy

Jim Bowdoin

hnydew@gmail.com

P O Box 153, Honeydew, CA 95545

650 Old Hindley Ranch Road

From: [dan rathbun](#)
To: [Bundschuh, Andrew](#)
Subject: honeydew bridge
Date: Thursday, March 09, 2017 10:46:20 AM

i am a 40 year resident of the mattole valley and my preference would be for the truss type bridge.

thanks

little danny rathbun
thbun@mac.com
510-459-7320

From: [dan rathbun](#)
To: [Bundschuh, Andrew](#)
Subject: Re: honeydew bridge
Date: Thursday, March 09, 2017 10:49:26 AM

of course i forgot to mention that i am 100% in favor of keeping the existing one.

little danny rathbun
thbun@mac.com
510-459-7320

On Mar 9, 2017, at 10:46 AM, dan rathbun <thbun@mac.com> wrote:

i am a 40 year resident of the mattole valley and my preference would be for the truss type bridge.

thanks

little danny rathbun
thbun@mac.com
510-459-7320

From: [Robert Yosha](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Design
Date: Thursday, March 09, 2017 11:45:37 AM

Hello, Mr. Andrew Bundschuh, Environmental Permitting and Compliance Manager.

Sorry I was not able to make it to the Grange for a recent meeting held there devoted to this topic.

I'm writing you today to indicate my strong support for:

Bridge Design Number 1, the camelback through-truss bridge.

I'll leave it at that.

Thanks,
Robert Yosha
28 year full-time Mattole resident/landowner.

From: [Ken Carpenter](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Project
Date: Saturday, March 11, 2017 3:35:16 PM

Dear Mr. Bundschuh:

I live within sight and the sounds of the Honeydew Bridge so am very interested in what is to be done at that site. I would much prefer that the present structure not be replaced because it serves its function well, slows traffic down and is aesthetically pleasing. However, I will not impede "progress".

My preference among the three designs presented is the one with the overhead truss. I find it to be much more aesthetically pleasing than the other two. It fits the environs very well. The concrete structures are too sterile for my tastes.

The only environmental concern I have pertains to the large oak tree next to the northeast end of the bridge. Care should be taken to ensure that it not be damaged.

Thank you,

Ken Carpenter
125 Old Hindley Ranch Rd.
Honeydew

From: [Corbett Petersen](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge replacement
Date: Wednesday, March 15, 2017 5:20:36 PM

Dear Sir,

I'm writing in regards to the Honeydew Bridge replacement project. I must say that I am disappointed that there seems to be only three options put on the table, rather than a fourth; rehabilitate the current bridge. The bridge is nearly a century old, and like nearby Fernbridge, has considerable historical value, is still in continuous daily use, and provides a vital link to interior areas of the county. I would much prefer to see the current structure rehabilitated rather than replaced. However, if it is absolutely impossible for that to happen, I would prefer that it be replaced with the truss design, if only for aesthetic "old world charm" reasons.

The bridge is nearly a century old and in some recent CalTrans documents is eligible for Landmark registration. I urge the county to consider allowing that to happen and allow various other groups to ally with the county in an effort to save the bridge. It is nearly a century old and is a testament to design and strength of other bridges (much like Fernbridge) throughout the state that have been gone for decades. However again if it is absolutely impossible to save, being that funding for a new structure is going to be difficult as one consideration, why not then build a replacement to the east of the current Honeydew Bridge? Or perhaps allow it to stand, maintenance permitting, to be used as a pedestrian/bicyclist bridge as others in the country (e.g. Bridgeville, Avenue of the Giants)?

Please consider a rehabilitation option for the bridge. There is much history to be saved here as well as in an unusual way provides a "traffic calming" device, being it is a single lane thoroughfare. There are a good number of folks that would like to see it remain, especially those that have had families in the area since the 19th century, like myself. We'd hate to see it go.

Cordially,

Corbett Petersen
Eureka

From: [Peter Marshall](#)
To: [Bundschuh, Andrew](#)
Subject: Honeydew Bridge Comments
Date: Wednesday, March 15, 2017 6:08:35 PM

Dear Mr. Bundschuh,, Thank you for the opportunity to comment on the bridge project. Alternative #1 (double camelback truss) is preferred due to its mitigation of the cultural diminishment resulting from the removal of "the old bridge."
Mention of Western Pond Turtle, et al. prompts me to urge utmost care for their survival and well being during harsher phases of construction such as pile driving/drilling.
Thank you.
Peter Marshall
Honeydew

From: [Maraget Fraser](#)
To: [Bundschuh, Andrew](#)
Subject: Please preserve the Honeydew Bridge!
Date: Wednesday, March 15, 2017 6:38:51 AM

Hello,

I am a Petrolia resident and residential property owner. I use the Honeydew Bridge frequently, and crossing it is always one of my favorite parts of my drive in and out of the Mattole Valley.

I am not in favor of replacing it. The bridge I feel can be saved/restored cheaper than a replacement. What is the heavy equipment that can't pass? If a vehicle/equipment is really too big to cross the bridge, then it is likely that it is unsafe for them to drive the many switchbacks between Honeydew and HWY 101. There are alternate routes to take.

The Honeydew bridge has considerable historical and aesthetic value. Please preserve this nostalgic piece of Humboldt County "back country", and reinforce and maintain this beautiful old bridge.

Thank you,

Margaret Fraser

Francis Cook An Officer and a Gentleman

Donell McCanness came along with me to visit Francis at his Rio Dell home on December 4, 2015, and again a few weeks later. She was invaluable in helping to jog his memory and draw out reminiscences. Indeed, Donell practically worked miracles, in that Francis did not seem, at first, to be particularly eager to talk.

Unfortunately, Francis passed away in the Autumn of 2016 at the age of 92, and is not available to help clear up a few slightly mysterious passages. Perhaps an elder reader will be able to fill in some of the blanks.

by Laura Cooskey

Coming into Francis Cook's home feels a bit like entering a shrine to the beauty of Humboldt County.

He has on display a beautiful painting by Bill George—a view of Cape Mendocino, from 1970. The Georges worked at the Walker Ranch and were good friends of the family. Also, there's a pretty painting of Freshwater, where his wife, Virginia Coeur Cook, was from. Painted by someone named "Palm"—Francis doesn't know who that is. He also has a Mattole Valley Sammons painting, possibly of Taylor Peak, and a couple from the Southwest. And he has an "African fir" tree out back, shielding his yard from the freeway. Francis, or Francie as he's often called, has lived here in Rio Dell for five or six years.

Daughter Tianne lives in the Bay Area. Francis and Virginia Coeur Cook had four "T" kids: Tom, Tim, Terry, and much later, Tianne. Tim lives near Petrolia with his wife, Kathy; Tom is our mail delivery man; and Terry worked for years for UPS and lives in Humboldt, as well.

Before Francis lived here, he briefly rented a house over at Clearlake. Before that, he lived in Petaluma, and before that, Petrolia. Most of the early work in Petaluma was as a brand inspector. After his wife Virginia passed away in December of 2000, Francis was still living in

Petaluma, but the cost was too high. He had a friend in Clearlake with a house who said he could live in it. She'd moved to Arizona and wanted him in the house. Francis returned to Humboldt from Clearlake because "I think I had only so long to buy a house... and I wanted to buy a house in Humboldt."

He and Virginia had moved to Petaluma when all the kids but Tianne were out of the house. He went there for the brand inspection job. Tianne was in first grade then (this was 1970). The family had lived in Ferndale, across from Lakins', for just a little while when the older kids were in high school. Tianne had just started school, and only went there for one year. She came way later than the other kids.

"I liked it good," Francis replies to the question of how living in Petaluma was, compared to Humboldt. "I was on the go all the time." But they had a shakeup in livestock identification. "I had to do more than one man could do." He had to travel all over Sonoma County, Marin County... "then they wanted me to go over to the Valley and up to Mendocino—nobody could do it. They said, 'This is what your job is going to be.' But it was impossible to do it." So what did he do? "I guess I just quit!" He stayed in Petaluma—got a job in the auction yard, picking up stock, delivering cattle. Driving a truck full of cattle, up into Mendocino. This job continued until Francis's retirement, when he moved north again.

Francis went to Eureka for high school—didn't know anyone in Ferndale to stay with. Jim stayed out of high school for a year so Fran could catch up, and they could go to school together. (Looks like Francis also moved ahead one year.) They stayed in Eureka with friends of the family, the Moores. Older brother Joe Cook had gone to Craddock Business College in Eureka, after high school in the Mattole. (Donell went to three years of high school at Mattole. But many Petrolia people chose to go to high school in town.)

Francis was born on June 29, 1924, at St. Joseph's Hospital, Eureka. (Donell notes that her husband, Jack

Englewood, Illinois. It was sent to her by her father's second wife, Nellie Lansing, born in Greene, New York, who married Frank Benton in October, 1889. But Jessie was not only the step-daughter of Nellie Lansing Benton; she was her schoolmate. According to a note on the *ancestry.com* family tree for Nellie J. Lansing, Nellie married the father of her best friend at Cook Academy about two years after he was widowed. She became step-mother to Flora and Royal, and to Jessie, to whom she addressed the letter from Petrolia.

Nellie was born in 1860, and married Francis Benton at about age 29—when he was 62. Jessie Fremont Benton (Mrs. C.S. Thornton), born in 1864, was only four years younger than Nellie.

The 1890 trip to California to visit Frank Benton's brother Joel in the wild and remote Mattole Valley would have been a wedding trip for Nellie and Frank. Although they speak of going next to Santa Barbara, that must have been on the way home to the Chicago area. Grant Benton, Francis and Nellie's only child, was born not long after their return, in May, 1892. Francis Benton died in Cook County, Illinois, on his 86th birthday, in 1914; his wife Nellie Lansing Benton passed away in 1928, and his daughter Jessie Thornton in 1936.

Joel Benton departed this world in May of 1901, leaving the ranch to his wife, Ann, who in 1904 sold it to John Henry Hunter, Jr., and family. Laura Stansberry Hunter, Bob Stansberry's aunt, lived on that ranch (later Drurys', then Macchiarini and Rathbuns') for about a decade during her school years and before marriage.



This photo of Peter Lansing and daughter Nellie, taken around 1870, is from *ancestry.com*. One thing we know about Nellie is that she got a good education; I typed her letter exactly as she wrote it, with no spelling errors. •

Meeting regarding Honeydew Bridge on Wednesday, March 1

The Humboldt Co. Dept. of Public Works will be holding a meeting at the Mattole Grange this Wed., 3/1/17, from 5 p.m.-7 p.m., concerning replacement and memorializing of the one-lane Honeydew Bridge.

This plan has been in the works for some time. I have been in correspondence with Andrew Bundschuh of Public Works and Chris McMorris of JRP Historical Consulting, an organization that acts as a sort of liaison between the government and parties concerned with historical and cultural values.



It is clear that the bridge will be replaced. This is not really a question. There are many reasons for this, and also answers as to why there is money to do this, but not to fill potholes (different levels of government, agencies, etc.), which can feel more pressing on a daily basis.

What we are looking at now are ways to “mitigate” – that’s the key word—the damage to historical values incurred by destroying the old bridge; that is, to salvage what we can by remembering and celebrating the bridge and its place in Mattole Valley history. Wild ideas thrown out have been to have an evening of music, poems, and reminiscences about the bridge; to have an art exhibit of drawings, paintings, photos, etc., of it; and to make permanent records (written reports and/or a book with photos, and videos). Or maybe we could kick it off with a bridge party some sunny Spring day. There would possibly be some financial compensation for these mitigation projects.

Also, if anyone has heaps of money, they might see about obtaining the bridge and putting it up over a shorter span on private property.

I admit I am not up to speed on the details, but am planning on attending the meeting to learn more.

There is quite a bit of information about the Honeydew Bridge project on the following webpage: <http://www.humboldt.gov.org/honeydewbridge>. There’s a link on that page bringing you directly to a meeting plan for our March 1 gathering. •