

April 29, 2010

Public Notice for Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects)

California Department of Transportation
Highway 101 – Willits Bypass Project
WDID No. 1B10019WNME

Mendocino County

Introduction

On March 1, 2010, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the California Department of Transportation (Caltrans), requesting Federal Clean Water Act (CWA), section 401, Water Quality Certification for activities related to the proposed Highway 101 Willits Bypass Project (project). The proposed project will cause disturbances to waters of the United States (U.S.) and waters of the State, including intermittent, ephemeral and perennial tributaries to Outlet Creek, which is located within the Eel River Hydrologic Unit No.111.00, the Outlet Creek Hydrologic Sub-Area (HSA) No. 111.61, and the Little Lake Valley Ground Water Basin. Regional Water Board staff are proposing to regulate this project pursuant to Section 401 of the CWA (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority.

The proposed project is located on Highway 101, in Mendocino County, and will begin approximately 0.8 mile south of the Haehl Overhead and end approximately 1.9 miles south of the Reynolds Highway (Figure 1-1). The overall length of the bypass is approximately 5.9 miles from post mile realignment (PMR) 43.1 and ending near PMR 49.0. The purpose of the project is to upgrade the level of service to the traveling public along Highway 101 by reducing travel times and reducing the traffic congestion along Highway 101 and within the City of Willits. Beginning at the southern end of the project, the new alignment of Highway 101 would swing to the northeast and then travel back to the northwest, adjacent to the Willits Wastewater Treatment Plant (WWTP) (Figures 1-2a – 1-2d). Because of funding constraints, the decision was made to construct the bypass in two phases such that a functional interim two-lane facility would be constructed initially; when adequate funding becomes available in the future, the remaining lanes will be constructed to complete the four-lane bypass. The application for Water Quality Certification is for Phase I only.

Project Description

The proposed project will be constructed largely on fill material imported to the site. The bypass requires approximately 2.5 million cubic yards of fill (1.4 million cubic yards in Phase 1) and will require imported borrow material from outside the project area in addition to material excavated on-site. The area from which Caltrans proposes the contractor take fill material for the project is at Oil Well Hill, which is located on the east side of Highway 101, approximately 0.85 mile north of the intersection of Reynolds Highway and Highway 101. The State Geology and Mining Board granted an exception to the Surface Mining and Reclamation Act (SMARA) permitting requirement on March

13, 2008 for obtaining the fill material from Oil Well Hill. The construction contractor will have the option to determine whether the source of fill material for the project will be from the Caltrans designated borrow site at Oil Well Hill, a commercial borrow site, or another site. If the contractor chooses to use available commercial borrow sites in the vicinity of the project to obtain the required fill, it will likely not need to obtain any additional environmental permitting when soil is exported because commercial borrow sites typically hold preapproved operating permits. Should the contractor select an alternative, noncommercial borrow site for this project, the contractor will be responsible for conducting a separate environmental review for that borrow site.

The following structures will be constructed during the project:

- Two interchanges will be constructed for the project. The Haehl Creek interchange will be located at the south end of the project near Haehl Creek and connect the existing highway into Willits with the new highway facility. The Quail Meadows interchange will be located near the north end of Little Lake Valley and connect the new highway facility to the existing highway north of Willits.
- The bypass will cross multiple creeks, riparian corridors, streets, and railroad rights-of-way using 22 bridges, three retaining walls, and a one mile long viaduct that will span the regulatory floodway.
- Six bridges will be constructed in the Haehl Creek interchange area, one for each of the following:
 1. Northbound freeway lanes separation over State Route (SR) 20
 2. Southbound freeway lanes separation over SR 20
 3. Southbound off-ramp over Haehl Creek
 4. Northbound on-ramp over Haehl Creek
 5. Northbound freeway lanes over Haehl Creek
 6. Southbound freeway lanes over Haehl Creek
 7. A culvert will be replaced during improvement of the proposed new Schmidbauer Ranch access road
- Two retaining walls will be constructed in the Haehl Creek interchange area adjacent to Haehl Creek:
 1. East side of northbound lanes
 2. West side of northbound on-ramp
- One retaining wall will be constructed on the west side of the southbound roadway lanes, just south of Center Valley Road.
- Two bridges will be constructed to cross East Hill Road:
 1. One bridge for the southbound roadway lanes (Phase 1)
 2. One bridge for the northbound roadway lanes (Phase 2)
- Two bridges will be constructed to cross the middle reach of Haehl Creek south of Shell Lane:
 1. One bridge for the southbound roadway lanes (Phase 1)
 2. One bridge for the northbound roadway lanes (Phase 2)

- Two viaduct structures will be constructed to span the floodway:
 1. Southbound (Phase 1)
 2. Northbound (Phase 2)

- Two bridges will be constructed to cross over the North Western Pacific Rail Road tracks in the Quail Meadows interchange area, one for each of the following:
 1. U.S. Highway 101 Willits Bypass
 2. Southbound roadway lanes (Phase 1)
 3. Northbound roadway lanes (Phase 2)

- Two bridges will be constructed to cross the new connector road to existing U.S. Highway 101 in Quail Meadows Interchange area:
 1. One for the southbound roadway lanes (Phase 1)
 2. One for the northbound roadway lanes (Phase 2)

- Six bridges will be constructed to cross Upp Creek directly north of the Quail Meadows interchange, one for each of the following:
 1. Southbound roadway lanes (Phase 1)
 2. Northbound roadway lanes (Phase 2)
 3. Northbound on-ramp (Phase 1)
 4. Northbound on-ramp (Phase 2)
 5. Southbound off-ramp
 6. Roundabout local intersection
 7. The northbound on Ramp Bridge constructed in Phase 1 would be replaced in Phase 2 by a different bridge

- The proposed alignment encroaches upon the 100 year floodplain. The design includes two elevated structures, which make up the floodway viaduct. The purpose of this design feature is to span the floodway. A floodplain evaluation report concludes that project will not increase the base flood elevation of the floodway, and does not constitute a significant floodplain encroachment as defined in 23 CFR 650.105(q). The viaducts will be located in the central part of the project area and will span Center Valley Road, the lower reach of Haehl Creek just upstream of the confluence with Baechtel Creek, Hearst Willits Road, Baechtel and Broaddus Creeks at their confluence (beginning of the Outlet Creek designation), the WWTP, and Mill Creek. The approximately 6,000 foot long structures will consist of separate northbound and southbound elevated viaduct superstructures. The total area of both viaducts would be 11.6 acres. Each of the viaducts will be approximately 42.6 feet wide. The edge to edge distance between the structures will be approximately 31.2 feet, and each will have a 16.5 foot minimum clearance underneath. The viaducts will require supporting columns, ranging in size from 4.5 to 7 feet in diameter.

Proposed Impacts to Wetlands and Surface Waters within the Regional Water Board's Jurisdiction

The project will result in impacts to wetlands and surface waters within the Outlet Creek HSA, including Haehl Creek, Baechtel Creek, Broaddus Creek, Mill Creek, Outlet Creek, Upp Creek, Ryan Creek and two ponds (Rutledge and Niesen). Caltrans has determined that the project would directly impact a total of 89.27 acres of waters of the U.S.¹, including 83.77 acres of impacts to wetlands and 5.5 acres (12,416 linear feet) to streams and ponds also identified as waters of the U.S. The project would temporarily impact 29.88 acres of wetlands and 3.16 acres (9,158 linear feet) of streams and ponds identified as waters of the U.S.². In addition, the project would result in permanent impacts to 53.89 acres of wetlands and to 2.34 acres (3,258 linear feet) of streams and ponds that are waters of the U.S.³

Caltrans has also determined that the project would result in 10.12 acres of temporary impacts (6,693 linear feet) and 10.88 acres of permanent impacts (8,535 linear feet) to waters of the state, including riparian areas.⁴ "Waters of the State" is defined very broadly within the Water Code as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code § 13050(e)). It has been interpreted to include all Waters of the U.S., in addition to areas outside of Waters of the U.S., such as isolated wetlands, headwaters, and riparian areas above the ordinary high water mark.

¹ Waters of the U.S. is defined in section 232.2 of Title 40 of the Code of Federal Regulations and includes "all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. All interstate waters, including interstate wetlands. All other waters including intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would or could affect interstate or foreign commerce... and wetlands adjacent to waters (other than waters that are themselves wetlands) ..."

² A temporary impact is the short term impact that occurs during the placement of fill within wetlands for access roads, or the removal of trees and vegetation along streams to construct false work and structures.

³ A permanent impact is the placement of fill within areas for the purpose of a permanent structure such as the roadway embankments for the new highway, bridge footings, or culverts within streams.

⁴ Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Protection of riparian areas adjacent to streams, lakes, and estuarine-marine shorelines is essential to the protection of the beneficial uses of the waterbodies. As collectively agreed to by the resource agencies with jurisdiction over this project, riparian areas are: 1) Category I Riparian Corridors, which include areas of salmonid streams and adjacent riparian areas extending 100 feet from each bank laterally from the Ordinary High Water Mark; 2) Category II Riparian Corridors, which include tributaries of Category I Riparian Corridors that are within 1,000 feet of the confluence with a Category I Stream, and extending 50 feet from the OHWM on each bank; and 3) Category III Riparian Corridors, which include tributaries of Category I Riparian Corridors that are more than 1,000 feet upstream of the confluence with the Category I Stream, extending 25 feet from the OHWM on each bank.

Protecting riparian areas is essential to ensuring the protection of beneficial uses identified in the Basin Plan. Riparian areas support and protect surface water quality by accumulating and filtering sediment before it reaches surface waters and providing shade for the enhancement and protection of cold freshwater habitat. In addition, riparian areas have their own beneficial uses that are recognized in the Basin Plan, such as providing terrestrial habitats, vegetation, and wildlife (WILD), providing flood peak attenuation/ flood water storage (FLD), providing water quality enhancement, including filtration, purification and erosion control (WQE), and the preservation and enhancement of wetland habitat (WET).

Proposed Mitigation

As part of its application for the Water Quality Certification, Caltrans submitted the *Draft Mitigation and Monitoring Proposal*, dated 28 February 2010. To mitigate impacts to wetlands, Caltrans has proposed creating 15 acres of wetlands. During the project planning process Caltrans assessed over 6,000 acres of land within Little Lake Valley to identify potential mitigation for the impacts of the bypass project and contacted the property owners requesting that they consider selling land to Caltrans for mitigation. Caltrans received responses from willing sellers of 3,157 acres, of which only approximately 14 acres of wetland creation was feasible. At the request of the Regional Water Board, Caltrans expanded their search to approximately 11,000 acres outside Little Lake Valley. Caltrans received responses from land owners willing to sell 2,700 acres, with little opportunity for wetland creation. The Water Quality Certification by the Regional Water Board will be conditional upon Caltrans obtaining control of all of the area necessary for the creation of the 15 acres of wetlands, as proposed in its mitigation and monitoring proposal.

Prior to the beginning of ground disturbing project construction activities, known populations of wetlands plant species to be affected by construction either will be salvaged for transportation to adjacent on-site locations or salvaged for relocation to off-site mitigation parcels, where the harvested material will be used to topdress created wetlands. Off-site mitigation actions for wetlands creation will require site preparation, including grading uplands and modifying local hydrology; seeding graded areas; planting wetlands species; and monitoring for successful wetland establishment.

After the creation of approximately 15 acres of wetlands, the project would still result in a net loss of 38.9 acres of wetlands. This net loss is, however, inconsistent with Executive Order W-59-93, in which the State of California established a State Wetland Conservation Policy with a goal of *“ensur[ing] no overall net loss and long term net gain in the quantity, quality and permanence of wetlands acreage and values in California...”* After several years of meetings and planning with Caltrans, the United States Environmental Protection Agency (U.S. EPA), United States Fish and Wildlife Service (U.S. FWS), United States Army Corps of Engineers (U.S. ACE), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), Mendocino County Resource Conservation District (MCRCD), Willits Environmental Center (WEC) and Regional Water Board collectively agreed to an ecologically designed watershed approach to mitigate for the permanent net loss of 38.9 acres of

wetlands. The watershed approach would involve providing a significant improvement to the ecological functions and values of wetlands off-site of the project, but still within the Little Lake Valley. (The project is planned in the west-central portion of the Little Lake Valley.) The resource agencies collectively agreed that the mitigation should be focused within Little Lake Valley, because it hosts a variety of unique ecological features, including the presence of several rare, threatened, and endangered species (e.g. anadromous fish and Baker's Meadowfoam).

This watershed approach mitigation strategy would combine habitat creation, restoration, enhancement, and preservation, which is consistent with the U.S. EPA and U.S. ACE new Compensatory Mitigation Rule released on April 10, 2008. Approximately 1,033 acres of existing wetlands would be enhanced and 1,161 acres of existing wetlands would be preserved. Wetland enhancement actions include: filling in man made drainage ditches to increase the residence time of surface waters within the wetland area; implementing a grazing management plan to reduce the impacts from cattle; and removing invasive species to promote the health and natural recruitment of native wetland species. The mitigation site preservation and site protection instruments would be a combination of fee title purchase, conservation easement, or other deed restriction. The Water Quality Certification by the Regional Water Board will be conditional upon Caltrans obtaining control of all of the area necessary for the enhancement and preservation of wetlands, as identified in their mitigation plan.

Caltrans proposes to mitigate impacts to riparian areas by planting with native riparian species along approximately 49 acres adjacent to waters of the U.S. and State and monitoring to ensure successful establishment. In addition, 53 acres of riparian areas would be enhanced by the following actions: expanding riparian habitat through planting native species; increasing habitat complexity; improving hydrology; controlling invasive species; and implementing a grazing management plan. A total of 116 acres of riparian areas would be preserved. The mitigation site preservation would be a combination of fee title purchase, conservation easement, or other deed restriction

To mitigate for impacts to waters of the U.S. and State, Caltrans proposes to enhance approximately 17 acres of streams by improving hydrology and increasing habitat complexity. The Rutledge pond will be realigned adjacent to the bypass, and therefore its disturbance will only be a temporary impact. Additionally, Caltrans proposes to grade and modify the Neisen pond as part its plan to create wetlands. Approximately 24 acres of streams identified as waters of the U.S. and State will be preserved. Overall, the mitigation plan would result in the purchase and/or preservation of approximately 2,100 acres of land within Little Lake Valley. The Water Quality Certification by the Regional Water Board will be conditional upon Caltrans being able to complete the purchase and/or preservation of this acreage.

In addition, Caltrans proposes to remove fish passage barriers along Upp Creek, Haehl Creek and Ryan Creek. The removal and/or upgrade of these facilities would likely reduce sediment input into the creeks as well as improve the beneficial use of the creeks for migration by anadromous fish. One existing culvert in the upper Haehl Creek channel, located under the proposed highway bridge, will be permanently removed and

restored as a natural drainage feature. A second existing culvert in upper Haehl Creek will be replaced and the area restored during improvement of the proposed new Schmidbauer Ranch access road. An existing box culvert in the vicinity of the proposed Quail Meadows interchange and passing under US 101 will be permanently removed and the creek contoured, re-graded, stabilized, and replanted; local traffic will cross Upp Creek on the new bridge that will be on the north leg of the roundabout. Stabilization of both creek channels that pass through the interchange areas (Haehl and Upp Creeks) will consist of grade control structures located downstream of the culvert, at appropriate heights and intervals, for the distance necessary to stabilize the natural stream gradient. Fish passage design elements will comply with guidelines established by NMFS and CDFG.

The project will result in an increase of approximately 38 new acres of impervious surface in the Little Lake Valley. The total area of impervious surface that will exist within the project limits will be 49 acres (including new and existing impervious surface) when the project is completed. Caltrans will provide permanent post-construction storm water treatment for approximately 43 acres of impervious surface. Storm water runoff and modifications to the local hydrograph will be controlled primarily through the use of low impact development (LID) best management practices (BMPs) such as bio-strips, bio-swales, and shallow vegetated detention basins that rely on infiltration and dispersion. In addition, where feasible, Caltrans will install and maintain traction sand traps within drain inlets along the roadway to reduce sediment delivery to Outlet Creek HSA.

If Caltrans uses Oil Well Hill as a borrow site for fill material, the modifications to the roadside area will allow room for additional post-construction treatment BMPs. Therefore, additional storm water treatment would be provided by treating existing Highway 101 storm water runoff.

Caltrans will utilize BMPs to provide erosion control and pollution prevention throughout all project areas during bypass and mitigation construction. All areas within the project affected by the construction activities will be appropriately stabilized and/or replanted with appropriate native vegetation.

Project Schedule

The proposed activities associated with the bypass project, including vegetation removal, are scheduled to begin in the fall of 2010 with the projected completion near the end of 2015. The proposed project will be conducted year round; however, work within jurisdictional streams will only occur within in summer months during low flow conditions from the period of June 15th to October 15th. The entire project is expected to take four construction seasons to complete.

Federal and State Regulatory Compliance

Caltrans has applied for authorization from the U.S. ACE to conduct the project under an individual Department of the Army permit pursuant to the CWA, section 404. In

addition, Caltrans has applied to the CDFG for a 1602 Lake and Streambed Alteration Agreement. Additionally, Caltrans has sought formal consultation and obtained Biological Opinions from the U.S. FWS and the NMFS. On October 25, 2006, Caltrans certified a Final Environmental Impacts Statement / Environmental Impact Report (FEIS/EIR - State Clearing House No. 1990030006) for the project in order to comply with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). On December 15, 2006, Caltrans filed a Notice of Determination (NOD) for the proposed project. On December 18, 2006, Caltrans filed a Record of Decision (ROD) for the proposed project.

Prior to issuing the Water Quality Certification, the Regional Water Board will consider the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The Regional Water Board will incorporate mitigation measures identified in the FEIS/FEIR into the Water Quality Certification and will file a NOD concurrently with the issuance of the Section 401 Water Quality Certification.

Total Maximum Daily Loads and Surface Water Monitoring

The Eel River watershed is listed on the Clean Water Act section 303(d) list as impaired for sediment and temperature. In 2004, the U.S. EPA established sediment and temperature total maximum daily loads (TMDLs) for the Upper Main Eel River and tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury). Roads are a responsible source of sediment in the watershed (directly, from surface erosion, and, indirectly, by triggering landslides). In addition, activities that impact the riparian zone and reduce riparian vegetation are identified as sources contributing to increased stream temperatures. A focus on measures to reduce sediment discharges to surface waters from roads in the watershed, and measures to avoid, minimize, and mitigate impacts on riparian zones is essential for achieving TMDLs.

Pursuant to Regional Water Board Resolution R1-2004-0087, *Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters within the North Coast Region* (Sediment TMDL Implementation Policy), the Executive Officer is directed to “rely on the use of all available authorities, including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste.”

To ensure compliance with sediment, temperature and other related Water Quality Objectives within the Basin Plan, and consistent with the U.S. EPA-established TMDLs, adequate wetland and riparian protection and stringent replacement mitigations to avoid, minimize, and mitigate the sediment and temperature impacts associated with the proposed project will be incorporated as enforceable conditions the Water Quality Certification. In addition, Caltrans will be required to conduct surface water monitoring, sampling, and analysis in accordance with the conditions of the Water Quality Certification. Additionally, storm water runoff monitoring, sampling, and analysis will be conducted as required by the State Water Resources Control Board (SWRCB) National

Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from the State of California, Department of Transportation (Caltrans) Properties, Facilities and Activities. The surface water data collected will be utilized to assess the adequacy of BMPs during construction as well as site specific mitigation measures proposed to minimize impacts to the environment, including sediment and temperature impacts.

Public Comment Period

Regional Water Board staff will consider all comments submitted in writing and received within the comment period that begins on April 29, 2010 and ends at 5:00 p.m. on May 26, 2010. If you have any questions or comments, please contact staff member Jeremiah Puget at (707) 576-2835 or jpuget@waterboards.ca.gov during the posting of this notice.

The information contained in this public notice is only a summary of the applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed project including maps and design drawings. The related documents and comments received are on file and may be reviewed or copied at the Regional Water Board office, 5550 Skylane Boulevard, Suite A, Santa Rosa, California. Appointments are necessary for document and file review. Appointments can be made by calling (707) 576-2220. Additionally, copies of the Section 401 Water Quality Certification application as submitted to the Regional Water Board are available at the City of Willits Public Library and the City of Ukiah Public Library.



**Figure 1-1
Regional Location**

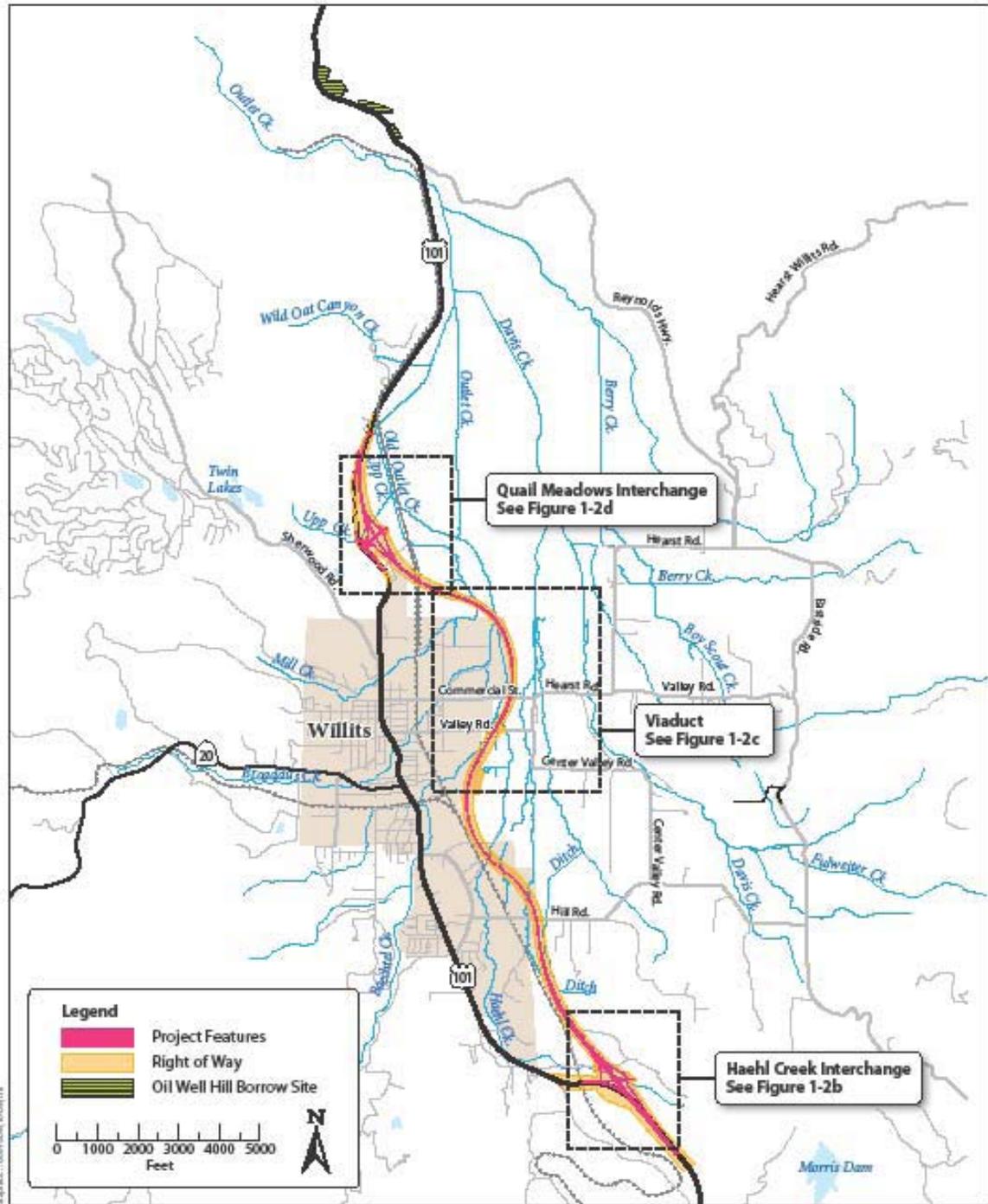


Figure 1-2a
Project Features—Overview Phase 1

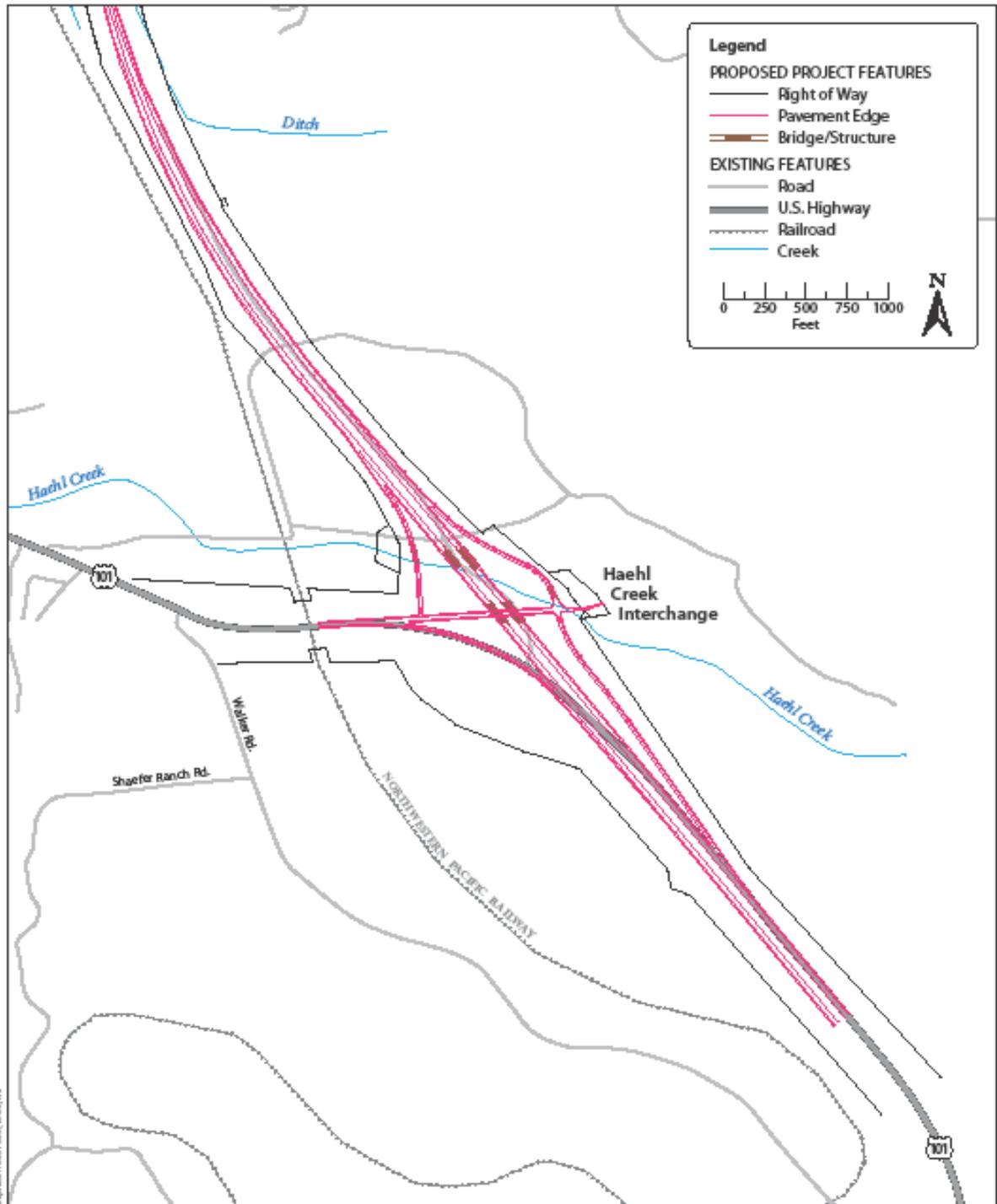


Figure 1-2b
Southern End Project Features—Haehl Creek Interchange Phase 1

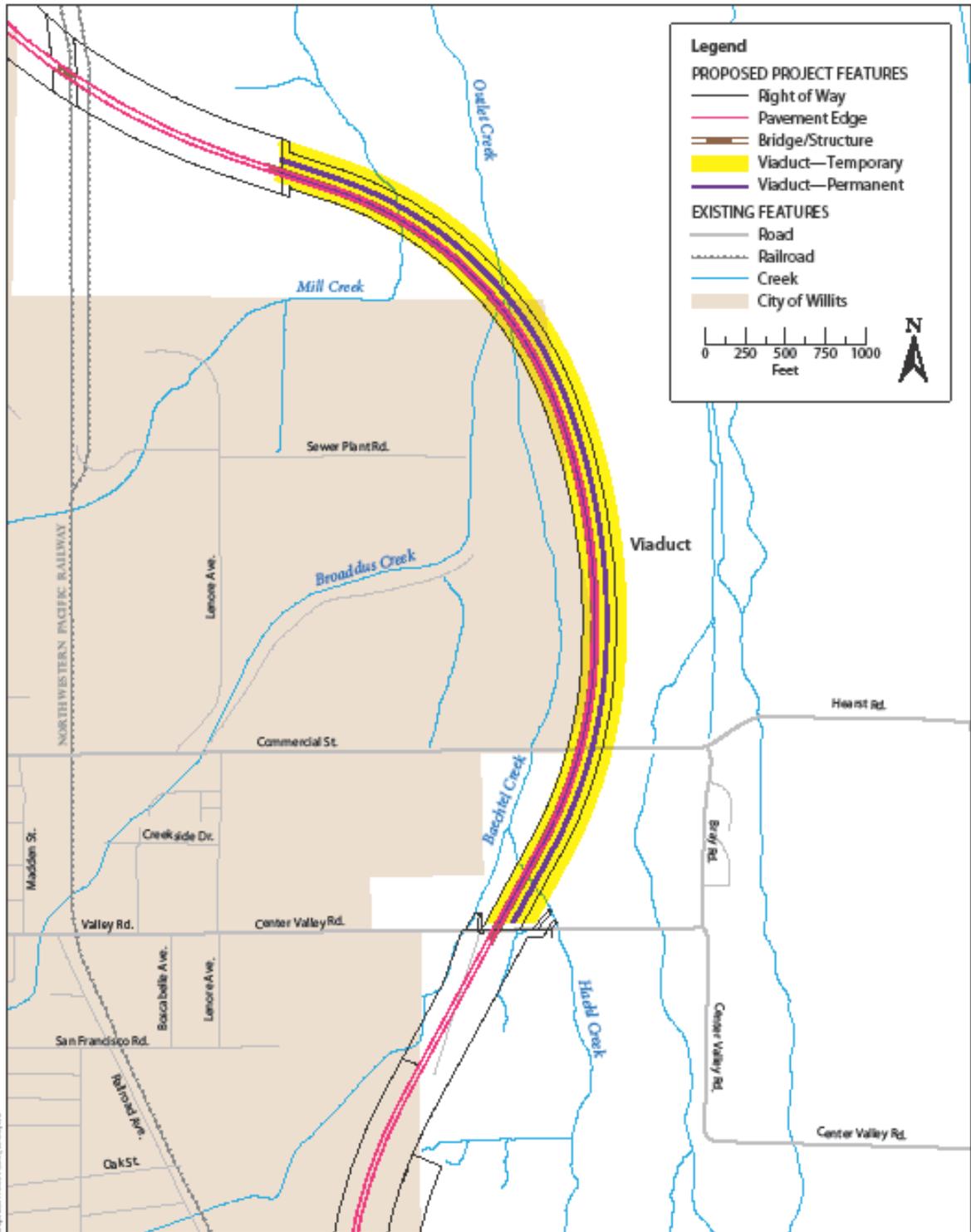


Figure 1-2c
Middle Project Features—Viaduct Phase 1

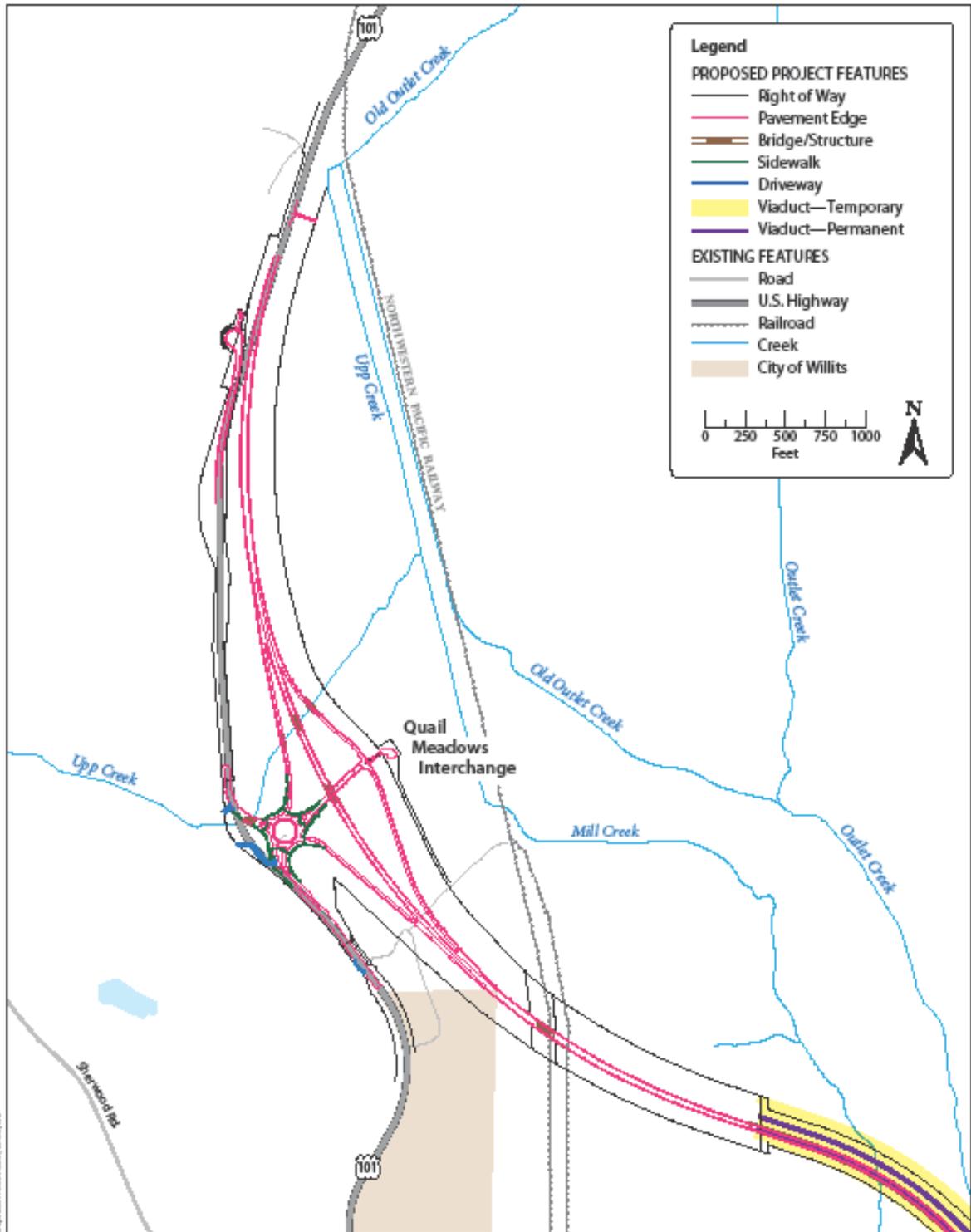


Figure 1-2d
North End Project Features—Quail Meadows Interchange Phase 1