

Draft Section 4(f) *De Minimis* Finding for U.S Route 101
Retaining Wall Project at South Last Chance Grade

EA: 01-0C241

01-DN-101 PM-14.9/15.0

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 the California Department of Transportation (Caltrans) under its assumption of responsibility pursuant to 23 USC 326.

Introduction

Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

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

Description of Proposed Project

The purpose of this project is to ensure that the current roadway of U.S. Highway 101 remains open to vehicular traffic. The project is needed because a deep-seated landslide exacerbated by recent storm damage is undermining the highway at Post Mile 14.9 in Del Norte County. The Last Chance Slide section of the highway has been chronically unstable, requiring numerous repairs and causing repeated traffic delays on this major north-south route. The segment is the major transportation link between Humboldt and Del Norte Counties. The proposed solution is to build a retaining wall below the roadway.

This project includes construction of a soldier pile retaining wall to restore and support the two-lane highway. (The existing soil nail retaining wall at this location would remain, but would not be visible once the soldier pile retaining wall is constructed.) The proposed wall is expected to be approximately 350-feet long. See the attached project location map and plan sheets.

The elevation of the roadway at this location is approximately 700 feet and slopes down to the Pacific Ocean with a slope of approximately 1:1 (horizontal:vertical).

The project also includes the following items:

- Extend and widen an existing access bench below the soldier pile retaining wall.
- Install see-through traffic barrier (type ST-10) with end treatments on top of the new retaining wall.
- Place imported borrow material between the existing retaining wall and the proposed soldier pile retaining wall.
- At Post Mile 14.88, replace an existing plastic 24” diameter culvert and placing rock slope protection at the outlet.
- At Post Mile 14.96, replace an existing plastic 18” diameter culvert with a 24” diameter plastic culvert; place rock slope protection at the two culvert outlets.
- Place and compact base rock and hot mix asphalt paving.
- Replace the lane striping/pavement markings.
- Hydroseed, place mulch.

Temporary construction items include the following:

- Temporary barrier (Type K) with temporary crash cushions.
- Temporary signal system to provide one-lane reversible traffic during construction.
- Temporary concrete washouts and fiber rolls and other best management practices (BMPs) to minimize adverse storm water run-off/erosion and water quality effects.

The anticipated duration of construction of this storm damage restoration project is approximately 180 days.

NOTE: This project should not be confused with another retaining wall project approximately a tenth of a mile to the north. Although the two projects are addressing roadway stability within an overall slide area, the two projects are separate (the retaining walls are not connected).

List and Description of Section 4(f) Properties

The project is within Del Norte Coast Redwoods State Park (Park) in coastal northern California. The Park is one of four park units jointly managed by the California Department of Parks and Recreation and the National Park Service as Redwood National and State Parks, covering about 130,000 acres in Del Norte and Humboldt Counties. Less than 5% of the original old growth redwood forests in the world are protected in national and state park units along the California coast. The Park contains other significant natural and cultural resources, and is both a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site and a unit of the California Coast Ranges International Biosphere Reserve. As such, Caltrans has determined that the Park qualifies as a “significant” resource under 23 CFR 774.11(c).

The Park was established “to make available to the people, for their inspiration and enjoyment forever, the scenic grandeur of the coast of Del Norte County ...where the coast redwood forest uniquely clothes the slopes directly facing the ocean...together with all scenic, historic, scientific, and recreational values and resources of the area” (November 1964 State Park and Recreation Commission Declaration of Purpose). Significant natural resources in the Park in the vicinity of the project area include stands of old growth redwood forest and other forest habitat for federally and state-listed threatened and endangered northern spotted owls and marbled murrelets. The primary recreational resource in the vicinity of the project area is the California Coastal Trail. Trailheads along the highway on either side of the project area serve other park trails. The project area offers spectacular views of the Pacific Ocean from the highway. Pullouts along the highway south of the project area provide scenic views of the coast and surrounding mountains.

In addition to the California Coastal Trail, the California State Legislature designated the Pacific Coast Bike Route, which is a continuous bike route that spans the California coastline from Mexico to Oregon. The segment of Route 101 that extends through the entire north-south length of the Park is the Pacific Coast Bike Route. For recreational bicyclists traveling along the Del Norte coastline, Route 101 is the only continuous public road available through the Park and to north and south destinations beyond the Park.

A cultural resources analysis and review concluded that there are no historic properties within the project limits.

Use of Section 4(f) Property

The project site is within the Park on Route 101 at Post Mile 14.9, approximately 2.5 miles north of Wilson Creek. This area, known as Last Chance Grade, is located on a steep coastal slope above the Pacific Ocean and has numerous landslides operating at various depths within the Franciscan geologic formation. Due to these landslides, the roadway segment itself has been slowly sliding downslope and westward, and is now partially outside the current Caltrans-owned highway right-of-way. Thus, portions of the proposed work would occur outside the highway right-of-way and within State Park owned land. The proposed project may require use of up to 0.3 acre of State Park-owned land directly adjacent to the existing Route 101 right-of-way, which would be a transportation use subject to Section 4(f).

The proposed work will not affect land use, as the highway corridor is an existing feature within the Park on a steep slope above the Pacific Ocean with no direct, safe access to the ocean or Park trails. The proposed 0.3 acre use of State Park-owned land for transportation use is about 0.0002 % of the total 130,000 acres within Redwood National and State Parks and 0.0008 % of the 35,000 acres within Del Norte Coast Redwoods State Park. The attached right-of-way map shows the location of the Park land needed to construct the project.

While the project site is adjacent to old growth redwood forest, there are no old growth redwood trees within the project area. The nearest old growth redwood forest is upslope to the east a few hundred feet. The project would not affect any old growth redwood trees. There are red alder, grand fir and Douglas-fir trees within the project limits. If any trees larger than 12 inches would be removed by the project, Caltrans will discuss avoidance and minimization measures with the Park.

The primary ecological resources within the Park are associated with the old growth redwood forests. The coast-facing slope is unstable due to the underlying geology, and constant wave erosion at the base of the slope. Because of this, the forests on this slope are younger and more fragmented than the forests further inland. Species dependent on mature forests, such as northern spotted owl and marbled murrelet, are also found further inland and upslope of the project site, and would not be impacted by the project.

The California Coastal Trail is approximately 800 feet upslope of the highway and runs parallel to the highway at the project location. The project would not affect access to this or any other recreational trails. The areas immediately adjacent to the project site are generally very steep and not safe for public access. Thus, the project would not temporarily or permanently affect recreational access to the Park. Restoring the damaged roadway would ensure that the existing access to the Park from trailheads along the highway north and south of the project area remains available to park visitors. The project would also help maintain this segment of the Pacific Coast Bike Route.

Project construction noise would be minimal. Construction does not include impact pile driving, jackhammers, or blasting. Occasional heavy equipment back-up alarms would likely be the only construction-related noise that would exceed the ambient traffic noise.

Last Chance Grade provides scenic coastal viewing opportunities, including False Klamath Cove and views of the surrounding mountains. These views would not be affected by the project. The proposed soldier pile retaining wall would be below the highway and at most only glimpsed by passing motorists. The proposed barrier (type ST-10) to be installed on top of the new retaining wall would be see-through to minimize obstructing coastal views from the roadway.

Some pullouts near the project site will be used for construction staging and temporarily unavailable to the public. The project would avoid permanent impacts to any pullouts. The project would not permanently impact the Park's scenic resources or opportunities to enjoy those resources.

Avoidance, Minimization, or Mitigation Measures

To avoid significant impacts to the Park's 4(f) resources, the project would incorporate the following minimization and mitigation measures:

1. Vegetation would be removed outside the migratory bird breeding season (May 1 – July 31).
2. No suitable northern spotted owl or marbled murrelet nest trees would be removed or altered.
3. If the need for any other vegetation trimming or ground disturbance arises, a qualified biologist must first evaluate and approve the areas before work can occur.
4. Appropriate Best Management Practices would be employed to protect water quality.
5. In order to not attract corvids (crows, ravens, jays) or other nest predators on threatened and endangered birds, food scraps and trash would be removed from the site at the end of each work shift. Construction crews would be directed to not feed and/or attract wildlife. Food scraps and trash from the general traveling public would also be removed from the site and properly disposed of at the end of each work shift.

6. An aesthetic treatment of soldier pile timber lagging would be applied to the constructed wall, similar to other nearby walls within the Park.
7. See-through barrier rail (Type 10) on top of the proposed retaining wall would perpetuate existing views from the roadway.
8. Access for bicyclists will be maintained before and after project construction.

The proposed project as designed, with avoidance measures, does not adversely impact significant Park resources.

Section 4(f) *De Minimis* Determination

Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 USC 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

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A portion of the Park will be incorporated into the highway facility. This use will be *de minimis* because it does not impact the significant resources of the Park, and maintains public access to the Park through ensuring that the transportation facility remains available to provide access to this Park and other units of Redwood National and State Parks.

Coordination

Caltrans will coordinate Section 4(f) planning efforts with both the Superintendent of Del Norte Coast Redwoods State Park and the Supervisory Environmental Specialist at Redwood National Park. This Section 4(f) Analysis and the Draft *De Minimis* Determination Memorandum will be submitted to State and National Parks for review and comment prior to circulation to the public.

A Del Norte County coastal development permit may be required prior to project construction.

Attachments:

Project location map, plan sheets, and typical cross sections
Right-of-way map