

## **Section 4(f) *de minimis* finding for Last Chance Slips**

**EA: 0B270**

**01–DN–101 PM 15.1**

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 327.

### **Introduction**

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (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 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 an 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 Department of Agriculture and the Department of Housing and Urban Development, in developing transportation projects and programs that use lands protected by Section 4(f).

### **Description of Proposed Project**

The purpose of this project is to ensure the current roadway of US 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 (PM) 15.1 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 soil nail retaining wall to restore the two-lane highway. The wall is expected to be approximately 200 feet long. Work will include removing up to 25 feet of material below the wall. A metal beam guard rail (MBGR) will be constructed along the edge of the shoulder (edge of paving) 4'-0" from the top of the retaining wall. A cable rail for worker safety will be constructed at the top of the retaining wall. The existing slope is approximately 800 feet above the Pacific Ocean with a slope of approximately 1:1 (horizontal:vertical). The work will also include the extension of an existing 18-inch culvert at PM 15.15. The anticipated duration of construction of this storm damage restoration project is approximately 90 days.

## **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 opportunities to enjoy scenic views of the ocean, the rugged Pacific Coast, and the inland mountains.

## **Impacts on Section 4(f) Property**

The project site is within the Park on Route 101 at Post Mile 15.1, 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 highway itself has been moving downslope and westward, and is now partially outside the current Caltrans Right of Way. Thus, portions of the proposed work would occur outside the Caltrans Right of Way. There is an easement on this parcel within the Park, restricting the property for park use. This easement does acknowledge the existing highway.

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 safe access to the ocean or adjacent parkland (see ROW map). The proposed project may affect up to 0.3 acre, or

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.

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 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 slightly further inland. Species dependent on mature forests, such as northern spotted owl and marbled murrelet, are 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 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.

Last Chance Grade offers scenic coastal views. Various pullouts south of the project area offer spectacular views of the Pacific coast, including False Klamath Cove, as well as views of the inland mountains. These views would not be affected by the project. The soil nail wall would be below the highway and at most only glimpsed by passing motorists. The project would not have permanent effects to any pullouts. Some pullouts near the project site will be used for construction staging and temporarily unavailable to the public. The project will not have permanent impacts to any pullouts. The project would not permanently impact the Park's scenic resources or opportunities to enjoy those resources.

## **Avoidance Alternatives**

There are no alternatives proposed for this project. The potential alternatives are limited by the existing geology and topography. The roadway has been slowly moving west and downslope. The option of cutting to the east, back up the slope, is not feasible due to the large amount of earth that would need to be removed and the instability of the cut bank requiring a retaining wall. This option would be much more expensive and would still be only a temporary fix, as the landslides are still moving. This option could also potentially affect large redwoods upslope of the roadway. Therefore, this option was not considered a prudent and feasible alternative. The No Build alternative does not meet the purpose and need to ensure that the roadway remains open for vehicular traffic.

## **Measures to Minimize Harm to the Section 4(f) Property**

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. Back-up alarms on construction vehicles and equipment would be damped if possible, and backing up would be minimized to the extent feasible.
3. No suitable northern spotted owl or marbled murrelet nest trees would be removed or altered.
4. If the need for any other vegetation trimming or ground disturbance arises, a qualified biologist must first evaluate and clear the areas before work can occur.
5. Appropriate Best Management Practices would be employed to protect water quality.
6. In order to not attract corvids 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 not attempt to feed and/or attract wildlife. If one-way traffic controls are needed, 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.
7. An aesthetic treatment of soldier pile timber lagging would be applied to the constructed wall, similar to other nearby walls within the Park.

## **Coordination**

The Superintendent of Del Norte Coast Redwoods State Park was notified of this proposed project on November 8, 2013. This Section 4(f) Analysis and the Draft De Minimis Determination Memo were made available to the Park prior to circulation to the public.

## **Least Harm Analysis and Concluding Statement**

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.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans 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.

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.

## **Applicable technical reports**

Natural Environment Study:	Completed 2/4/14
Historic Properties Survey Report:	Completed 3/12/14

STATE OF CALIFORNIA ACNH-Q101(150)E  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN DEL NORTE COUNTY**  
**ABOUT 10.5 MILES NORTH OF KLAMATH**  
**FROM 2 MILES NORTH OF WILSON CREEK BRIDGE**  
**TO 2.4 MILES NORTH OF WILSON CREEK BRIDGE**

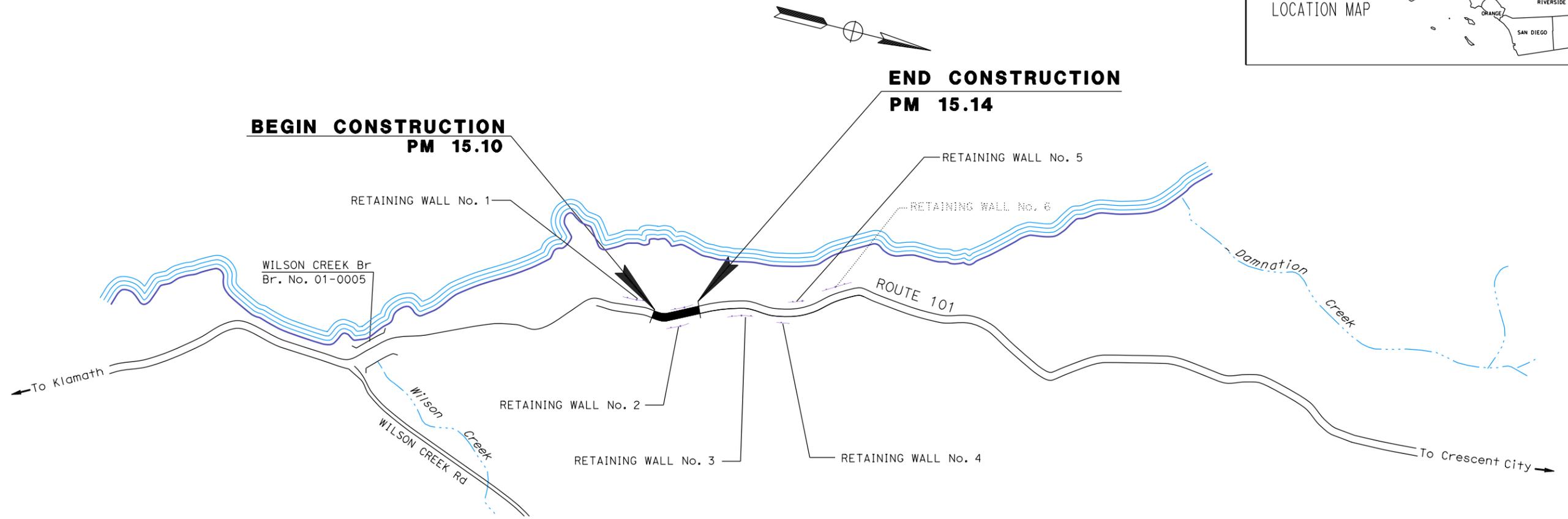
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	15.10/15.14	1	





LOCATION MAP



NO SCALE

PROJECT MANAGER  
 T. STIMSON/F. DEMLING  
 DESIGN ENGINEER  
 T. LARK

PROJECT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE \_\_\_\_\_  
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CONTRACT No. **01-OB270**

CU 0313 EA 0B270

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 L. ASHLEY  
 FUNCTIONAL SUPERVISOR  
 CHECKED BY  
 CALCULATED-DESIGNED BY  
 TODD LARK  
 REVISOR BY  
 DATE REVISOR

**DESIGN DESIGNATION:**

ADT (2008) 4,900 D = 60%  
 ADT (2028) 6,620 T = 12%  
 TI<sub>20</sub> = 10.0 V = 55 mph

**NOTES:**

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.

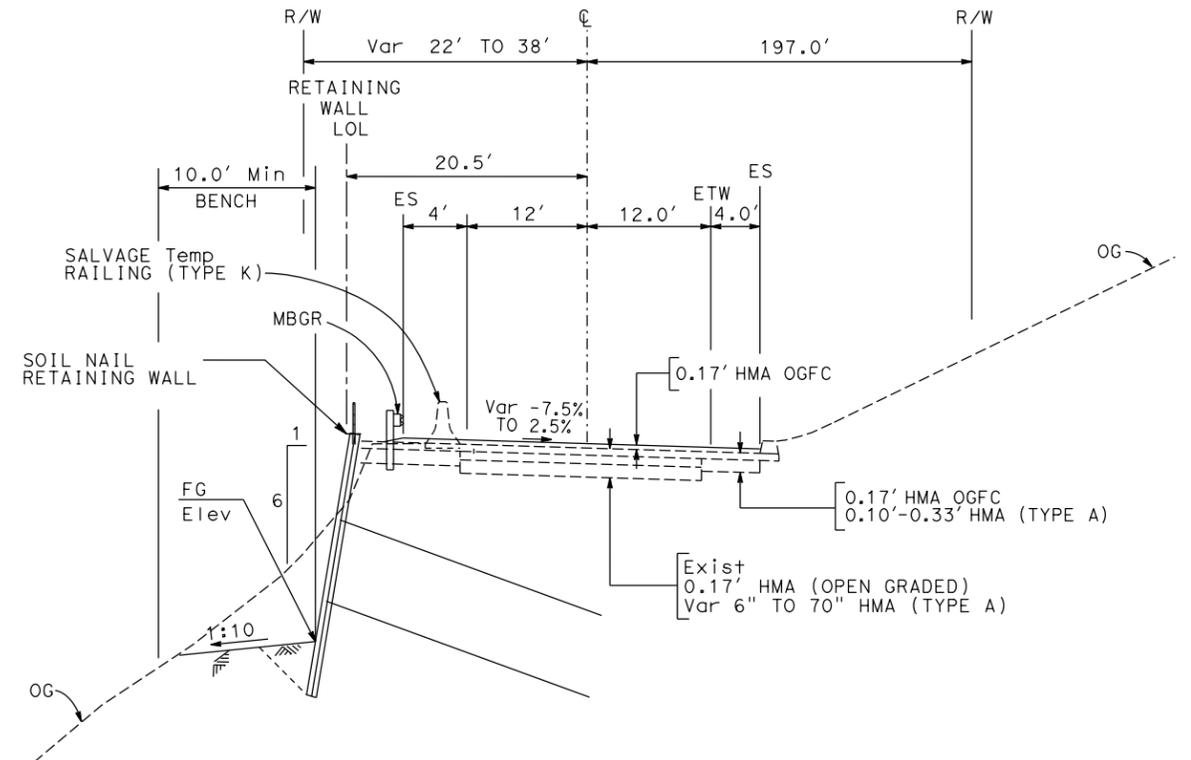
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	15.10/15.14		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

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**ROUTE 101**  
 RETAINING WALL  
 PM 15.10 to PM 15.14±

**TYPICAL CROSS SECTIONS**

NO SCALE

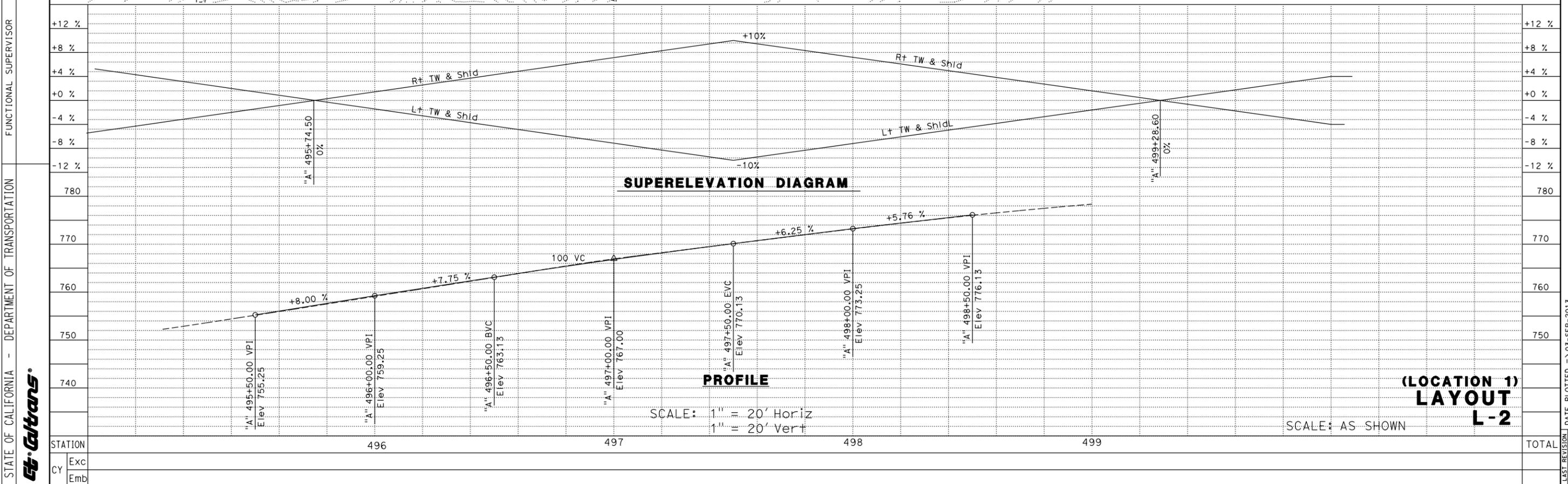
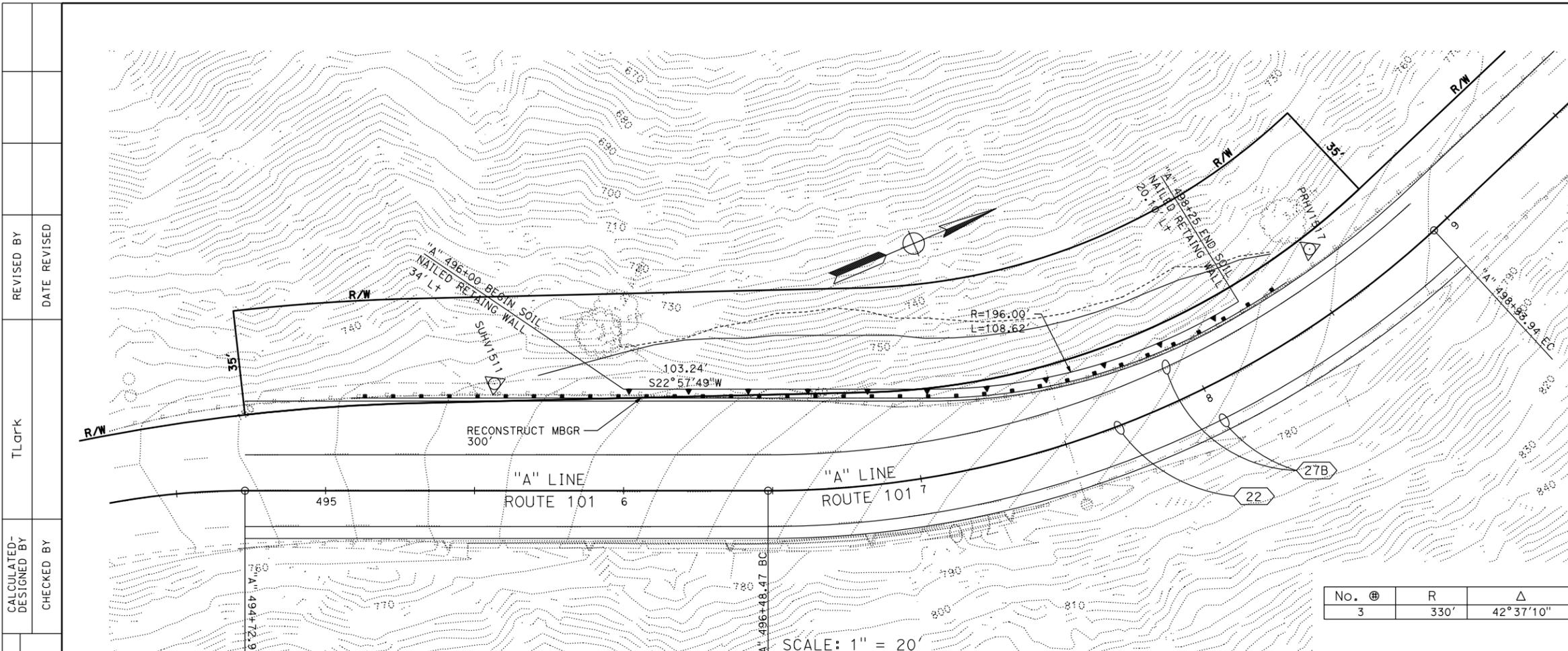
**X-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	101	15.10/15.14		

REGISTERED CIVIL ENGINEER DATE \_\_\_\_\_

PLANS APPROVAL DATE \_\_\_\_\_

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**St. Gobans**

REVISOR BY DATE REVISOR  
DATE REVISOR  
TLark  
CALCULATED-DESIGNED BY CHECKED BY

LAST REVISION DATE PLOTTED => 03-SEP-2013 TIME PLOTTED => 11:29

(LOCATION 1)  
**LAYOUT L-2**

