ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
Humboldt Bay Trail South

Resolution ATP-P-1819-02B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☒ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☐ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) for the *Humboldt Bay Trail South*, effective on, June 26, 2019 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *County of Humboldt*, and the Implementing Agency, *County of Humboldt*, sometimes collectively referred to as the "Parties".

3. RECITAL

3.2 Whereas at its January 30, 2019 meeting the Commission approved the Active Transportation Program, and included in this program of projects the *Humboldt Bay Trail South*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.

.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☒ Resolution G-19-31, "Adoption of Program of Projects for the Active Transportation Program", dated January 30, 2019
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

4.3 All signatories agree to adhere to the Commission's Active Transportation Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 The County of Humboldt agrees to secure funds for any additional costs of the project.

4.6 The County of Humboldt agrees to report to Caltrans on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.

4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 The County of Humboldt agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Humboldt Bay Trail South

Resolution ATP-P-1819-02B

Tom Mattson — Date 3/26/19

Public Works Director, County of Humboldt

Project Applicant

Name — Date 3/26/19

Public Works Director, County of Humboldt

Implementing Agency

Matthew Brady — Date 4/15/19

District 1 Director

California Department of Transportation

for Laurie Berman — Date 5/3/19

Director

California Department of Transportation

Susan Bransen — Date 9/18/19

Executive Director

California Transportation Commission

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
PROJECT PROGRAMMING REQUEST
DTP-0001 (Revised Mar, 1 2018 v7.08) *General Instructions*

Amendment (Existing Project) Y/N					Date:	04/04/19
District	**EA**	**Project ID**	**PPNO**	**MPO ID**	**Alt Proj. ID / prg.**	
01		0114000127	2391			ATP

County	Route/Corridor	PM Bk	PM Ahd	Project Sponsor/Lead Agency	
HUM	101	79.8	83.8	Humboldt County	
				MPO	**Element**
				Non-MPO	CO

Project Manager/Contact	Phone	E-mail Address
Hank Seeman	(707) 445-7741	hseemann@co.humboldt.ca.us

Project Title

Humboldt Bay Trail South

Location (Project Limits), Description (Scope of Work)

Along the North Coast Railroad Authority (NCRA) Railroad and US 101 corridor between Eureka and Bracut (approximately 2 miles south of Arcata). with a portion located on the perimeter levee around the CRC mill site, along the shoreline of Humboldt Bay. The project is construction of a 4.23 mile Class I bike path (with wetland mitigation, shoreline protection, drainage improvements, safety barriers and fencing, and associated elements) to link the Eureka Waterfront Trail and Humboldt Bay Trail North.

Component	Implementing Agency
PA&ED	Humboldt County
PS&E	Humboldt County
Right of Way	Humboldt County
Construction	Humboldt County

Legislative Districts

Assembly:	2	Senate:	2	Congressional:	2

Project Benefits

Humboldt Bay Trail South is the County's top priority to address safety concerns for pedestrians and bicyclists, and presents the greatest opportunity to engender a massive mode shift to increase the number of trips between Eureka and Arcata by walking or biking, increase safety for non-motorized users, enhance public health, decrease greenhouse gas emissions, provide safe mobility options for disadvantaged communities, and promote community vitality in Humboldt County.

Purpose and Need

The Humboldt Bay Trail South project will complete the final 4.23 mile gap in Humboldt Bay Trail to provide disadvantaged residents and families a safe, non-motorized transportation route between Eureka and Arcata, the two largest population and commercial centers in Humboldt County.

Category	Outputs/Outcomes	Unit	Total
Local streets and roads	Bicycle lane mile(s)	Miles	4.23
Local streets and roads	Cable barrier mile(s)	Miles	3.23

ADA Improvements Y	Bike/Ped Improvements Y	Reversible Lane analysis N
Inc. Sustainable Communities Strategy Goals Y	Reduces Greenhouse Gas Emissions Y	

Project Milestone			Existing	Proposed
Project Study Report Approved				
Begin Environmental (PA&ED) Phase			08/20/2014	
Circulate Draft Environmental Document	Document Type	ND/CE	02/16/2018	
Draft Project Report				
End Environmental Phase (PA&ED Milestone)			08/29/2018	
Begin Design (PS&E) Phase			11/28/2018	
End Design Phase (Ready to List for Advertisement Milestone)			07/23/2020	
Begin Right of Way Phase			04/01/2019	
End Right of Way Phase (Right of Way Certification Milestone)			04/01/2020	
Begin Construction Phase (Contract Award Milestone)			10/15/2020	
End Construction Phase (Construction Contract Acceptance Milestone)			07/07/2022	
Begin Closeout Phase			08/01/2022	
End Closeout Phase (Closeout Report)			06/30/2023	

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STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST

DTP-0001 (Revised Mar, 1 2018 v7.08) **Date:** 04/04/19

District	County	Route	EA	Project ID	PPNO	Alt ID
01	HUM, ,	101, ,		0114000127	2391	
Project Title:	Humboldt Bay Trail South					

Existing Total Project Cost ($1,000s)									
Component	Prior	18-19	19-20	20-21	21-22	22-23	23-24+	Total	Implementing Agency
E&P (PA&ED)	1,450							1,450	Humboldt County
PS&E	550							550	Humboldt County
R/W SUP (CT)									Humboldt County
CON SUP (CT)									Humboldt County
R/W									Humboldt County
CON				16,600				16,600	Humboldt County
TOTAL	2,000			16,600				18,600	
Proposed Total Project Cost ($1,000s)									**Notes**
E&P (PA&ED)	1,450							1,450	
PS&E	550							550	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				16,600				16,600	
TOTAL	2,000			16,600				18,600	

Fund No. 1:	RIP - National Hwy System (NH)								Program Code
Existing Funding ($1,000s)									20.30.600.621
Component	Prior	18-19	19-20	20-21	21-22	22-23	23-24+	Total	**Funding Agency**
E&P (PA&ED)	1,450							1,450	Humboldt County Association of G
PS&E	550							550	$1450 PAED voted 08/20/14 $550 PSE EXT. TO 550 $550 PSE voted 10/18/18
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	2,000							2,000	
Proposed Funding ($1,000s)									**Notes**
E&P (PA&ED)	1,450							1,450	
PS&E	550							550	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	2,000							2,000	

Fund No. 2:	State SB1 ATP - Active Transportation Program - SB1 (ATP-SB1)								Program Code
Existing Funding ($1,000s)									20.XX.720.100
Component	Prior	18-19	19-20	20-21	21-22	22-23	23-24+	Total	**Funding Agency**
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				13,296				13,296	
TOTAL				13,296				13,296	
Proposed Funding ($1,000s)									**Notes**
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				13,296				13,296	
TOTAL				13,296				13,296	

Fund No. 3:	CT Minor Pgm. - State Cash (ST-CASH)								Program Code
Existing Funding ($1,000s)									CT-MINOR
Component	Prior	18-19	19-20	20-21	21-22	22-23	23-24+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				1,250				1,250	
TOTAL				1,250				1,250	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				1,250				1,250	
TOTAL				1,250				1,250	

Fund No. 4:	Other State - National Hwy System (NH)								Program Code
Existing Funding ($1,000s)									SHOPP
Component	Prior	18-19	19-20	20-21	21-22	22-23	23-24+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				2,054				2,054	
TOTAL				2,054				2,054	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				2,054				2,054	
TOTAL				2,054				2,054	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST

DTP-0001 (Revised June, 7 2018 v7.09)

Complete this page for amendments only

Date: 3/28/19

District	County	Route	EA	Project ID	PPNO	Alt. ID
01	HUM	101		0114000127	2391	

SECTION 1 - All Projects

Project Background

Programming Change Requested

Reason for Proposed Change

If proposed change will delay one or more components, clearly explain 1) reason the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

Other Significant Information

SECTION 2 - For SB1 Projects Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

SECTION 3 - All Projects

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.*

Name (Print or Type)	Signature	Title	Date

Attachments

1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
2) Project Location Map

In the yellow security banner above, please click on "**Options**" and select "**Trust this document one time only**" before completing the form. After you select to trust the document, you will be asked if you want to save the document before closing, select "**No**".

ACTIVE TRANSPORTATION PROGRAM

IMPLEMENTING AGENCY: Humboldt County

PROJECT TYPE: Infrastructure - Large

PROJECT APPLICATION NO.: 1-Humboldt County-1

PROJECT NAME: Humboldt Bay Trail South

PROJECT DESCRIPTION: Construction of 4.2 mile Class I bike path along the North Coast Railroad Authority and Hwy 101 transportation corridor between Eureka and Arcata, and construction of cable barrier.

PROJECT LOCATION: The project is located along the NCRA and Caltrans Highway 101 corridor between Eureka and Brainard Slough (~2 miles south of Arcata) with Humboldt Bay to the west and north.

ATP FUNDED COMPONENTS

Infrastructure				Non-Infrastructure	Plan
PA&ED	PS&E	R/W	CON		
$ -	$ -	$ -	$ 13,296	$	$
FY -	FY -	FY -	FY 2021	FY -	FY -

PROJECT FUNDING INFORMATION (1,000s)

Total Project $	Total ATP $	Total Non-ATP $	Past ATP $	Leveraging $	Non-Participating $	Future Local $
22,600	13,296	9,304		9,304		

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APPLICATION INDEX PAGE

Part A1: Applicant Information

Implementing Agency: This agency must enter into a Master Agreement with Caltrans and will be financially and contractually responsible for the delivery of the project within all pertinent Federal and State funding requirements, including being responsible and accountable for the use and expenditure of program funds. This agency is responsible for the accuracy of the technical information provided in the application and is required to sign the application.

IMPLEMENTING AGENCY'S NAME:			
Humboldt County			
IMPLEMENTING AGENCY'S ADDRESS	**CITY**		**ZIP CODE**
1106 Second Street	Eureka	CA	95501
IMPLEMENTING AGENCY'S CONTACT PERSON:	**CONTACT PERSON'S TITLE:**		
Hank Seemann	Deputy-Director (Environmental Services)		
CONTACT PERSON'S PHONE NUMBER:	**CONTACT PERSON'S EMAIL ADDRESS :**		
707-445-7741	hseemann@co.humboldt.ca.us		

Applicants have the opportunity to insert a project picture, agency seal, or other image on the cover page. If you would like to do this, attach the image (*.jpg, *.bmp, *.png, etc.) by clicking in the box.

MASTER AGREEMENTS (MAs):

Does the Implementing Agency currently have a MA with Caltrans?	☒ Yes ☐ No
Implementing Agency's Federal Caltrans MA number	01-5904R
Implementing Agency's State Caltrans MA number	00058s

* Implementing Agencies that do not currently have a MA with Caltrans, must be able to meet the requirements and enter into an MA with Caltrans prior to funds allocation. The MA approval process can take 6 to 12 months to complete and there is no guarantee the agency will meet the requirements necessary for the State to enter into a MA with the agency. Delays could also result in a failure to meeting the CTC Allocation timeline requirements and the loss of ATP funding.

Project Partnering Agency:

The "Project Partnering Agency" is defined as an agency, other than Implementing Agency, that will assume the responsibilities for the ongoing operations and maintenance of the improved facility. The Implementing Agency must: 1) ensure the Partnering Agency agrees to assume responsibility for the ongoing operations and maintenance of the improved facility, 2) provide documentation of the agreement (e.g., letter of intent) as part of the project application, and 3) ensure a copy of the Memorandum of Understanding or Interagency Agreement between the parties is submitted with the first request for allocation. For these projects, the Project Partnering Agency's information shall be provided below.

Based on the definition above, does this project have a partnering agency? ☒ Yes ☐ No

PROJECT PARTNERING AGENCY'S NAME:	
Caltrans	
PROJECT PARTNERING AGENCY'S CONTACT PERSON:	**CONTACT PERSON'S TITLE:**
Tom Fitzgerald	DDD Maintenance and Operations
CONTACT PERSON'S PHONE NUMBER:	**CONTACT PERSON'S EMAIL ADDRESS :**
707-496-6614	Tom.Fitzgerald@dot.ca.gov

Attach a "letter of intent" or other documentation. Caltrans Partnering Agency letter.pdf [Remove] [Open File]

DEPARTMENT OF TRANSPORTATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 445-6377
FAX (707) 441-3914
TTY 711

Making Conservation a California Way of Life.

July 19, 2018

Hank Seemann
Deputy Director, Environmental Services
Humboldt County Public Works Department
1106 Second Street
Eureka, CA 95501

Dear Mr. Seemann

Caltrans District 1 Maintenance Engineering Office grants Conceptual Approval for the Humboldt Bay Trail South project that Humboldt County is submitting for Active Transportation Program (ATP) funding. Based upon the information provided to our office, the project proposes to construct a new multi-use path adjacent to US 101 between Arcata and Eureka. Caltrans District 1 conditionally agrees to cooperate on a maintenance agreement for the project elements within Caltrans' right-of-way.

This approval is conceptual only for funding application purposes. Final design approval by Caltrans will be required prior to construction for all work to be performed within Caltrans right-of-way. All work within Caltrans right-of-way will require an encroachment permit from the District 1 Office of Permits and will be required to be done in accordance with the Caltrans Highway Design Manual, and State of California Standard Plans and Specifications.

Sincerely,

Curtis D. Coburn

CURTIS D. COBURN, P.E.
Acting District 1 Maintenance Engineer

Part A2: General Project Information

PROJECT NAME: (Max of 10 Words) (To be used in the CTC project list) **Words Remaining:** 6

Humboldt Bay Trail South

PROJECT / APPLICATION NUMBER: 1

SUMMARY OF PROJECT SCOPE: (Max of 300 Words)
(Summary of the Existing Condition, Project Scope, the Expected Benefits) **Words Remaining:** 0

The project will close the four-mile gap in the Humboldt Bay Trail between Eureka and Arcata by constructing a multi-use trail (Class I bike path) along the Humboldt Bay shoreline and parallel to Highway 101. The project will provide the interconnecting link between recently completed trail projects and culminate the decades-long effort to connect the two largest cities in Humboldt County with a continuous, non-motorized transportation facility. In addition to serving the region's transportation needs, the project will achieve a critical link in the California Coastal Trail and provide a major expansion for recreational access around the bay.

Under existing conditions, people seeking to walk or bike between Eureka and Arcata must travel in the shoulder along a four-lane expressway. The lack of bicycle and pedestrian facilities severely limits the number of non-motorized trips along the highway corridor due to safety concerns.

This project is Humboldt County's top priority for investing in active transportation and presents the greatest opportunity to enable a major mode shift in transportation within the county. The project will significantly increase the number of non-motorized trips, improve safety, enhance public health, and promote community vitality.

The project design was carefully adapted for environmentally sensitive areas and constraints from existing infrastructure and private property. The majority of the project will be constructed by widening a railroad prism or utilizing the top of a levee. Project elements include three new bridges, modifications to a 730-foot railroad bridge, eucalyptus tree removal, retaining wall and railings, viewing platforms, signs, and a cable barrier separating the multi-use trail and Highway 101. Cable barrier installation will extend along portions of the existing, adjoining segment of trail adjacent to Highway 101. The project includes 3,800 feet of shoreline revetment improvements to protect the facility from existing flood hazards and future sea level rise.

FTIP PROJECT DESCRIPTION: (Max of 180 Characters) **Characters Remaining:** 0

Construction of 4.2 mile Class I bike path along the North Coast Railroad Authority and Hwy 101 transportation corridor between Eureka and Arcata, and construction of cable barrier

PROJECT LOCATION: (Max of 180 characters) **Characters Remaining:** 5

The project is located along the NCRA and Caltrans Highway 101 corridor between Eureka and Brainard Slough (~2 miles south of Arcata) with Humboldt Bay to the west and north.

In addition to the Location Description provided, attach a location map to the application. The location map needs to show the project boundaries in relation to the Implementing Agency's boundaries.

Bay Trail South Project Location Map_Final.pdf

Project Coordinates: (latitude/longitude in decimal format) Lat. 40.815228 N /long. -124.104121 W

Congressional District(s): 2

State Senate District(s): 2 **State Assembly District(s):** 2

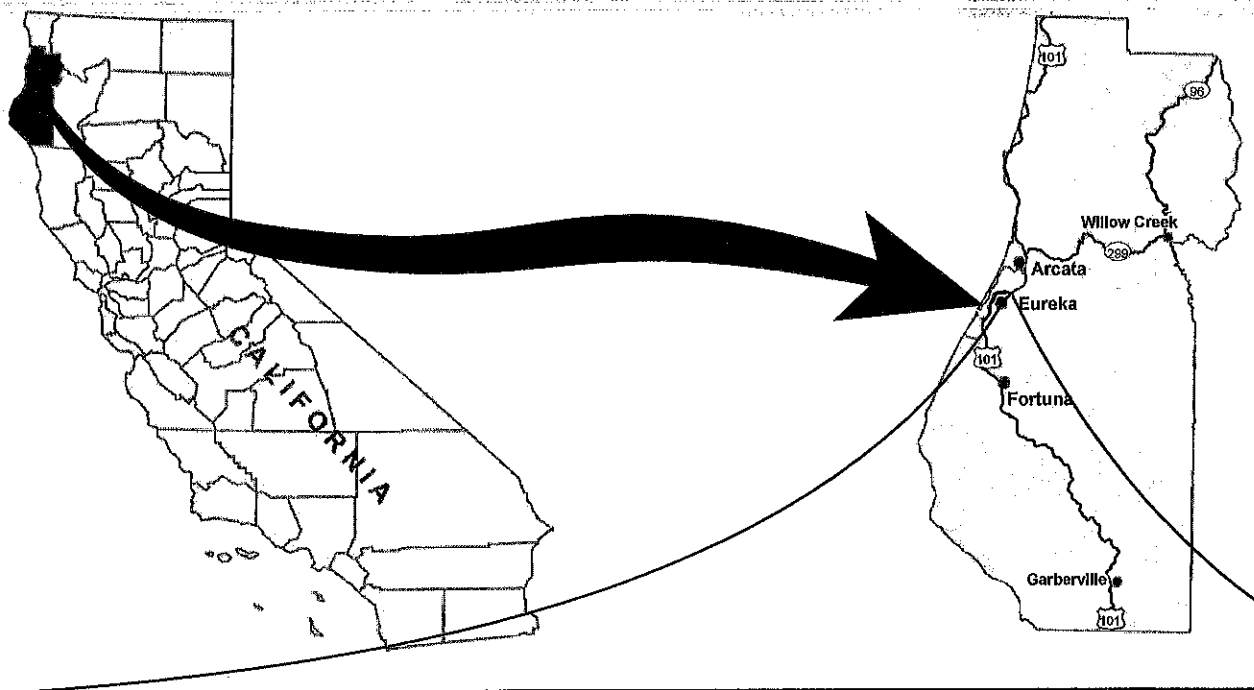
Caltrans District: 1

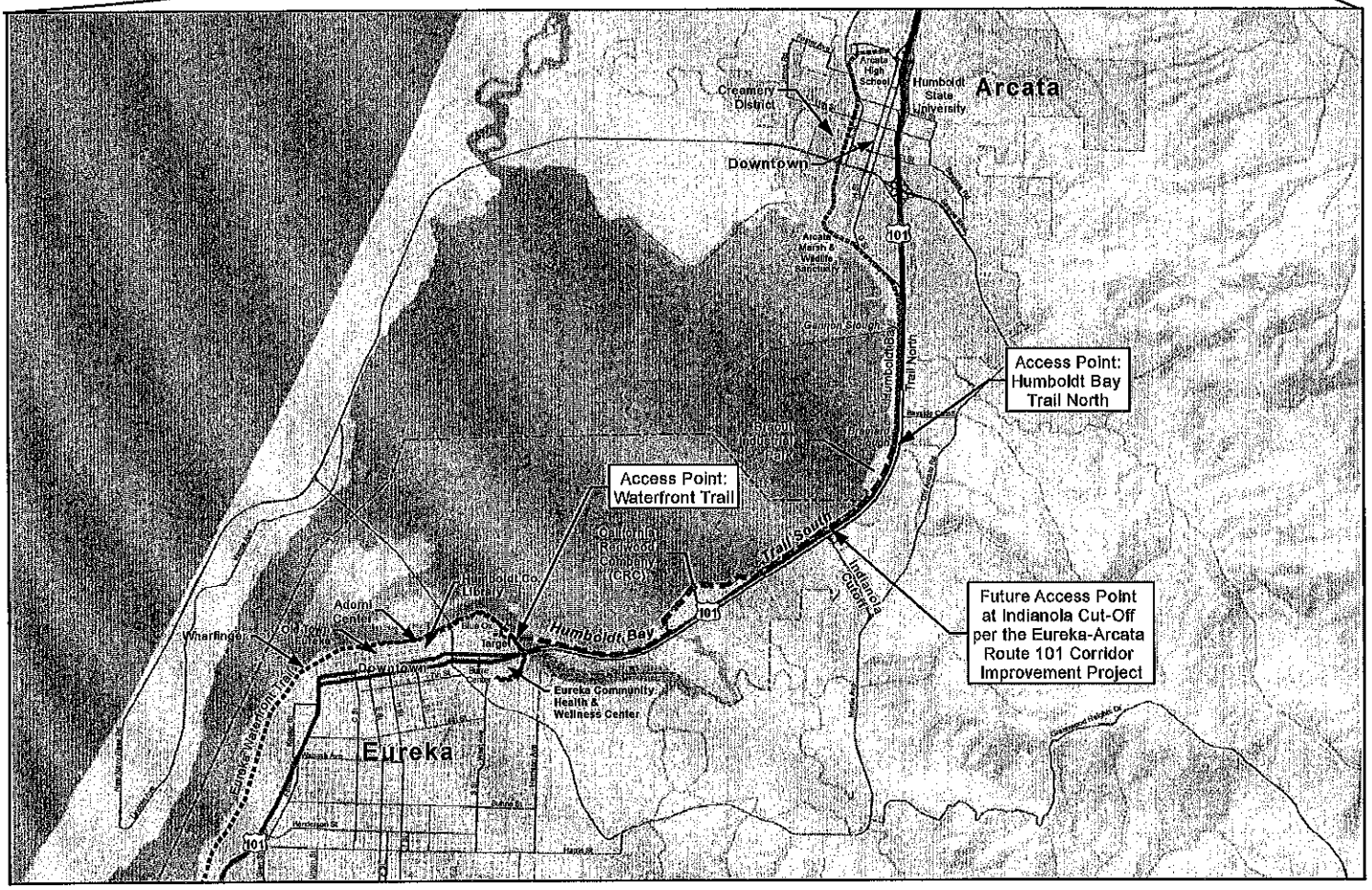
County: Humboldt

MPO: Caltrans

RTPA: Humboldt CAG

Urbanized Zone Area (UZA) Population: Project is located outside one of the ten large MPOs in a UZA with Pop <=200,000 and > than 5,000





City Limits

US 101 Safety Corridor

Proposed Humboldt Bay Trail South

Trail Connections

Existing Eureka Waterfront Trail

Existing Humboldt Bay Trail North

Paper Size 8.5" x 11" (ANSI A)
0 0.5 1 1.5
Miles
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

N

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
(Eureka to Bracut)

Job Number 11110166
Revision B
Date 23 Jul 2018

Project Location and Existing Conditions Map

Figure 1

718 Third Street Eureka CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

Past Projects: Within the last 10 years, has there been any previous State or Federal ATP, SRTS, SR2S, BTA or other ped/bike funding awards a project(s) that are adjacent to or overlap the limits of project scope of this application?

☒ Yes ☐ No If yes, how many previous awards? 2

Project Number	Past Project Funding	Funded Amount $	Project Type	Type of overlap/connection with past projects (select only one which matches the best)
ATPL 5021 (020)	Active Transportation Program (ATP)	$3,100,000	Infrastructure (I)	Adjacent project limits with minor overlapping scope or limits of work mit
ATPL 5017 (043)	Active Transportation Program (ATP)	$2,448,000	Infrastructure (I)	Adjacent project limits with no overlapping scope or limits of work s of

Part A3: Project Type

PROJECT TYPE: (Use the drop down menu to select.) Infrastructure - Large

Indicate any of the following plans that your agency currently has: (Check all that apply)

☒ Bicycle Plan ☐ Pedestrian Plan ☐ Safe Routes to School Plan ☐ Active Transportation Plan ☐ None

PROJECT SUB-TYPE (check all Project Sub-Types that apply):

☒ **Bicycle Transportation** % of Project 86 %

☒ **Pedestrian Transportation** % of Project 14 %

☐ **Safe Routes to School** ***(Also fill out Bicycle and Pedestrian Sub-Type information above)***

For a project to qualify for Safe Routes to School designation, the project must directly increase safety and convenience for public school students to walk and/or bike to school. Safe Routes to Schools infrastructure projects must be located within two miles of a public school or within the vicinity of a public school bus stop and the students must be the intended beneficiaries of the project. Other than traffic education and enforcement activities, non-infrastructure projects do not have a location restriction.

Projects with Safe Routes to School elements must fill out "School and Student Details" later in this application.
As a condition of receiving funding, projects with Safe Routes to School Elements must commit to completing additional before and after student surveys as defined in the Caltrans Active Transportation Guidelines (LAPG Chapter 22).

☒ **Trails (Multi-use and Recreational):** *(Also fill out Bicycle and Pedestrian Sub-Type information above)*

Trails Projects constructing multi-purpose trails are generally eligible in the Active Transportation Program. If the applicant believes all or part of their project meets the federal requirements of the Recreational Trails Program they are encouraged to seek a determination from the California Department of Parks and Recreation on the eligibility of their project to complete for this funding. This is optional but recommended because some trails projects may compete better under this funding program. See section 22.7 Recreational Trails Program (RTP) of the Caltrans ATP Chapter for Elements that are only eligible for funding with Recreational Trail Funds.

For all trails projects:

Do you feel a portion of your project is eligible for federal Recreational Trail funding? ☒ Yes ☐ No

If yes, estimate the total project costs that are eligible for the Recreational Trail funding: $18,080,000

If yes, estimate the % of the total project costs that serve "transportation" uses? 100 %

Applicants intending to pursue "Recreational Trails Program funding" **must submit** the required information to the California Department of Parks and Recreation prior to the ATP application submissions deadline. (See the Application Instructions for details)

**Recreational Trail funding can only fund work outside of the roadway Right-of-way.*

Part A4: Project Details

Indicate the project details included in the project/program/plan.

Note: When quantifying the amount of Active Transportation improvements proposed by the project, **do not double-count the improvements** that benefit both Bicyclists and Pedestrians (i.e. new RRFB/Signal should only show as a Pedestrian **or** Bicycle Improvement).

☒ Bicycle Improvements

What % of the BICYCLE related project cost are going towards closing a "Gap" in infrastructure? 100 %
(As opposed to cost going towards "improving" existing bicycle infrastructure: i.e. Class 2 to Class 4)

New Bike Lanes/Routes:	Class 1: 22,319 Linear Feet	Class 2: 0 Linear Feet
	Class 3: 0 Linear Feet	Class 4: 0 Linear Feet
Signalized Intersections:	New Bike Boxes: 0 Number	Timing Improvements: 0 Number
Un-Signalized Intersections:	New RRFB/Signal: 0 Number	Crossing-Surface Improvements: 1 Number
Mid-Block Crossing:	New RRFB/Signal: 0 Number	Crossing-Surface Improvements: 0 Number
Lighting:	Intersection: 0 Number	Roadway Segments: 0 Linear Feet
Bike Share Program:	New Station: 0 Number	New Bikes: 0 Number
Bike Racks/Lockers:	New Racks: 0 Number	New Secured Lockers: 0 Number
Other Bicycle Improvements:	#1: _____ #: 0	#2: _____ #: 0

☒ Pedestrian Improvements

What % of the PEDESTRIAN related project cost are going towards closing a "Gap" in infrastructure? 100 %
(As opposed to cost going towards "improving" existing pedestrian infrastructure.)

Sidewalks:	New (4' to 8' wide): 0 Linear Feet	New (over 8' wide): 0 Linear Feet
	Widen Existing: 0 Linear Feet	Reconstruct/Enhance Existing: 0 Linear Feet
	New Barrier Protected (Barrier, parking, functional-planter, etc.): 17,030 Linear Feet	
ADA Ramp Improvements:	New Ramp (none exist): 0 Number	Reconstruct Ramp to Standard: 0 Number
Signalized Intersections:	New Crosswalk: 0 Number	Enhance Existing Crosswalk: 0 Number
	Ped-Heads: 0 Number	Shorten Crossing: 0 Number
	Timing Improvements: 0 Number	
Un-Signalized Intersections:	New Traffic Signal: 0 Number	New Roundabout: 0 Number
	New RRFB/Signal: 0 Number	Crossing-Surface Improvements: 0 Number
	Shorten Crossing: 0 Number	
Mid-Block Crossing:	New RRFB/Signal: 0 Number	Crossing-Surface Improvements: 0 Number
Lighting:	Intersection: 0 Number	Roadway Segments: 0 Linear Feet
Pedestrian Amenities:	Benches: 0 Number	Trash Cans: 0 Number
	Shade Trees: 0 Number	Shade Tree Type: _____
Other Ped Improvements:	#1: Counted above, Class 1 benefits peds also #: 1	#2: Counted above, crossing benefits peds #: 1

☒ Multi-use Trail Improvements

Class 1 Trails:	New (8' or less wide): 0 Linear Feet	New (over 8' wide): 22,319 Linear Feet
	Widen/Reconstruct Existing: 0 Linear Feet	
Non-Class 1 Trails:	New: 0 Linear Feet	Widen/Reconstruct Existing: 0 Linear Feet
Other Trail Improvements:	#1: _____ #: _____	#2: _____ #: 0

☐ Vehicular-Roadway Traffic-Calming Improvements

☐ Non-Infrastructure Components

☐ Plan Type (only intended for Plans)

Right of Way (R/W) Impacts (Check all that apply)

☐ Project is 100% within the Implementing Agency's R/W and/or is within their control at the time of this application submittal. (This includes temporary construction easements)

☒ Project will likely require R/W in fee ownership, permanent easements and/or temporary construction easements from private owners and/ or will require utility relocations from utility companies outside that implementing agency's governmental control.

The federal R/W process involving private property acquisitions and/or private utility relocations can often take 18 to 24 months after environmental document approval. The project schedule in the application for R/W needs to reflect the necessary time to complete the federal R/W process.

What is the total number of private R/W parcels expected to be impacted? 5

What is the total number of utility companies expected to be impacted? 0

What is the total additional months needed (all project phases) for the expected R/W acquisitions and/or utility relocations? 12

Has the project schedule been developed to account for this time? Yes

☒ Project will likely encroach into Caltrans R/W requiring easements, encroachment permits and/or other approvals.

Is Caltrans the "Implementing Agency"? No

**See the application instructions for more details on the required coordination, documentation and approval from Caltrans.*

The applicant must attach the approved and signed Caltrans Checklist for ATP projects impacting Caltrans R/W.

CT-ROW-Impact-Checklist - Bay Trail ATP final.pdf

The following project details must match the information shown in the approved Caltrans Checklist attached above:

What % of the project (by area) is within Caltrans R/W? 20 %

What % of the project (by total project cost) is within Caltrans R/W? 16 %

What is the total cost (all project phases) of all the project elements within Caltrans R/W? 3,700,000

What level of Caltrans project development oversite has been determined to be needed by Caltrans? PEER Review

Is the project expected to be tracked by Caltrans as a "Local Assistance" or "Capital" project? Yes

What is the total additional months needed (all project phases) for Caltrans to complete its required oversite responsibilities? 21

Has the project schedule been developed to account for this time? Yes

☒ Project will likely require R/W, Easements, encroachment and/or approval involving Governmental (excluding Caltrans - as Caltrans impacts are documented above), Environmental, or Railroad owner's property.

**See the application instructions for more details on the required coordination and documentation from these agencies.*

Attach a letter of support or neutrality from each separate agency. Combine all letters in one pdf attachment.

NCRA and City of Eureka support letters for Part A4.pdf

The following information should be based on specific prior coordination and agreement between the agencies:

What is the total additional months needed (all project phases) for all of these agencies to complete their required oversite responsibilities and to complete any required actions that are necessary based on the expected R/W impacts? 12

Has the project schedule been developed to account for this time? Yes

ATP - Caltrans R/W Impact Checklist

Required for Infrastructure Projects with Impacts to Caltrans R/W

This form is a **required** part of the ATP project application for **all candidate projects located on the Caltrans R/W, adjacent to the Caltrans R/W,** or have **any potential impacts to the Caltrans R/W.** This includes, but is not limited to, impacts from Caltrans required easements, Caltrans required encroachment permits, RW acquisition or utility relocations. This form is intended to help the Implementing Agency consider these risks during the initial application process, and properly assess the needed time and cost to accomplish the task(s).

To complete the form, the **Implementing Agency is required to answer all questions in Part A**, below. Part B, of this form is to be completed by the Caltrans District Local Assistance Engineer (DLAE), or their delegated staff person. Once completed, the DLAE returns this form to the Implementing Agency, so they may attach the form to their ATP project application. A minimum of 2-weeks is required for Caltrans review. *(NOTE: If the agency submits an incomplete checklist and/or attachments, Caltrans will be required to return the package for correction and re-submittal. The 2-week process will restart once the agency makes the corrections and resubmits.)*

PART A – Implementing Agency Section

I. **The following project information is to be completed by the Implementing Agency - prior to submittal:**
(This information must be consistent with the submittal attachments)

A. What is the total cost (*all project phases*) of the entire project? $22,600,000 *dollars*
   - What is the total cost of the Construction phase of the entire project? $18,600,000 *dollars*

B. What % of the project (*by area*) is within Caltrans R/W? 20 *whole number between 1 and 100*

C. What % of the project (*by total project cost*) is within Caltrans R/W? 16 *whole number between 1 and 100*

D. What is the total cost (*all project phases*) of all the project elements within Caltrans R/W? $3,700,000 *dollars*

E. To the best of your knowledge, Check all of the following

- ⊗ Project is not in and will not discharge into an Environmentally Sensitive Area and is not expected to need an EIR/EIS
- ⊗ Project does not require R/W dedication from Caltrans
- ⊗ Project does not require Office of Structures approval
- ⊗ Project does not require Design Exceptions to the mandatory design standards
  (Ref: Highway Design Manual, Design Information Bulletin 78)
- ○ Project does not require approval for Encroachment Exceptions
  (Ref: *Encroachment* Permit Manual, Chapter 300)

F. To the best of your knowledge, list all project features and/or project elements that are expected to add complexity to the delivery or construction of the propose project:

- ⊗ Removal of approximately 200 mature eucalyptus trees within the US101 right-of-way.
- ⊗ Need for an encroachment exception to allow for temporary construction access to US101.
- ○ _____
- ○ _____
- ○ _____

II. **Implementing Agency must attach to this form and verify the following:**

- Project Location Map (Attachment C)
- Project Maps/Plans (Attachment D)
- Project Estimate (Attachment F)
- ✓ These documents must be consistent with (i.e. match) the Engineer's Checklist (Attachment B)
- ✓ These documents must identify the limits of work within the Caltrans R/W and their estimated costs

PART B – Caltrans DLAE Section

1. **Review the scope of the proposed project. Does it appear consistent with Caltrans standards and/or likely to be approved for construction during the Oversight process?** Yes **(Yes/No)**

   This Caltrans review does not imply approval of the project, but merely acknowledges that Caltrans District staff are aware of the proposed project and upon initial review the project appears to be acceptable/constructible.

2. **Determine the expected level of Caltrans Oversight that will be required:**

   The Encroachment Permit process is described in the Encroachment Permits Manual, Chapter 100 – The Permit Functions: http://www.dot.ca.gov/trafficops/ep/docs/Chapter_1.pdf

   - **Encroachment Permit Oversight:**

     Generally used for projects that are considered "Non-Complex" that have the following traits:
     - The total construction cost of the project within the State R/W is < $1 Million
     - Project is not Environmentally Complex (Not an EIR or EIS)
     - Project does not require R/W dedication from Caltrans or Office of Structures approval
     - Project does not require Mandatory Design Exceptions or Encroachment Exceptions
   - **PEER Review: (Simple PR Review)**

     Similar to Encroachment Permits, Peer Reviews are generally used for projects that are considered "Non-Complex". Peer Reviews are typically used for projects with a total construction cost within the State R/W is greater than $1 Million but less than $3 Million.
   - **Capital Oversight Process Review: (Full PR Oversight Review)**

     Oversight Process Reviews are generally used for projects that are considered "Complex" and/or have a total construction cost within the State R/W is greater than $3 Million.

   Caltrans District Staff expects the appropriate level of Caltrans Oversight to be: *(Circle expected level)*

   Encroachment Permit (***PEER Review***) ***Capital Oversight***

   The District has made this estimation based all or partially on the following project features/elements and/or lack of detail:
   Work proposed is separated from the roadway. A cooperative agreement is required for this project.

3. **Approximate the expected time needed for Caltrans to complete its required oversight and the corresponding cost of this oversite:**

Cooperative Agreement Processing:	6 Months	$30K Cost
PA&ED:	3 Months	15 Cost
PS&E:	3 Months	15 Cost
R/W:	6 Months	30 Cost
CON: *(After the CON allocation date)*	3 Months	15 Cost
TOTAL	**21 Months**	**$105K Cost**

   - **A revised estimation of the Caltrans review time & cost will be completed if/when the project is funded.**
   - The estimated time & costs included in this form are only a rough approximation to assist local agencies estimate the schedule and full cost of the project in their ATP application. This approximation does not limit Caltrans to increasing these estimates based on a more thorough review if the project is funded.
   - The review costs can range from few thousand dollars for a simple encroachment permit to 10%+ of total project cost for Capital Oversight projects

4. **How will the project be tracked by Caltrans?** *(Circle one of the following)* **Local Assistance or** (**Capital Outlay**)

   *ATP construction projects on the State Highway System (SHS) are tracked with the Capital Outlay projects IF the following criteria are met: 1) If the ATP project is 50% or more on the SHS geographically (within existing or future state R/W) **AND** 2) if the construction phase is $1 million or more.*

5. **Caltrans Responsible Reviewers:**

DLAE concurrence is expected for all completed Caltrans R/W Impact Checklists:

DLAE Name: Suzanne Theiss Date: 7/23/18 (707) 445-6399

Optional Comments:

The District Traffic manager (or other manager as appropriate) concurrence is expected for any project that is expected to impact the state highway right-of-way and has the potential to negatively affect the safety or operations of the facility.

- This Caltrans review does not imply approval of the project, but merely acknowledges that Caltrans District staff is aware of the proposed project, and that, upon initial review, the overall-project appears to be acceptable.

Name: _____ Division/Office: _____ Phone_____ Date: _____

Optional Comments:
Project will not negatively affect the safety or operations of the facility.

When needed, provide the other District reviewers that participated in the completion of the Checklists:

Name: Lisa Spellenberg Division/Office: NE Right of Way Phone (707) 445-6427 Date: 7/23/18

Optional Comments:
An encroachment permit exception will take additional time. Recommend beginning the process very early in the project.

Additional review: Jen Buck, Project Manager
(707) 441-5897 7/23/18

jen

North Coast Railroad Authority
419 Talmage Road, Suite M
Ukiah, CA 95482
707-463-3280

July 2, 2018

CALTRANS

Division of Local Assistance

1120 N Street, MS 1

Attn: Office of State Programs

Sacramento, CA 95814

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

The North Coast Railroad Authority (NCRA) supports this application by the County of Humboldt to the state Active Transportation Program (ATP) for the Humboldt Bay Trail South Project. The Humboldt Bay Trail is a planned 13-mile long multi-use trail, connecting the two largest population centers in rural Humboldt County, the cities of Eureka and Arcata. The Humboldt Bay Trail South project will close a 4-mile gap in this planned trail network and provide a safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101. Since planning began for the Humboldt Bay Trail in 1997, community support has grown exponentially as well as agency collaboration to where now the Humboldt Bay Trail is one of the region's top transportation priorities.

As portions of the County's project lie within the NCRA right-of-way, NCRA has been coordinating with the County of Humboldt on the Humboldt Bay Trail South project since 2012 when the NCRA established an Ad Hoc Humboldt Bay Corridor Committee to discuss the historic rail right-of-way around Humboldt Bay. The committee met several times with the Humboldt Bay community to discuss this important infrastructure. The working group resulted in a unanimously supported resolution that stated: "NCRA will prioritize rail infrastructure restoration and trail development in the Eureka to Arcata corridor to more clearly align its timing and objectives with those of the Humboldt County Association of Governments'/Caltrans' U.S. 101 Corridor Improvement Project."

NCRA continues to be willing to cooperate with the County and community partners to realize multi-modal transportation use around Humboldt Bay. This approval is conceptual for funding application purposes only. Final design review by NCRA will be required prior to construction for all work to be performed within NCRA's right-of-way. In addition, the County will be required to enter into an agreement to manage and maintain sections of constructed trail within the NCRA right-of-way.

We are pleased to continue to work with the County of Humboldt for the Humboldt Bay Trail South Project.

Sincerely,

Mitch Stogner, Executive Director

CC: Hank Seemann, Humboldt County Public Works, hseemann@co.humboldt.ca.us

EUREKA
COMMUNITY SERVICES

COMMUNITY SERVICES DEPARTMENT
1011 Waterfront Drive • Eureka, California 95501-1146 • (707) 441-4241

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

July 27, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

Please accept the City of Eureka's full support for the County of Humboldt's Humboldt Bay Trail South Project. For over two decades, the communities of the Humboldt Bay region have worked toward the goal of a connected regional multi-use trail system to provide residents and visitors alike a safe, separated corridor for active commuting to work, college, school and destinations. The County of Humboldt has worked diligently to provide creative outlets for community feedback and collaborate with the City, Caltrans and the North Coast Railroad Authority to design a comfortable, welcoming trail within a constrained corridor.

The Humboldt Bay Trail South project is an exceptional project that will fill the final gap in the 14-mile long Humboldt Bay Trail between Eureka and Arcata, also a key link in the California Coastal Trail system. The Eureka Waterfront Trail, to which the County's project will connect, was recently completed by the City of Eureka in February 2018, and already we have seen a significant increase in visitors to our waterfront and rave reviews from all the various users of the trail. Completing the 4-mile gap in the Humboldt Bay Trail promises to increase trail use even further and transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits.

The Class I Eureka Waterfront Trail, to which the County's trail will connect, provides disadvantaged neighborhoods in north and west Eureka direct access to the Humboldt Bay Trail and also for residents in east and central Eureka a safe, undercrossing of Highway 101. The completion of the Humboldt Bay Trail will greatly improve safety and mobility for many Eureka residents providing the only safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101. After many years of intensive planning, incremental progress in completing trail segments in Arcata and Eureka, and significant state and local investment, one of the most popular and long-awaited transportation projects on the north coast of California is poised to be realized.

A segment of Bay Trail South will traverse a city-owned parcel, and the City of Eureka is in full support of this alignment. The City of Eureka anticipates working with the County to secure an agreement or encroachment permit for this aspect of the project.

The City of Eureka strongly supports the Humboldt Bay Trail South project for our residents and visitors alike. Thank you for your careful consideration of this project which promises to transform opportunities for non-motorized transportation between communities on Humboldt Bay.

Sincerely,

Miles Slattery
Community Services Director

Part A5: Project Schedule

NOTES: 1) Per CTC Guidelines, all project applications must be submitted with the expectation of receiving federal funding and therefore the schedule below must account for the extra time needed for federal project delivery requirements and approvals, including a NEPA environmental clearance and for each CTC allocation there must also be a Notice to Proceed with Federally Reimbursable work.
2) Prior to estimating the durations of the project delivery tasks (below), applicants are highly encouraged to review the appropriate chapters of the Local Assistance Procedures Manual and work closely with District Local Assistance Staff.
3) The proposed CTC Allocation dates must be between July 1, 2019 and June 30, 2023 to be consistent with the available ATP funds for Cycle 4.

INFRASTRUCTURE PROJECTS:

PA&ED Project Delivery Phase:

Will ATP funds be used in this phase of the project? ☐ Yes ☒ No

Expected or Past Start Date for PA&ED activities:	8/20/2014	
Time to complete the separate CEQA & NEPA studies/approvals:	49 months	*(See note #2, above)*
Expected or Past Completion Date for the PA&ED Phase:	8/29/2018	

** Applications showing the PA&ED phase as complete, must include/attach the signature pages for the CEQA and NEPA documents, which include project descriptions covering the full scope.*

PS&E Project Delivery Phase:

Will ATP funds be used in this phase of the project? ☐ Yes ☒ No

Expected or Past Start Date for PS&E activities:	11/1/2018	
Time to complete the final Plans, Specification & Estimate:	21 months	
Expected or Past Completion Date for the PS&E Phase:	7/23/2020	

** Applications showing the PS&E phase as complete, must include/attach the signed & Stamped Title Sheet for the plans and approval page of the specifications.*

Right of Way Project Delivery Phase:

Will ATP funds be used in this phase of the project? ☐ Yes ☒ No

Expected or Past Start Date for R/W activities:	6/1/2018	
Time to complete the R/W Engineering, Acquisition, and Utilities:	24 months	
Expected or Past Completion Date for the R/W Phase:	5/21/2020	

** PS&E and Right of Way phases can be allocated at the same CTC meeting.*

** Applications showing the R/W phase as complete, must include/attach the Caltrans approved R/W Certification.*

Construction Project Delivery Phase:

Will ATP funds be used in this phase of the project? ☒ Yes ☐ No

Proposed CTC "CON Allocation" Date:	8/15/2020	
Notice to Proceed with Federally Reimbursable ATP Work:	10/14/2020	
Expected Start Date for Construction activities:	10/15/2020	
Time to complete the Construction activities:	21 months	
Expected or Past Completion Date for the CON Phase:	7/7/2022	

NON-INFRASTRUCTURE (NI) AND "PLAN" PROJECTS: *(This includes combined "I" and "NI" projects)*

Will ATP funds be used in this phase of the project? ☐ Yes ☒ No

Expected Start Date for "NI" or "Plan" Construction activities:		
Time to complete the CON-Phase activities:	months	
Expected Completion Date for the CON Phase:		

Proposed Dates for "Before" and "After" Counts *(As required by the CTC and Caltrans guidelines):*

Expected Date for "Before" counts (Ideally, within 12 months of the beginning of the Construction Activities)	5/15/2020
Expected Date for "After" counts (Ideally, at least 6 months after the end of all Construction Activities)	5/15/2023

Part A6: Project Funding

(1,000s)

Project Phase	Total Project Costs	Total ATP Funding	*ATP Allocation Year **	Total Non-ATP Funding **	Non-Participating Funding	"Prior" ATP Funding	Leveraging Funding	Future Local Identified Funding
PA&ED	1,450	-		1,450	-	-	1,450	-
PS&E	550	-		550	-	-	550	-
R/W	2,000	-		2,000	-	-	2,000	-
CON	18,600	13,296	*20/21*	5,304	-	-	5,304	-
NI-CON/ PLAN	-	-		-	-	-	-	-
TOTAL	**22,600**	**13,296**		**9,304**	**-**	**-**	**9,304**	**-**

* *The CTC Allocation-Year is calculated based on the information entered into the "Project Schedule" section.*

** *Applicants must ensure that the "Total Non-ATP Funding" values show in this table match the overall Non-ATP Funding values they enter into Page 2 of the PPR (later in this form)*

ATP FUNDING TYPE REQUESTED:

Per the CTC Guidelines, all ATP projects must be eligible to receive federal funding. Most ATP projects will receive federal funding; however, it is the intent of the Commission to consolidate the allocation of federal funds to as few projects as practicable. Therefore, the smallest projects may be granted State Funding from the State Highway Account (SHA) for all or part of the project. Agencies with projects under $1M, especially ones being implemented by agencies who are not familiar with the federal funding process, are encouraged to request State funding.

Do you believe your project warrants receiving state-only funding? ☐ Yes ☒ No

ATP PROJECT PROGRAMMING REQUEST (PPR):

Using the Project Schedule, Project Funding, and General Project information provided, this electronic form has automatically prepared the following PPR pages. Applicants must review the information in the PPR to confirm it matches their expectations.

Amendment (Existing Project) Y ☒ N ☐						Date: 07/30/18
District	**EA**	**Project ID**	**PPNO**	**MPO ID**	**Alt Project. ID/prg.**	
1		0114000127	2391			ATP

County	Route/Corridor	PM Bk	PM Ahd	Project Sponsor/Lead Agency	
HUM	101	79.774	83.788	Humboldt County	
				MPO	**Element**
				Caltrans	Local Assistance

Project Manager/Contact	Phone	E-mail Address
Hank Seemann	(707) 445-7741	hseemann@co.humboldt.ca.us

Project Title

Humboldt Bay Trail South

Location (Project Limits), Description (Scope of Work)

The project is located along the NCRA and Caltrans Highway 101 corridor between Eureka and Brainard Slough (~2 miles south of Arcata) with Humboldt Bay to the west and north.

Component	Implementing Agency
PA&ED	Humboldt County
PS&E	Humboldt County
Right of Way	Humboldt County
Construction	Humboldt County

Legislative Districts

Assembly:	2	Senate:	2	Congressional:	2

Project Benefits (If more space is needed, use the Additional Information field on the next page.)

Humboldt Bay Trail South is the County's top priority to address safety concerns for pedestrians and bicyclists, and presents the greatest opportunity to engender a massive mode shift to increase the number of trips between Eureka and Arcata by walking or biking, increase safety for non-motorized users, enhance public health, decrease greenhouse gas emissions, provide safe mobility options for disadvantaged communities, and promote community vitality in Humboldt County.

Purpose and Need

The Humboldt Bay Trail South project will complete the final 4.23 mile gap in Humboldt Bay Trail to provide disadvantaged residents and families a safe, non-motorized transportation route between Eureka and Arcata, the two largest population and commercial centers in Humboldt County.

Category	Outputs/Outcomes	Unit	Total
Local Streets and Roads	Pedestrian/Bicycle facilities miles constructed	Feet	22,319

ADA Improvements: Y ☒ N ☐ Bike/Ped Improvements: Y ☒ N ☐ Reversible Lane Analysis: Y ☐ N ☐

Inc. Sustainable Communities Strategy Goals: Y ☒ N ☐ Reduces Greenhouse Gas Emissions: Y ☒ N ☐

Project Milestone	Existing	Proposed
Project Study Report Approved	07/30/18	
Begin Environmental (PA&ED) Phase		08/20/2014
Circulate Draft Environmental Document (Document Type) ND/CE		02/16/2018
Draft Project Report		N/A
End Environmental Phase (PA&ED Milestone)		08/29/2018
Begin Design (PS&E) Phase		11/01/2018
End Design Phase (Ready to List for Advertisement Milestone)		07/23/2020
Begin Right of Way Phase		06/01/2018
End Right of Way Phase (Right of Way Certification Milestone)		05/21/2020
Begin Construction Phase		10/15/2020
End Construction Phase		07/07/2022
Begin Closeout Phase		08/01/2022
End Closeout Phase (Closeout Report)		06/30/2023

Additional Information	Date:	07/30/18

A Project Study Report was completed for the Humboldt Bay Trail South project on March 18, 2014.

Exhibit 22-G Project Programming Request (PPR)

Date: 07/30/18

Project Information:

Project Title:	Humboldt Bay Trail South				
District	**County**	**Route**	**EA**	**Project ID**	**PPNO**
1	Humboldt	101		0114000127	2391

Funding Information:

DO NOT FILL IN ANY SHADED AREAS

Proposed Total Project Cost ($1,000s)

Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total
E&P (PA&ED)	1,450	0	0	0	0	0	0	**1,450**
PS&E	0	550	0	0	0	0	0	**550**
R/W	0	0	2,000	0	0	0	0	**2,000**
CON	0	0	0	18,600	0	0	0	**18,600**
TOTAL	**1,450**	**550**	**2,000**	**18,600**	**0**	**0**	**0**	**22,600**

Notes:

ATP Funds	Infrastructure Cycle 4							
Proposed Funding Allocation ($1,000s)								
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**
PS&E	0	0	0	0	0	0	0	**0**
R/W	0	0	0	0	0	0	0	**0**
CON	0	0	0	13,296	0	0	0	**13,296**
TOTAL	**0**	**0**	**0**	**13,296**	**0**	**0**	**0**	**13,296**

Program Code: 20.30.720
Funding Agency: Caltrans
Notes:

ATP Funds	Non-Infrastructure Cycle 4							
Proposed Funding Allocation ($1,000s)								
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**
PS&E	0	0	0	0	0	0	0	**0**
R/W	0	0	0	0	0	0	0	**0**
CON	0	0	0	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Program Code: 20.30.720
Funding Agency: Caltrans
Notes:

ATP Funds	Plan Cycle 4							
Proposed Funding Allocation ($1,000s)								
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**
PS&E	0	0	0	0	0	0	0	**0**
R/W	0	0	0	0	0	0	0	**0**
CON	0	0	0	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Program Code: 20.30.720
Funding Agency: Caltrans
Notes:

ATP Funds	Previous Cycle							
Proposed Funding Allocation ($1,000s)								
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**
PS&E	0	0	0	0	0	0	0	**0**
R/W	0	0	0	0	0	0	0	**0**
CON	0	0	0	0	0	0	0	**0**
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Program Code:
Funding Agency: Caltrans
Notes:

Exhibit 22-G Project Programming Request (PPR)

Date: 07/30/18

Project Information:					
Project Title:	Humboldt Bay Trail South				
District	**County**	**Route**	**EA**	**Project ID**	**PPNO**
1	Humboldt	101		0114000127	2391

Summary of Non-ATP Funding

The Non-ATP funding shown on this page must match the values in the Project Funding table.

Fund No. 2:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**	Humboldt County
PS&E	0	0	0	0	0	0	0	**0**	**Notes:**
R/W	0	0	0	0	0	0	0	**0**	
CON	0	0	0	0	0	0	0	**0**	
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

Fund No. 3:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	1,450	0	0	0	0	0	0	**1,450**	Caltrans
PS&E	0	550	0	0	0	0	0	**550**	**Notes:**
R/W	0	0	2,000	0	0	0	0	**2,000**	STIP
CON	0	0	0	0	0	0	0	**0**	
TOTAL	**1,450**	**550**	**2,000**	**0**	**0**	**0**	**0**	**4,000**	

Fund No. 4:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**	Coastal Conservancy
PS&E	0	0	0	0	0	0	0	**0**	**Notes:**
R/W	0	0	0	0	0	0	0	**0**	
CON	0	0	0	2,000	0	0	0	**2,000**	
TOTAL	**0**	**0**	**0**	**2,000**	**0**	**0**	**0**	**2,000**	

Fund No. 5:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**	Caltrans
PS&E	0	0	0	0	0	0	0	**0**	**Notes:**
R/W	0	0	0	0	0	0	0	**0**	Minor A
CON	0	0	0	1,250	0	0	0	**1,250**	
TOTAL	**0**	**0**	**0**	**1,250**	**0**	**0**	**0**	**1,250**	

Fund No. 6:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**	Caltrans
PS&E	0	0	0	0	0	0	0	**0**	**Notes:**
R/W	0	0	0	0	0	0	0	**0**	SHOPP (Outer Barrier Separation)
CON	0	0	0	2,054	0	0	0	**2,054**	
TOTAL	**0**	**0**	**0**	**2,054**	**0**	**0**	**0**	**2,054**	

Fund No. 7:									**Program Code**
Proposed Funding Allocation ($1,000s)									
Component	**Prior**	**18/19**	**19/20**	**20/21**	**21/22**	**22/23**	**23/24+**	**Total**	**Funding Agency**
E&P (PA&ED)	0	0	0	0	0	0	0	**0**	
PS&E	0	0	0	0	0	0	0	**0**	**Notes:**
R/W	0	0	0	0	0	0	0	**0**	
CON	0	0	0	0	0	0	0	**0**	
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

strict	County	Route	EA	Project ID	PPNO	Alt. ID
1	Humboldt	101		0114000127	2391	

ON 1 - All Projects

Background — Characters Remaining: 1

boldt Bay Trail South project will complete the final 4.23 mile gap in Humboldt Bay Trail to provide disadvantaged residents and families a safe, rized transportation route between Eureka and Arcata, the two largest population and commercial centers in Humboldt County. This project connects f Eureka's Waterfront Trail to the City of Arcata's Humboldt Bay Trail North via a Class I multi-use trail starting just south of the North Coast Authority's (NCRA) Eureka Slough Bridge in Eureka, and continuing along the NCRA transportation corridor north towards Brainard Slough. The so includes sections of cable barrier as a safety barrier proposed at specified locations between Highway 101 and the trail.

ıming Change Requested — Characters Remaining: 720

ɜtruction Phase funding

for Proposed Changed — Characters Remaining: 511

boldt Bay Trail South project has funding allocated through non-ATP funding programs for all other project phases (PA&ED, PS&E and R/W). The ready to advance to the Construction Phase within the time frame of ATP Cycle 4.

sed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, ow cost increase will be funded — Characters Remaining:

ignificant Information — Characters Remaining: 1148

minary Engineering phases ($2 million) were programmed in the State Transportation Improvement Program (STIP) through the Humboldt County on of Government's (HCAOG) Regional Transportation Improvement Program (RTIP) allocation in 2014. The Right of Way phase ($2 million) was ned in the STIP in June 2018 following an approved transfer of RTIP funds from the Highway 101 Eureka-Arcata Corridor Improvement Project. ct has advanced greatly with HCAOG's RTIP funding; however, the project is not fully funded and over $13 million of additional funding is for construction and mitigation. Caltrans is providing $3.35 million in cost-share for construction: $1.25 million through the Caltrans Minor A and $2.1 million through the State Highway Operation and Protection Program (outer barrier separation).

ION 2 - For SB1 Projects Only

Alternative Project Request (Please follow the individual SB1 program guidelines for specific criteria)

SECTION 3 - All Projects

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.*

Name (Print or Type)	Signature	Title	Date
Hank Seemann	s/	Deputy-Director (Environmental Services)	07/30/2018

Attachments

1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency

2) Project Location Map

Part A7: Screening Criteria

The following Screening Criteria are requirements for applications to be considered for ATP funding. Failure to demonstrate a project meets these criteria will result is the disqualification of the application.

1. **Demonstrated fiscal needs of the applicant:**

   - **Is all or part of the project currently (or has it ever been) formally programmed in an RTPA, MPO and/or Caltrans funding program?** ☒ Yes ☐ No

   If "Yes", explain why the project is not considered "fully funded". (Max of 200 Words) **Words Remaining:** 29

   Humboldt Bay Trail South is a highly complex project along a narrow and constrained transportation corridor situated within the coastal zone. Portions of the project have been funded through the Humboldt County Association of Governments (HCAOG) and Caltrans. The Preliminary Engineering phases ($2 million) were programmed in the State Transportation Improvement Program (STIP) through HCAOG's Regional Transportation Improvement Program (RTIP) allocation in 2014. The Right of Way phase ($2 million) was programmed in the STIP in June 2018 following an approved transfer of RTIP funds from the Highway 101 Eureka-Arcata Corridor Improvement Project. The project has advanced greatly with HCAOG's RTIP funding; however, the project is not fully funded and over $13 million of additional funding is required for construction and mitigation. Caltrans is providing $3.35 million in cost-share for construction: $1.25 million through the Caltrans Minor A Program and $2.1 million through the State Highway Operation and Protection Program (outer barrier separation). The remaining funds needed to complete the project far exceed the amount available from HCAOG's limited RTIP allocation.

   - **Are any elements of the proposed project directly or indirectly related to the intended improvements of a past or future development or capital improvement project?** ☒ Yes ☐ No

   If "Yes", explain why the other project cannot fund the proposed project. (Max of 200 Words) **Words Remaining:** 16

   Humboldt Bay Trail South is related to the Highway 101 Eureka-Arcata Corridor Improvement Project, a large ($50 million) project initiated in 2002 by Caltrans and HCAOG to improve highway safety and operations, including a major new interchange. In parallel, Humboldt County and the Cities of Eureka and Arcata have independently led segments of the Humboldt Bay Trail. Arcata initiated the Humboldt Bay Trail North project in 2007, and Humboldt County initiated the Humboldt Bay Trail South Project in 2012 (these are the two projects situated parallel to the Corridor Project). In September 2013, the Coastal Commission adopted a condition that construction of the Corridor Project cannot begin until the Humboldt Bay Trail is fully funded and has right-of-way secured. In December 2013, an inter-agency ad hoc committee was formed to ensure coordination and collaboration on the linked projects. The City of Arcata completed the Humboldt Bay Trail North project in 2017. The Corridor Project is a high-priority safety project and has received the majority of HCAOG's RTIP allocation over the last 15 years. Additional funding from HCAOG for the proposed project is not available.

   - **Are adjacent properties undeveloped or under-developed where standard "conditions of development" could be placed on future adjacent redevelopment to construct the proposed project improvements?** ☐ Yes ☒ No

2. **Consistency with an adopted regional transportation plan:**

   - **Is the project consistent with the relevant adopted regional transportation plan that has been developed and updated pursuant to Government Code Section 65080?** ☒ Yes ☐ No

   If "Yes", the applicant must provide that portion of Regional Transportation Plan showing that the proposed project is consistent. Attach a copy of ONLY the following elements of the plan: cover page and pages linking the proposed project to the plan. Highlighted and/or mark the attachment to clearly identify the connection.

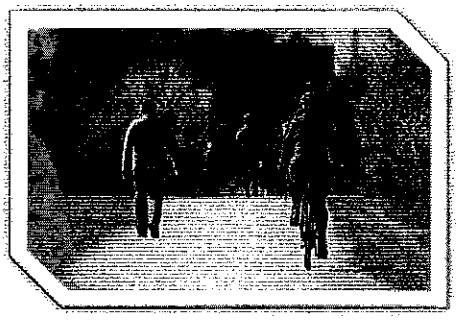
   Bay Trail South in RTP for Part A7.pdf

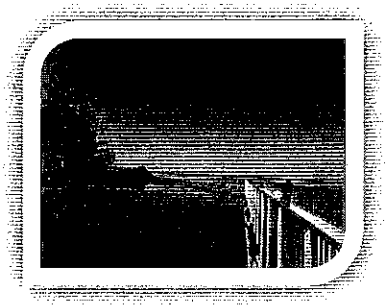
   Note: Projects not providing proof will be disqualified and not be evaluated.

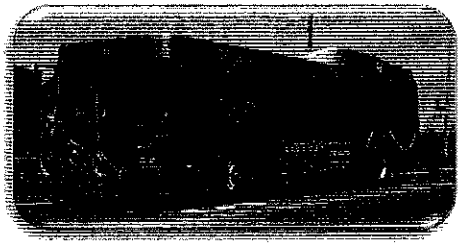
3. **Is the Implementing Agency Caltrans?** ☐ Yes ☒ No

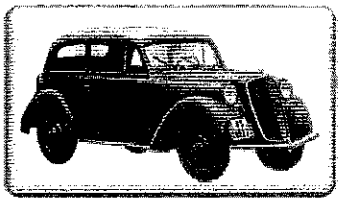
VROOM...

Variety in Rural Options of Mobility









This document can be viewed at www.hcaog.net

HCAOG

20-YEAR

REGIONAL TRANSPORTATION PLAN

2014 Update

HUMBOLDT COUNTY ASSOCIATION of GOVERNMENTS

GOAL, OBJECTIVES, & POLICIES

HCAOG shall carry out transportation planning for the regional roadway system with this goal:

GOAL: Throughout Humboldt County, the streets, roads, and highway system meet the transportation and safety needs of all users, including pedestrians, transit users, bicyclists, motorists, the elderly, youth, and the disabled. The region's jurisdictions have the resources to preserve, enhance, and maintain the roadway network to support bicycle, bus, pedestrian, automobile, and truck travel.

OBJECTIVES: The policies listed in the Complete Streets Element will help meet the RTP's main objectives (listed in alphabetical order):

- Balanced Mode Share/Complete Streets
- Economic Vitality
- Efficient & Viable Transportation System (includes Preserving Assets)
- Environmental Stewardship
- Equitable & Sustainable Use of Resources
- Safety

The policies below are grouped according to the RTP's main objectives (chapter 1, Introduction, fully describes the six main objectives). The objectives support and work in tandem with one another. Thus, a policy can help meet more than one objective.

OBJECTIVE: BALANCED MODE SHARE/ COMPLETE STREETS

- *Maximize multi-modal access to the roadway system and eliminate barriers to non-motorized transportation.*
- *Expand and maintain a regional network of inter-connected pedestrian and bicycle facilities for active transportation.*
- *Support and implement projects and policies that increase biking and walking, especially for short trips, first/last mile transit trips, and school trips. {California Transportation Plan 2040}*
- *Create safe and effective walking and bicycling facilities that create neighborhood connectivity and continuity. {California Transportation Plan 2040}*

Policy CS-1 HCAOG shall encourage and facilitate local jurisdictions, local Native American Tribes, Caltrans, and non-profits to individually and collaboratively plan, install, and maintain roads in Humboldt County to build a coordinated and balanced transportation system. *(Also supports objectives: Efficient & Viable Transportation System, Economic Vitality)*

Policy CS-2 HCAOG recognizes the planned Humboldt Bay Trail as a regional priority multi-use trail, and supports multi-jurisdictional, public, and private efforts to develop it. *(Also supports objectives: Efficient & Viable Transportation System, Economic Vitality)*

COMPLETE STREETS Project Location	Short or Long Term[1]	Complete Sts	Economic	Environment	Operations	Preserve Sys	Safety	Description	Funding Source	Implementation Year(s)	Cost in Year of Expenditure[2] ($000)
Agency: COUNTY OF HUMBOLDT											
Honeydew Bridge	ST	X	X	X	X	X	X	Replace existing bridge	HBP	2017	$6,600
Central Avenue	ST	X		X	X	X	X	Shoulder widening & overlay	Not funded	TBD	$900
Harris & Hall	ST	X			X		X	Safety improvements	Not funded	TBD	$500
Herrick & Elk River Intersection	LT	X	X	X	X	X	X	Signalize	Not funded	TBD	$1,500
Fairfield, Meyer, Eureka	LT	X	X	X	X	X	X	Route improvement	Not funded	TBD	$1,000
McKinleyville Avenue Extension	ST	X	X	X	X		X	Connect to School Road	Not funded	TBD	$1,500
Bald Hills Road	LT		X	X	X			Pave Surface	Not funded	TBD	$6,000
New Navy Base Road, SR 255 to Humboldt Bay	LT	X	X	X	X	X	X	Reconstruct roadway from SR 255 to Humboldt Bay	Not funded	TBD	$1,500
Myrtle Ave. at Freshwater Road	ST	X		X	X		X	Intersection improvement	Not funded	TBD	$1,900
Central Avenue, McKinleyville	ST	X		X	X		X	Shoulder widening	Not funded	TBD	$800
Central Avenue, McKinleyville	ST		X	X	X		X	Synchronize traffic signals	Not funded	TBD	$1,800
Hammond Trail Bridge–Mad River	ST	X		X	X	X	X	Replace existing bridge	Not funded	TBD	$6,400
Hammond Trail: Clam Beach to Scenic Drive	LT	X	X	X			X	Class I, II, and III (0.3 miles). *(Interagency coordination with City of Trinidad)*	Not funded	2027/28	$2,200 (1,800 in 2017)
Annie & Mary Trail: Blue Lake to Glendale (Chartin Road to Glendale Drive)	ST	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$2,000
Annie & Mary Trail: Glendale Bridge	LT	X		X	X		X	Rehabilitate or replace railroad bridge to establish Class I trail	Not funded	TBD	$5,000
Little River Trail, (Moonstone Beach to Clam Beach)	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$9,900
Humboldt Bay Trail South (Eureka to Bracut segment)	ST	X	X	X	X			Rail with Trail Class I multi-use trail	Not funded	TBD	$12,000
Humboldt Bay Trail: Elk River to King Salmon	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$1,800
Humboldt Bay Trail: King Salmon to Fields Landing	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$1,400
Humboldt Bay Trail: Fields Landing to Humboldt Bay Nat'l Wildlife Refuge/College of the Redwoods	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$2,400
Humboldt Hill to Thompkins Hill	LT	X	X	X	X		X	Connector road	Not funded	TBD	$2,000
Harris to Fern Street, Cutten	LT	X	X	X	X		X	Connector road	Not funded	TBD	$2,000
Alderpoint/Mattole/Maple Creek	LT		X	X	X	X	X	Reconstruct rural routes	Not funded	TBD	$100,000

PACIFIC COAST BIKE ROUTE

The Pacific Coast Bike Route (PCBR) runs the length of California, from the California/Oregon State line to the California/Mexico border. The northern tip begins on Highway 101 in Del Norte, takes local roads around Crescent City, and enters Humboldt County via the Newton B. Drury Scenic Parkway in Redwood National & Prairie Creek Redwoods State Park. Within Humboldt, the PCBR travels local roads in McKinleyville, Arcata, and Eureka. Several of these roads are also part of the California Coastal Trail.

HAMMOND TRAIL

The Hammond Trail links the south bank of the Mad River with Clam Beach County Park and travels through coastal McKinleyville to the Hammond Bridge. The trail is approximately 5.5 miles long of Class I multi-use trail, paved, and separated from motorized traffic. The Hammond Trail is part of the Pacific Coast Bike Route, and was designated a part of the California Coastal Trail in June 2010.

EUREKA WATERFRONT TRAIL & PROMENADE

The Eureka Waterfront Trail is envisioned to run the length of the city's bayfront, from Tydd Street (near the Eureka Slough) to Herrick Avenue at the Pound Road Park-and-Ride. Some segments of the trail are already in place: Eureka Slough trail (bayside of the Target Store), the trail near the Adorni Center, the Old Town Boardwalk, PALCO Marsh trail, and the 1.5-mile multi-use Hikshari' Trail in south Eureka's Elk River Access Area. Hikshari' is the Wiyot place name for this coastal area west of Broadway Street where the Elk River flows into Humboldt Bay. The City of Eureka completed "Phase A," in December 2016, which extends the trail north from the Hikshari' Trail, adding Class I multi-use trail from Truesdale to Del Norte Street. Phase B, from Del Norte to C Street, and Phase C, from Halvorsen Trail to Tydd Street, will be constructed in 2017. Existing segments of the Waterfront Trail are part of the Pacific Coast Bicycle Route.

HUMBOLDT BAY TRAIL

What is now collectively referred to as the Humboldt Bay Trail has been the region's top trail priority for over a decade. The grand vision is to have a multi-use trail for non-motorized travel from Trinidad and Blue Lake to College of the Redwoods. This is a multi-jurisdictional trail within Humboldt County.

The following briefly summarizes current progress on the trails.[2]

Caltrans: Caltrans will be implementing a large-scale wetland mitigation

[2] Source: County of Humboldt, *State of the Trails Report*, June, 2016.

Trail Project	Jurisdiction	Description	In Other HCAOG Adopted Plan(s)[1]:
Humboldt Bay Trail North and South*	Arcata, Humboldt County	Arcata to Eureka Segment: A 6.5-mile Class I/multi-use path around the east side of Humboldt Bay, between Arcata and Eureka. The trail would follow the North Coast Railroad rail corridor and parallel U.S. 101.	HCCTIS, Humboldt Bay Trail Feasibility Study, RBP, RPP, RTMP
Humboldt Bay Trail (Continuation)*	Humboldt County	This would continue the Class I/multi-use path from Humboldt Bay Trail South Trail further south in three conceptual segments: Elk River to King Salmon; King Salmon to Fields Landing; and Fields Landing to the Humboldt Bay National Wildlife Refuge and College of the Redwoods.	*new in 2017 RTP Update*
Hoopa Valley Trail	Humboldt County	A 6-mile segment along SR 96 from the south end of Shoemaker Road northward (in Caltrans right-of-way). The long-term vision is to expand the trail throughout the Hoopa Valley.	RPP
John Campbell Memorial Greenway*	Fortuna	Multi-purpose from the Riverwalk Trail to the south entrance of the Headwaters Reserve	RBP, RTMP
Little River Trail (Hammond Trail Extension)*	Humboldt County	Multi-use (Class I) trail between Clam Beach and Moonstone Beach. The trail would connect the Hammond Trail and Clam Beach Road to Scenic Drive.	RBP
Manila Shared Use Path*	Humboldt County	Class I multi-use trail adjacent to Highway 255, from the intersection of Dean Street and Pacific Avenue, to Carlson Avenue intersection.	RBP
Orick Levee Coastal Trail	Humboldt County	Multi-purpose trail on north Redwood Creek levee to the U.S. 101 bridge (0.69 miles), south levee to Redwood National Park Visitor Center (2.45 miles).	HCCTIS (Priority Project)
Riverwalk Trail	Humboldt County	Fortuna City limits to Sandy Prairie	RTMP
Eureka Loop Trail*	Eureka	Multipurpose trail connecting the north and south ends of the Eureka Waterfront Trail to key destinations in the south, east and west of Eureka and portions of the Greater Eureka Area.	

The symbol identifies trails that are or would be part of the California Coastal Trail.

[1]HCCTIS=*Humboldt County Coastal Trail Implementation Strategy* (2011); RBP=*Regional Bicycle Plan* (2017); RPP=*Regional Pedestrian Plan* (2008); RTMP=*Regional Trails Master Plan 2010).*

*See the Complete Streets Element, Table *Streets*-4 for estimated project costs.

Part B: Narrative Questions

Question #1

QUESTION #1
DISADVANTAGED COMMUNITIES (0-10 POINTS)

☐ **This project does not qualify as a Disadvantaged Community.**

A. Map of Project Boundaries, Access and Destination (0 points): Required

Provide a scaled map showing the boundaries of the proposed project/program/plan, the geographic boundaries of the disadvantaged community, and disadvantaged community access point(s) and destinations that the project/program/plan is benefiting.

Disadvantaged Census Tracts and Destinations_Final.pdf

B. Identification of Disadvantaged Community: (0 points)

Select one of the following 4 options. Must provide information for all Census Tract/Block Group/Place # that the project affects.

- **Median Household Income**
- **CalEnviroScreen**
- **Free or Reduced Priced School Meals** - Applications using this measure must demonstrate how the project benefits the school students in the project area.
- **Other**

Select Option: Median Household Income

The Median Household Income (Table ID B19013) is less than 80% of the statewide median based on the most current Census Tract (ID 140) level data from the 2012-2016 American Community Survey (ACS) (<$51,026). Communities with a population less than 15,000 may use data at the Census Block Group (ID 150) level. Unincorporated communities may use data at the Census Place (ID 160) level. Data is available at: http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Census Tract/Block Group/Place #	Population	MHI
1	2,138	26,291
2	2,622	41,936
3	2,423	42,983
4	1,702	42,708
5	2,002	28,175
6	2,207	48,208
8	2,146	61,328
9	2,419	57,009
10	2,811	22,853
11.01	2,899	34,609
13	701	34,236

Lowest median household income from above (autofill): $ **22,853** (to be used for qualifying as benefiting a DAC only)

Median household income by census tract for the community(ies) benefited by the project: $ **40,045.28**
(to be used for severity calculation only)

Must attach a copy of FactFinder ACS page for each census tract listed above. Attach all pages as one pdf.

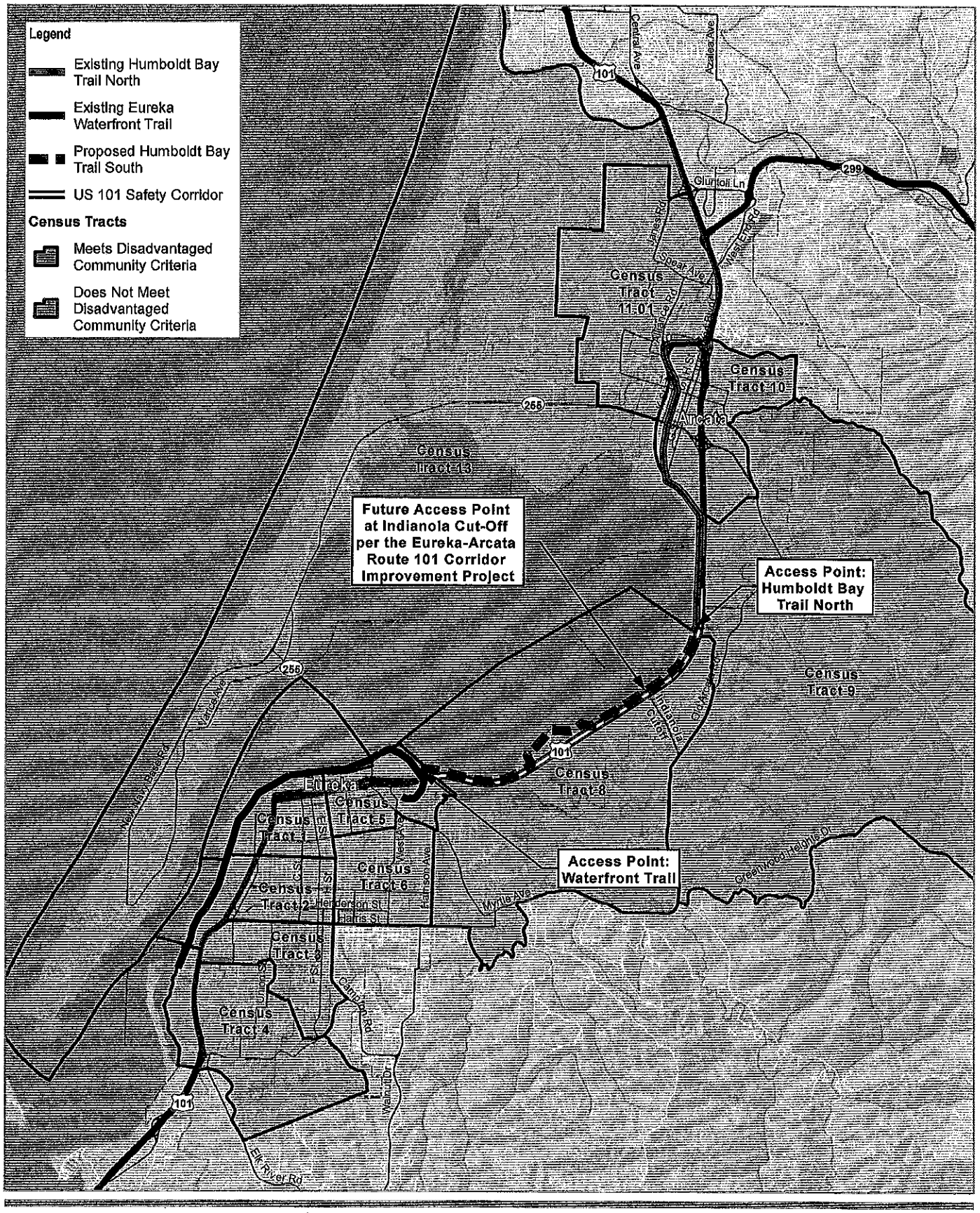
Census Tract tables B19013 and B25001 compiled.pdf

C. Direct Benefit: (0 - 4 points)

1. Explain how the project closes a gap, provides connections to, or addresses a deficiency in an active transportation network or meets an important community need. (Max of 150 Words)

Words Remaining: 0

The project will close the four-mile gap in the Humboldt Bay Trail and address an active transportation deficiency which adversely affects the region's most vulnerable residents. Median household income (MHI) in the project benefit area is $40,045, 59% of the state average MHI. The lowest MHI of 11 census tracts in the project area is $22,853. Many students and families in the Humboldt Bay area cannot afford to own and



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Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

N

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Census Tracts
Disadvantaged Communities

Project No. 11110166
Revision No. C
Date 23 Jul 2018

FIGURE 2

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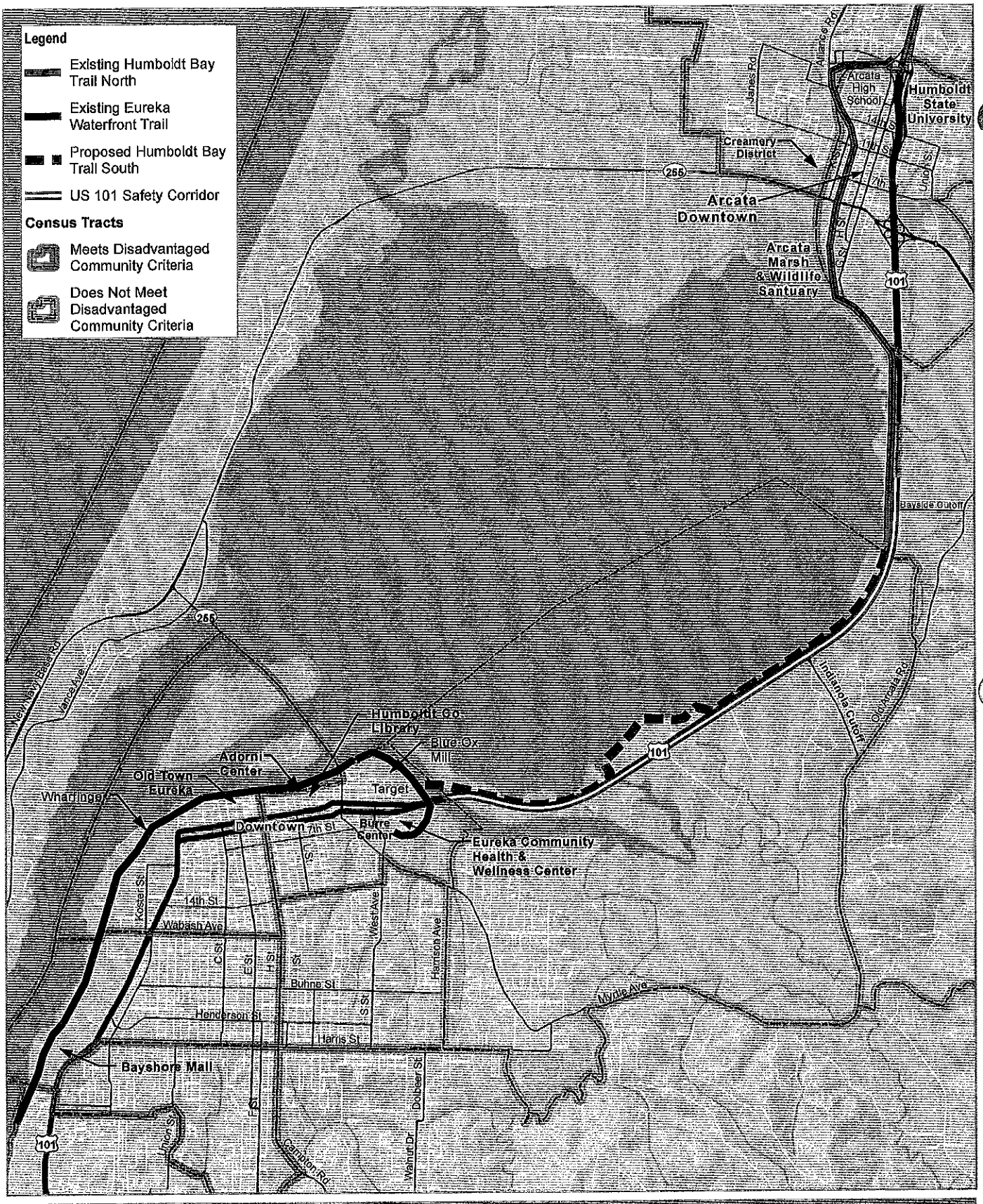
Print date: 23 Jul 2018 - 17:05

Data source: Copyright © 2014 Esri. Created by: gldavidson



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0 0.25 0.5 0.75 1

Miles

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

N

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Project No. 11110166
Revision No. C
Date 23 Jul 2018

Services/Destinations

FIGURE 3

Data source: Copyright © 2014 Esri. Created by: gldavidson

G:\11\11110166 Humboldt Bay Trail South PA&ED PS&E\06-GIS\Maps\Figures\ATP\11110166_03_HBTS_Destinations_RevC.mxd
Print date: 23 Jul 2018 - 14:26

B19013

MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2016 INFLATION-ADJUSTED DOLLARS)
Universe: Households
2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 1, Humboldt County, California		Census Tract 2, Humboldt County, California		Census Tract 3, Humboldt County, California
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
dian household income in the past 12 months (in 2016 ation-adjusted dollars)	26,291	+/-7,061	41,936	+/-7,245	42,983

	Census Tract 3, Humboldt County, California	Census Tract 4, Humboldt County, California		Census Tract 5, Humboldt County, California	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2016 inflation-adjusted dollars)	+/-3,383	42,708	+/-7,035	28,175	+/-2,288

	Census Tract 6, Humboldt County, California		Census Tract 8, Humboldt County, California		Census Tract 9, Humboldt County, California
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Median household income in the past 12 months (in 2016 inflation-adjusted dollars)	48,208	+/-6,491	61,328	+/-3,937	57,009

	Census Tract 9, Humboldt County, California	Census Tract 10, Humboldt County, California		Census Tract 11.01, Humboldt County, California	
	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median household income in the past 12 months (in 2016 inflation-adjusted dollars)	+/-10,019	22,853	+/-7,187	34,609	+/-7,273

	Census Tract 13, Humboldt County, California	
	Estimate	Margin of Error
Median household income in the past 12 months (in 2016 inflation-adjusted dollars)	34,236	+/-7,368

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

AMERICAN FactFinder

B25001

HOUSING UNITS
Universe: Housing units
2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

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Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Census Tract 1, Humboldt County, California		Census Tract 2, Humboldt County, California		Census Tract 3, Humboldt County, California	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	2,138	+/-114	2,622	+/-125	2,423	+/-115

	Census Tract 4, Humboldt County, California		Census Tract 5, Humboldt County, California		Census Tract 6, Humboldt County, California	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	1,702	+/-63	2,002	+/-129	2,207	+/-141

	Census Tract 8, Humboldt County, California		Census Tract 9, Humboldt County, California		Census Tract 10, Humboldt County, California	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total	2,146	+/-107	2,419	+/-84	2,811	+/-179

	Census Tract 11.01, Hur t County, California		Census Tract 13, Humboldt County, California	
	Estimate	Margin of Error	Estimate	Margin of Error
Total	2,899	+/-163	701	+/-43

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

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Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

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6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

operate a personal vehicle. Gas prices in Humboldt are some of the highest in the country because fuel is transported by barge. Arcata's rating on the Center for Neighborhood Technology's Housing + Transportation Affordability Index (which measures the percent of household budget spent on housing and transportation costs) is 61% - significantly higher than the benchmark of 45%. The project will enable economically disadvantaged residents to reduce their transportation costs by enabling travel between Eureka and Arcata without a vehicle.

2. Explain how the disadvantaged community residents will have physical access to the project. (Max of 150 Words)

Words Remaining: 22

Disadvantaged community residents will have physical access to the project through existing bike/pedestrian facilities or through existing city transit routes. The communities directly benefiting from the project include all census tracts situated within one mile of a Class I path connecting to the Humboldt Bay Trail South segment. Existing facilities lead to both the northern and southern endpoints of the project. The southern terminus will connect to Eureka's severely disadvantaged Bridge District neighborhood (census tract 1) and the Eureka Waterfront Trail, immediately accessible from Eureka's north and west neighborhoods (census tracts 2, 3, 4, 5, and 6). The northern terminus connects to the Humboldt Bay Trail North which runs north-south through Arcata and includes many access points within Arcata's severely disadvantaged neighborhoods (census tracts 10, 11.01, and 13).

3. Illustrate and provide documentation for how the project was requested or supported by the disadvantaged community residents. (Max of 150 Words)

Words Remaining: 1

Eureka and Arcata are economically disadvantaged communities based on MHI. Community residents have advocated for the Humboldt Bay Trail since the late 1990s. Large numbers of requests were submitted for the project as comments and testimony on the Humboldt County General Plan Update, HCAOG Regional Transportation Plan, and other HCAOG transportation plans. The project has been requested at nearly every public meeting regarding the Caltrans/HCAOG Corridor Project and at meetings on the future of the North Coast railroad. In the 2014 Humboldt County Community Health Improvement Plan, the primary objective associated with Priority 5 (Ensure safe neighborhoods for residents, pedestrians and bicyclists) is "By 2019, secure funding for design and construction of the Humboldt Bay Trail" (attached). Priorities, goals, and objectives for this plan were determined through direct input from disadvantaged community residents and over 30 social service organizations. The May-June 2018 survey (see Question 2) documents additional support.

Attach Documentation

2014 CHIP Pages Compiled.pdf

D. Project Location: (0 - 2 points)

1. Is your project located within a disadvantaged community? Partially

Severity: (0 - 4 points)

a. Auto calculated

Humboldt County

Community Health Improvement Plan 2014-2019

1-7-2015

Table of Contents

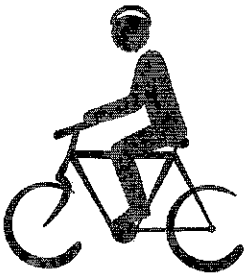
Let's get Healthy, Humboldt!

St. Joseph Hospital
Redwood Memorial Hospital
ST. JOSEPH HEALTH SYSTEM

Humboldt County Department of Health&Human Services
People helping people live better lives

Priority 5: Ensure safe neighborhoods for residents, pedestrians and bicyclists

Humboldt County envisions a healthy community that is safe and inviting for residents, pedestrians, bicyclists and motorists. This priority area was identified as an important contributing factor related to several of the most concerning health outcomes experienced in our county. The absence of safe, walkable communities is a leading cause of physical inactivity (link). Physical inactivity is a leading cause of cardio vascular disease which is a leading cause of death in Humboldt County.



In rural communities people often have to travel long distances to their destinations and many areas lack sidewalks, bike lanes, and other infrastructure to support walking and bicycling. Humboldt County is working to increase safety and connect residents by foot, bicycle, and public transit to their schools, workplaces and communities at large.

Some examples of efforts include: policy passed to reduce the speed limit in school zones (Fortuna), programs that encourage public transit use (Humboldt State University's Jack Pass), education in schools such as suggested walking/ biking maps, arrival/ dismissal maps, afterschool bike clubs and bike and pedestrian education in the classroom. Groups are also working to increase and improve walkways, bike paths and connect communities through a trail system.

Encouraging active modes of transportation can improve public health. With more people walking and bicycling, communities experience safer streets, reduced traffic demands, a stronger sense of community, improved air quality, and greater physical fitness. Both walking and cycling are good for your heart, your muscles, your bones, and are linked to improved mental health.

Goal 1: Increase options for active modes of transportation	
Objective:	By 2019, secure funding for design and construction of the Humboldt Bay Trail.
Strategy:	Jurisdictions (County of Humboldt, City of Arcata, City of Eureka) apply for grant funding to further trail completion. Coordinate trail planning between jurisdictions to ensure connectivity. Plan and design trail segments so they are "shovel ready" for future construction grants. Support local fund-raising to provide cost-share for grant applications. Collaborate with NCRA and Caltrans to incorporate trail into railroad and highway corridors.
Evidence-based or Promising Practice?	Yes
Performance Indicator:	Completion of new trail segment designs or construction.
Target:	Continuous trail from Eureka Waterfront to central Arcata.
By When?	Construction of one trail segment starting in 2014 (City of Arcata). Completed trail by 2019.
Baseline:	Hikshari' Trail, Eureka Boardwalk
Health outcomes or indicators for monitoring	Increased walking/bicycling mode share. Increased rate of physical activity.
Responsible Organization	City of Arcata, Humboldt County Public Works, City of Eureka
Contact	Karen Diemer, City Manager
Email	kdiemer@cityofarcata.org
Contact	Miles Slattery, Parks and Recreation Director
Email	mslattery@ci.eureka.ca.gov
Contact	Hank Seemann, Deputy Director of Environmental Services, Humboldt County Public Works
Email	hseemann@co.humboldt.ca.us
Collaborators	HCAOG; Caltrans, NCRA, California Coastal Conservancy.
Policy change required?	No

Part B: Narrative Questions

Question #2

QUESTION #2
POTENTIAL FOR INCREASED WALKING AND BICYCLING, ESPECIALLY AMONG STUDENTS, INCLUDING THE IDENTIFICATION OF WALKING AND BICYCLING ROUTES TO AND FROM SCHOOLS, TRANSIT FACILITIES, COMMUNITY CENTERS, EMPLOYMENT CENTERS, AND OTHER DESTINATIONS; AND INCLUDING INCREASING AND IMPROVING CONNECTIVITY AND MOBILITY OF NON-MOTORIZED USERS. (0-38 POINTS)

Please provide the following information: (This must be completed to be considered for funding.)

# of Users	Pedestrian	Bicycle	Date of Counts	Mark here if N/A to project
Current	6	33	6/23/2016	☐

Safe Routes to School projects: The following information related to the Safe Routes to School Projects data was already entered in part 3 of the application.

School	Total Student Enrollment	Approx. # of Students Living Along School Route Proposed	# of Students Currently Walking/Biking to School
Total	0	0	0

Document the methodologies used to establish the **current** count data. (Max of 250 Words) **Words Remaining:** 6

The project is situated parallel to Highway 101. Caltrans conducted counts of non-motorized users along Highway 101 at Indianola Cutoff, halfway between Eureka and Arcata (situated within the project area) during the week of June 23, 2016. These count data were collected after the most recent improvements on Highway 101 which colorized the highway shoulder and established a standard shoulder width of 10 feet. Total daily pedestrians and bicyclists northbound and southbound were counted on the Thursday, Saturday and Sunday during this week in June from 6:00 a.m. to 7:00 p.m. and averaged across these three days. Counts were assessed by capturing video footage using cameras mounted on existing poles adjacent to both the northbound and southbound lanes. Caltrans staff then viewed the footage to count non-motorized users.

Following completion of the Humboldt Bay Trail North project in 2017, the City of Arcata counted non-motorized users near the northern terminus of the proposed Humboldt Bay Trail South project using the City's Eco-Counter automatic counting system mounted in the trail surface. From mid-March to mid-May 2018, the Humboldt Bay Trail North received a daily average of 116 pedestrians and 88 bicyclists. Due to the existing gap in the Humboldt Bay Trail, almost all of the users on the Humboldt Bay Trail North segment turn around and return to Arcata rather than continuing on Highway 101. Counts on the Eureka Waterfront Trail were delayed due to technical difficulties but are planned within the next few months.

A. Statement of project need. Describe the issue(s) that this project will address. How will the proposed project benefit the non-motorized users? What is the project's desired outcome and how will the project best deliver that outcome? **(0-19 points)**

Discuss:
- Lack of connectivity
- The lack of mobility - if applicable - Does the population have limited access to cars, bikes, and transit?
  - Does the project have an unserved or underserved demand?
- The **local** health concerns responses should focus on:
  - Specific local public health concerns, health disparity, and/or conditions in the built and social environment that affect the project community and can be addressed through the proposed project. Please provide detailed relevant answers instead of general descriptions of the health benefits of walking and biking (i.e. "walking and biking increase physical activity").
  - Local public health data demonstrating the above public health concern or health disparity. Data should be at the smallest geography available (state or national data is not sufficient). One potential source is the Healthy Places Index (HPI) (http://healthyplacesindex.org)
- For combined I/NI projects: Discuss need for an encouragement, education, and/or enforcement program.

(Max of 1000 Words) **Words Remaining:** 17

The desired outcome of the project is a major mode shift from motorized to non-motorized use along Humboldt County's most highly traveled transportation corridor. The project will complete the series of non-motorized transportation projects between Eureka and Arcata by constructing a 4.2-mile, separated, multi-use trail to enable full non-motorized connectivity between the communities. The project will achieve a major transformation in mobility options around Humboldt Bay by liberating travelers from dependence on a vehicle and enabling safe access along the Humboldt Bay

shoreline.

Arcata and Eureka are the two largest urban areas in Humboldt County, with Eureka the County seat and Arcata the home of Humboldt State University (HSU). The total population of the two areas is 62,285, almost half the county population (135,026). The project area contains the majority of the Humboldt Bay region's community centers, social service facilities, medical facilities, transit facilities, employment centers, commercial districts, affordable housing, and schools.

Highway 101 between Eureka and Arcata is a four-lane expressway along the Humboldt Bay shoreline, surrounded primarily by agricultural land and wetlands. This highway segment is the most traveled transportation corridor in Humboldt County (ADT 37,000, 2014 data) with prevailing speeds near 55 miles per hour. The current configuration of Highway 101 was designed in the 1950s exclusively to support motorized vehicles. Cyclists and pedestrians must travel on the highway shoulder directly adjacent to high-speed traffic and navigate multiple intersections and driveways. The northbound lane of Highway 101 crosses three intersections and two driveways and the southbound lane crosses two driveways, creating dangerous conflict points. The shoulders are frequently occupied by disabled vehicles or utilized as part of highway maintenance or CHP operations, creating additional conflicts.

The absence of non-motorized facilities is a major deterrent for pedestrians and cyclists between Eureka and Arcata. Current bike and pedestrian use is extremely limited. Non-motorized travelers are typically only the most experienced cyclists, or individuals with urgent needs to travel and no vehicle options.

The existing segment of the Humboldt Bay Trail between Eureka and Arcata (Humboldt Bay Trail North) ends abruptly near the middle of the transportation corridor, forcing pedestrians and cyclists to travel the remaining four miles along the shoulder of the highway. Due to this gap, very few pedestrians and cyclists on the existing trail segment actually complete the trip between the two cities.

Humboldt County residents have some of the lowest household income levels in California. Humboldt County residents' MHI is $43,130, 63.7% of the state average. In Humboldt County, 20% of families are impoverished compared to the state average of 14.3% (2016 ACS). In 2016-2017, 58.1% of Humboldt County students were eligible for free or reduced priced meals. Transportation costs can greatly impact low income families, many of which have children that need to get to and from school. Gas prices in Humboldt County are consistently among the highest in the state.

From May through June 2018, Humboldt County conducted an on-line survey of non-motorized travel around Humboldt Bay, with 719 responses. 77% of respondents indicated that currently they never (51%) or rarely (26%) walk or bike along Highway 101 between Eureka and Arcata. Of these respondents, 75% indicated they would walk or bike once the Humboldt Bay Trail is complete. These survey results demonstrate the high latent demand for non-motorized travel between Eureka and Arcata. Further evidence is provided by the high usage rates along the adjoining Eureka Waterfront Trail and Humboldt Bay Trail North segment.

The project will directly benefit economically disadvantaged students attending HSU. According to 2016 HSU data, 53.1% of first time students are low income and 56.4% are first generation college students. Of first time undergraduate students, 42.4% are Hispanic or Latino. Due to a housing shortage in Arcata where HSU is located, many students are forced to live in Eureka where housing is more affordable and available. Carless students are forced to walk, bike, carpool, or use public transit as a means of getting to and from school.

Humboldt County has some of the most severe traffic safety concerns in the state. From the most recent data available through the California Office of Traffic Safety (2015), Humboldt County ranks the highest among all California counties in pedestrian-involved collisions. Injuries from motor vehicle crashes are a major public health concern in Humboldt County, as they were the highest or second-highest cause of death every year between 2007 and 2011 for people under the age of 45, according to the 2013 Humboldt County Community Health Assessment. This report also indicated that Humboldt County residents are more than twice as likely to be injured in a motorized vehicle collision as residents statewide. The average annual mortality rate for Humboldt County residents due to vehicle collisions is 15.7 per 100,000 people, over twice as high as the California rate of 7.5 per 100,000 people (2009-2011, Humboldt County Automated Vital Statistics System).

The lack of safe, accessible places to be active in our rural community and the lack of complete active transportation networks have a direct relation on our community's health outcomes. Humboldt County has some of the worst health outcomes across the state, ranking 49th out of 57counties. Humboldt County ranked 52nd in health behaviors including physical inactivity and alcohol impaired driving deaths and 52nd in length of life. The 2013 Humboldt County Health Assessment indicated that Humboldt County residents are far more likely to have a chronic disease of the heart and cardiovascular system. The health status of youth in Humboldt County has been analyzed through FitnessGram (California Physical Fitness Tests) of 5th, 7th, and 9th grade students. In the year 2015, 42.2% of 5th graders, 41.6% of 7th graders, and 39.1% of 9th graders were considered overweight or obese.

The project will achieve the desired outcome by transforming Humboldt County's most important transportation corridor into a "Complete Street" and fulfilling the decades-long vision of connecting communities with a trail and connecting people to Humboldt Bay.

B. Describe how the proposed project will address the active transportation need: (0-19 points)

1. Close a gap? ☒ Yes ☐ No

No. of gaps: 1 Total length of gap(s) (feet): 22,319

Gap closure = Construction of a missing segment of an existing facility in order to make that facility continuous.

a. Must provide a map of each gap closure identifying gap and connections.

Map showing the Gap and Basis of Design Report.pdf

b. Describe how the project links or connects, or encourages use of existing routes to transportation-related and community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations. *Specific destinations must be identified.* (Max of 150 Words)

Words Remaining: 0

The Eureka Waterfront Trail (six miles) and Humboldt Bay Trail North (four miles) are existing facilities constructed with funding from previous ATP cycles. The proposed project will construct the missing segment between these facilities to complete a 14-mile network of separated multi-use trails. The project will close the gap by utilizing the railroad right-of-way which extends parallel to Highway 101 and a private levee surrounding a former mill site. Closing the gap in the Humboldt Bay Trail will result in significant new trip generation: the 2016 Basis of Design Report estimated 130 to 160 peak hourly user trips by cyclists and pedestrians (peak hourly user trips represents an 85th percentile rate; the peak hourly rate would be met or exceeded approximately 50 days per year). Destinations within Eureka and Arcata include employment sites, government and social service centers, medical centers, commercial centers, affordable housing, schools, transit facilities, and recreation areas.

2. Creation of new routes? ☒ Yes ☐ No

New route = Construction of a new facility that did not previously exist for non-motorized users that provides a course or way to get from one place to another.

a. Must provide a map of the new route location.

Map for New Route Location_Final.pdf

b. Describe the existing route(s) that currently connect the affected transportation related and community identified destinations and why the route(s) are not adequate. (Max of 150 Words)

Words Remaining: 20

The existing route between Eureka and Arcata is along the shoulder of Highway 101, which is the only direct route between the two cities. The two other highways connecting Eureka and Arcata (Highway 255 and Old Arcata Road) are two to four miles longer, have comparable vehicle speeds, and more narrow shoulders (two to eight feet). The absence of a separated path for non-motorized transportation users makes the existing route along Highway 101 inadequate for most users due to the close proximity to high-speed vehicles (50 mph, and often higher) without separation or protection. The vast majority of people do not even consider traveling along the Highway 101 shoulder due to safety concerns. This project would also achieve the completion of a critical link in the state-wide California Coastal Trail.

c. Describe how the project links or connects, or encourages use of existing routes to transportation-related and community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations. *Specific destination must be identified.* (Max of 150 Words)

Words Remaining: 38

A separated bicycle and pedestrian trail between Arcata and Eureka has been identified as the highest-priority and most popular project in several regional planning documents developed over the last two decades. Completing this project will create a new, fully accessible, connected route between the two largest cities in Humboldt County. The project will enable full utilization of the existing Eureka Waterfront Trail and Humboldt Bay Trail North so that community members and visitors have safe non-motorized access to employment sites, government and social service centers, medical centers, commercial centers, affordable housing, schools (especially HSU), transit facilities, and recreation areas, the majority of which are located in the cities of Eureka and Arcata.

3. Removal of barrier to mobility? ☒ Yes ☐ No

a. Type of barrier: Freeway

b. Must provide a map identifying the barrier location and improvement.

Map for barrier location and improvement_Final.pdf

c. Describe the existing negative effects of barrier to be removed and how the project addresses the existing barrier. (Max of 150 Words)

Words Remaining: 48

Ten miles of the Humboldt Bay Trail have been completed (six miles in Eureka and four miles in Arcata). However, the absence of accessible, non-motorized transportation facilities in the four miles between these facilities presents a mobility barrier for all but the most experienced cyclists (or the most desperate travelers) to complete their trips between Eureka and Arcata. The vast majority of people do not even consider traveling along the Highway 101 shoulder due to safety concerns. This project will eliminate the barrier to mobility for the majority of people by creating an active transportation facility separate and parallel to Highway 101.

d. Describe how the project links or connects, or encourages use of existing routes to transportation-related and community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations. *Specific destination must be identified.* (Max of 150 Words)

Words Remaining: 28

The project will eliminate a mobility barrier by creating the missing link in a non-motorized trail network that will be accessible to users of all ages and abilities. A continuous, separated, paved multi-use trail along Highway 101 will support and increase active transportation in the region as well as the number of trips made by walking and bicycling. Many users have indicated a desire to travel via foot or bicycle once there is a facility designed for non-motorized use with adequate barriers and separation from Highway 101. The project will enable residents and visitors to travel between Eureka and Arcata to employment sites, government and social service centers, medical centers, commercial centers, affordable housing, schools (especially HSU), transit facilities, and recreation areas.

4. Other Improvements to existing routes? ☒ Yes ☐ No

a. Must provide a map of the new improvement location.

Map for new improvement location_Final.pdf

b. Explain the improvement. (Max of 150 Words)

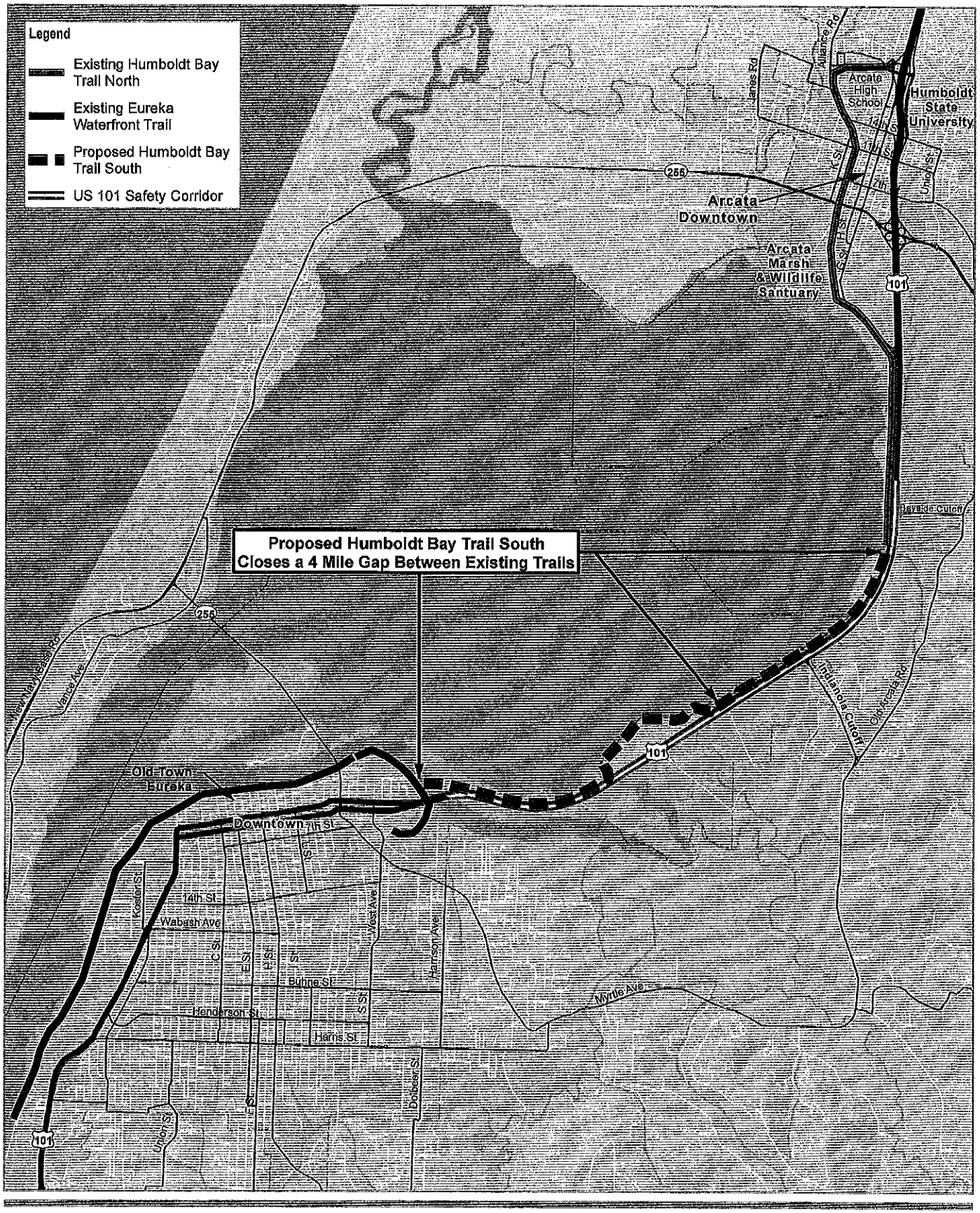
Words Remaining: 59

The existing route for cyclists and pedestrians between Eureka and Arcata is the shoulder of Highway 101. Cyclists and pedestrians must travel directly adjacent to high-speed traffic and navigate multiple intersections and driveways, which create dangerous conflict points. Further, the shoulders are frequently occupied by disabled vehicles or utilized as part of highway maintenance or CHP operations, creating additional conflicts. The proposed project improves the existing route by creating a parallel facility designed specifically for active transportation. The proposed project transforms Humboldt County's most important transportation corridor into a "Complete Street."

c. Describe how the project links or connects, or encourages use of existing routes to important or community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations. *Specific destination must be identified.* (Max of 150 Words)

Words Remaining: 8

Highway 101 connects Arcata and Eureka, the two most densely populated centers in Humboldt County, and has an elevated collision history. Many fatal collisions along the catalyzed Caltrans and HCAOG to develop the Highway 101 Eureka-Arcata Corridor Improvement Project which aims to create a safer roadway by improving safety at intersections, eliminating uncontrolled left turn movements, reduce delays at intersections, and restore and rehabilitate the exiting Highway 101 roadway. In addition, the California Coastal Trail is currently designated along the shoulders of Highway 101. The Pacific Coast Bike Route, also designated along the shoulders of Highway 101, is currently Caltrans recommended bike route around Humboldt Bay. This project would greatly improve the existing routes by increasing safety for non-motorized users trying to reach destinations such as schools, transit facilities, community and social services, medical centers, employment centers, affordable housing and business districts.



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Horizontal Datum: North American 1983
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Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Proposed Humboldt Bay Trail South Improves Safety

Project No. 11110166
Revision No. C
Date 23 Jul 2018

FIGURE 4

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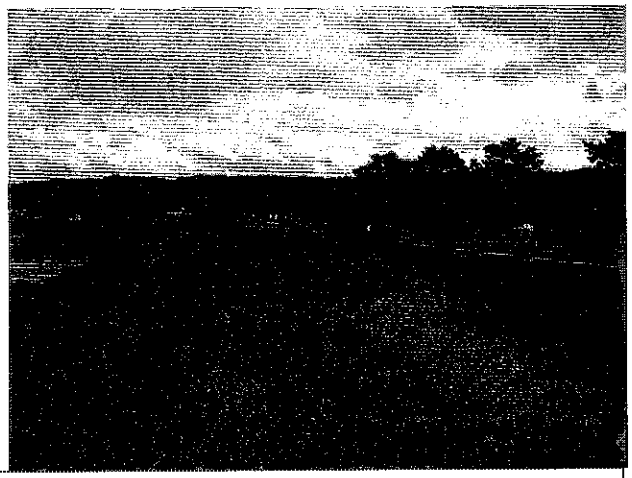
Basis of Design Report for Trail Width

Humboldt Bay Trail: Eureka-to-Arcata Segment



PREPARED BY

Humboldt County Department of Public Works

In coordination with:

Humboldt County Association of Governments
California Department of Transportation, District 1
City of Eureka
City of Arcata
Redwood Community Action Agency

Date: MARCH 31, 2016

and prioritization and trail demand projections for the approximately 158-mile-long segment within Humboldt County. Trail alignments were evaluated based on the goals of providing a scenic experience; maximum access for a variety of non-motorized uses; connectivity to destinations and amenities along the coast and local communities; separation from motorized traffic; minimum impacts to natural habitats and cultural and archeological resources; and respect for private property. For the segment between Arcata and Eureka, the report recommended a bike path with soft surface shoulders along the rail corridor around Humboldt Bay. The recommended design standard was a hard surface path of 12 feet where possible, 10 feet in constrained areas, along with four-feet natural surface shoulders (Page 44).

Initial Study and Mitigated Negative Declaration for Arcata Rail with Trail Connectivity Project
In 2011 the City of Arcata prepared an environmental document for the Arcata City Trail and Bay Trail North projects for compliance with the California Environmental Quality Act (CEQA). The proposed project analyzed in the CEQA document had a paved trail tread of ten feet with two two-foot unpaved shoulders (Appendix I – Design Plan Set).

Project Study Report and Initial Engineering Study for Humboldt Bay Trail South
Humboldt County prepared a Project Study Report (March 18, 2014) for the Humboldt Bay Trail South project to support the County's request for funding from the California Transportation Commission to perform technical studies, engineering design, and permitting. The Project Study Report identified the proposed project as a trail with a 10-foot-wide pave surface and two-foot-wide softer shoulders on each side (page 12). Following that report, Humboldt County retained GHD, Inc. to prepare an Initial Engineering Study (August 2014). The standard (non-bridge) cross-section in the Initial Engineering Study included a paved trail width of ten to twelve feet.

Other Plans
The Humboldt Bay Trail has been addressed in several other local plans (Humboldt Bay Harbor, Recreation and Conservation District, 2007; HCAOG, 2008; HCAOG, 2010a; HCAOG, 2010b; HCAOG, 2012; NCRA, 2012; HCAOG, 2013).

2.5 Nexus with Coastal Commission Consistency Determination for Corridor Improvement Project

A concurrent project within the study area is the Route 101 Eureka-Arcata Corridor Improvement Project which is being implemented by Caltrans and HCAOG. The Corridor Improvement Project addresses six at-grade crossings on Highway 101 situated between the Eureka Slough Bridge and the Route 101/255 separation in Arcata. The Humboldt Bay Trail is formally linked to Highway 101 and the Corridor Improvement Project through conditions established by the California Coastal Commission. The Revised Findings of Consistency Certification (Coastal Commission, 2013) includes Condition 1 (Coastal Trail Planning), which specifies:

> "Construction of the Route 101 Corridor Improvements will not commence until adequate commitments are in place to assure that a separate Class 1 bike and pedestrian trail, parallel to Route 101 from Arcata to the northern end of downtown Eureka, will be constructed and operational by the time the major project components are completed" (Page 7).

2.6 Trail User Profile

The Humboldt Bay Trail will serve as a transportation corridor between two large urban areas and as a major regional destination for recreation and outdoor activities. The trail will be used by a wide range of users for a variety of trip purposes using a variety of mobility modes. Trail users will range in ages, experience levels, and abilities. Trip purposes will include commuting (to

work, school, social events, commerce) and recreation (exercise, enjoyment, nature study). Modes of mobility will include bicycles (upright, recumbent, three-wheeled), wheelchairs, skates, scooters, and on foot. Pedestrians will include people with baby strollers and people walking dogs. The trail will be used by individuals as well as groups (e.g., up to 10 to 20 people). In addition, vehicles will need to access the trail periodically for maintenance, law enforcement, and emergency response.

Different trail users have different needs and preferences. Experienced users typically travel for longer distances and durations and at higher speeds (up to 20 to 25 miles per hour). Experienced users typically desire a continuous trip at a steady rate with few conflicts and will make passing movements around slower users. Novice and casual users will travel for shorter distances and durations with slower speeds and more frequent stoppages. Bicycle commuters may ride before dawn and after sunset, especially during the winter.

As a relatively long segment of trail separated from a roadway, the Humboldt Bay Trail will become a popular destination for children learning to ride bicycles, as well as seniors. Children are generally slower in recognizing and responding to rapidly changing situations and less able to accurately judge the speed and distance of approaching cyclists. Children are also generally less familiar with "rules of the road" and conventions for trail use (e.g., slower users staying to the right). Children are more likely to travel on an irregular course with frequent starts and stops. Seniors are another special type of user, who may ride at a slower pace and have longer reaction times when responding to sudden movements or objects in their path (AASHTO, 2012). Stoppages for resting will be common.

The Humboldt Bay Trail is expected to be a popular destination for walking, running, wildlife viewing, and other forms of nature study. Pedestrians slowing or stopping for birdwatching and similar activities will be common.

2.7 Trail Use Estimates

Overview

Existing conditions along the Highway 101 corridor between Eureka and Arcata are a significant deterrent for non-motorized travel. A large number of people don't ride bicycles on the corridor due to the perceived dangers of traveling on the shoulder of a major highway. Surveys, letters, and oral testimony over many years provide evidence of high latent demand.

Annual Use

The 2011 Humboldt County Coastal Trail Implementation Strategy report (RCAA *et al*, 2011) provided quantitative estimates for annual trail use of proposed trail segments by analyzing local and tourist demand (Appendix N). Local demand was forecasted using Alta Planning + Design's Seamless Travel Model, which was calibrated using data collected in San Diego. The model applies a predictive formula based on demographic data (employment density, population density), presence of retail activity, and trail length. Tourist demand was estimated at the county level based on county visitor data and applying use factors from studies of other trails across the country. Results were adjusted for seasonal factors to develop annual estimates. Based on the analysis in this report, the estimated annual usage of the Humboldt Bay Trail between Eureka and Arcata is approximately 80,000 to 100,000 trips per year.

Peak Hourly Use

For design purposes, rates of trail use are desired on a daily or hourly basis. The Seamless Travel Model used by RCAA *et al* (2011) is likely adequate to estimate annual usage but is not

considered a robust predictive tool for daily or hourly usage (Dana Dickman, Alta Planning + Design, personal communication).

Development of quantitative methods to forecast bicycle and pedestrian travel is an emerging field of study. Quantitative methods require a high level of demographic data, user and household surveys, and statistical analysis (AASHTO, 2012). However, these methods still require many assumptions and have limited reliability due to (1) the many site-specific causal factors involved in the decision to use a trail, and (2) the wide range of spatial scales (existing models have primarily been developed at a city-wide scale in large urban settings).

Due to the lack of a good-fit quantitative model and the absence of adequate local survey data for calibration, the best approach for non-motorized travel demand analysis within the project area is to develop a qualitative estimate based on a comparison study with an existing facility.

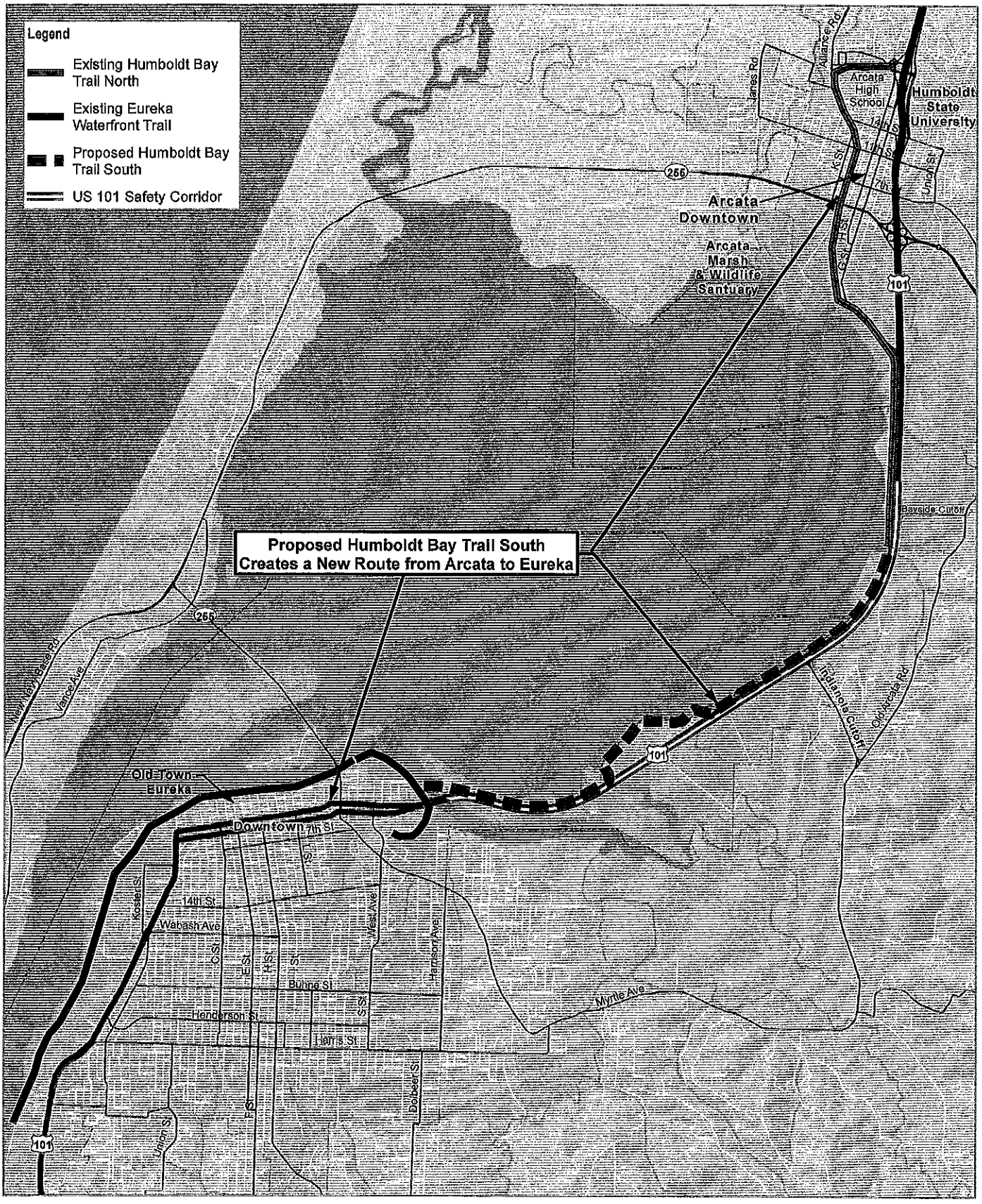
The Humboldt Bay Trail will be a major "showcase" regional trail for Humboldt County, comparable to the Sacramento River Trail in Redding, the American River Trail in Sacramento, and the Bear Creek Greenway in Medford/Ashland (Jackson County, Oregon). Based on demographics and setting, use of the Humboldt Bay Trail between Eureka and Arcata is expected to substantially exceed the Hammond Trail located in McKinleyville; however the Hammond Trail provides a local example of a Class I bike path, and existing trail use data can be used as a reference point to support an estimate for the Humboldt Bay Trail.

According to the 2010 census, McKinleyville has a population of 15,177. The Hammond Trail is used for both commuting and recreation but likely has a higher percentage of recreational use compared to the proposed Humboldt Bay Trail. In 2011, RCAA organized volunteers to conduct counts of trail usage on two summer days over a period of 12 hours each day (RCAA, 2011). Results from this survey (reflecting total two-way volumes) are summarized on Table 1.

Table 1 – Trail Use Counts (Two-way) for the Hammond Trail, August 2011 (RCAA, 2011)

Location	Paved Trail Width (feet)	Wednesday, August 17		Saturday, August 20	
		Daily total	Peak hourly	Daily total	Peak hourly
Clam Beach near Strawberry Creek	8.0 – 8.5	89	16	97	16
Murray Road	10.0 – 10.5	285	42	364	53
Hiller Park	8.0 – 8.5	335	36	387	47
Hammond Bridge at Mad River	8.0	163	23	256	38

Estimates for peak hourly usage of the proposed Humboldt Bay Trail between Eureka and Arcata are provided in Table 2. Count data for current non-motorized use on Highway 101 are not available (Kevin Tucker, Caltrans, personal communication), therefore estimates for existing conditions (without trail) are based on personal observations. Estimates for future with-trail conditions are provided for the first year after construction (assumed to be 2020) and also for a 20-year planning horizon. Future with-trail estimates were developed using professional judgment by considering the similarities and differences between the contexts for the Hammond Trail and the proposed Humboldt Bay Trail, with adjustments for the different physical settings and community contexts. In particular:



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Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Proposed Humboldt Bay Trail South Creates a New Route from Arcata to Eureka

Project No. 11110166
Revision No. C
Date 23 Jul 2018

FIGURE 5

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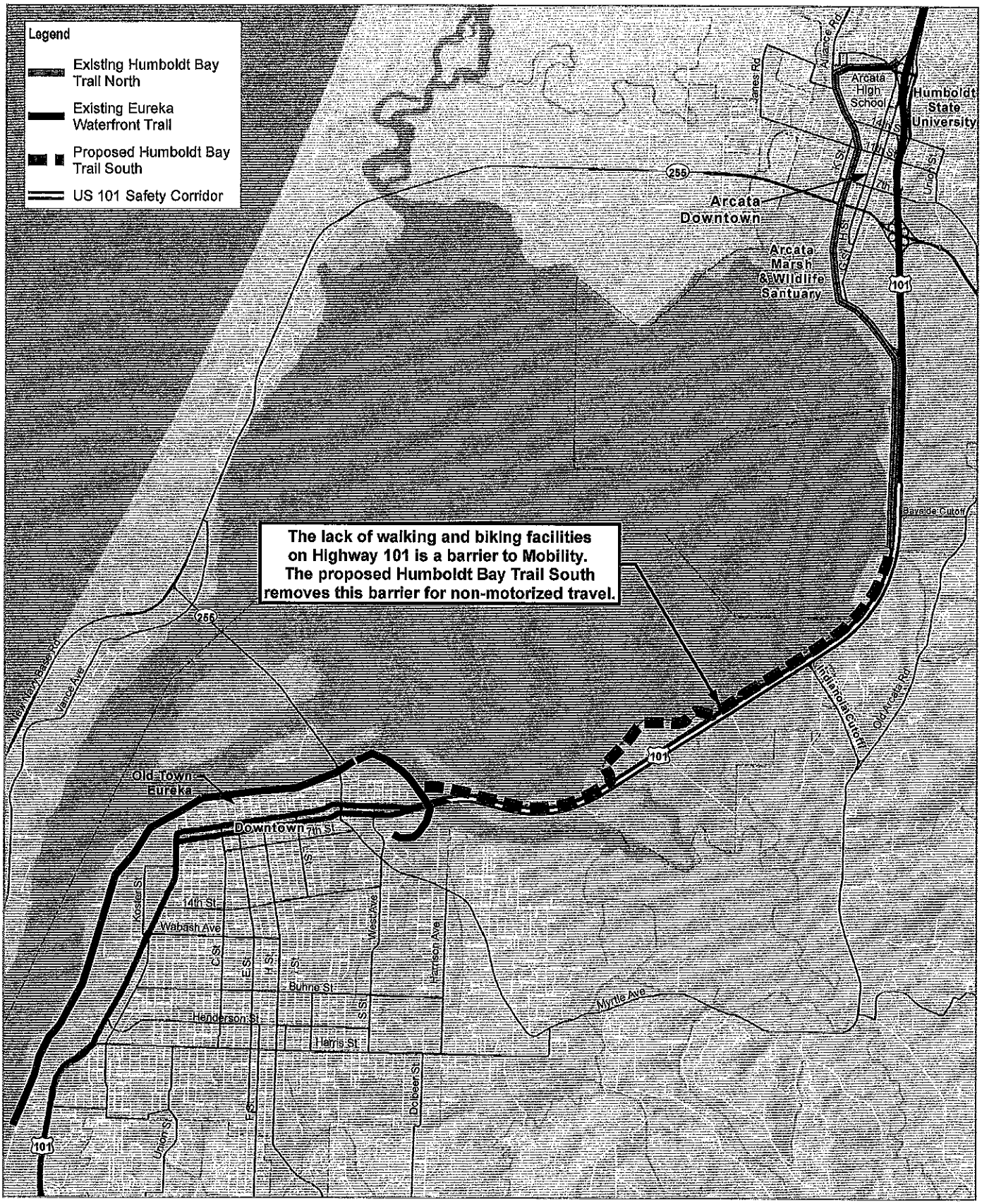

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Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Proposed Humboldt Bay Trail South Removes a Barrier to Mobility

Project No. 11110166
Revision No. C
Date 23 Jul 2018

FIGURE 6

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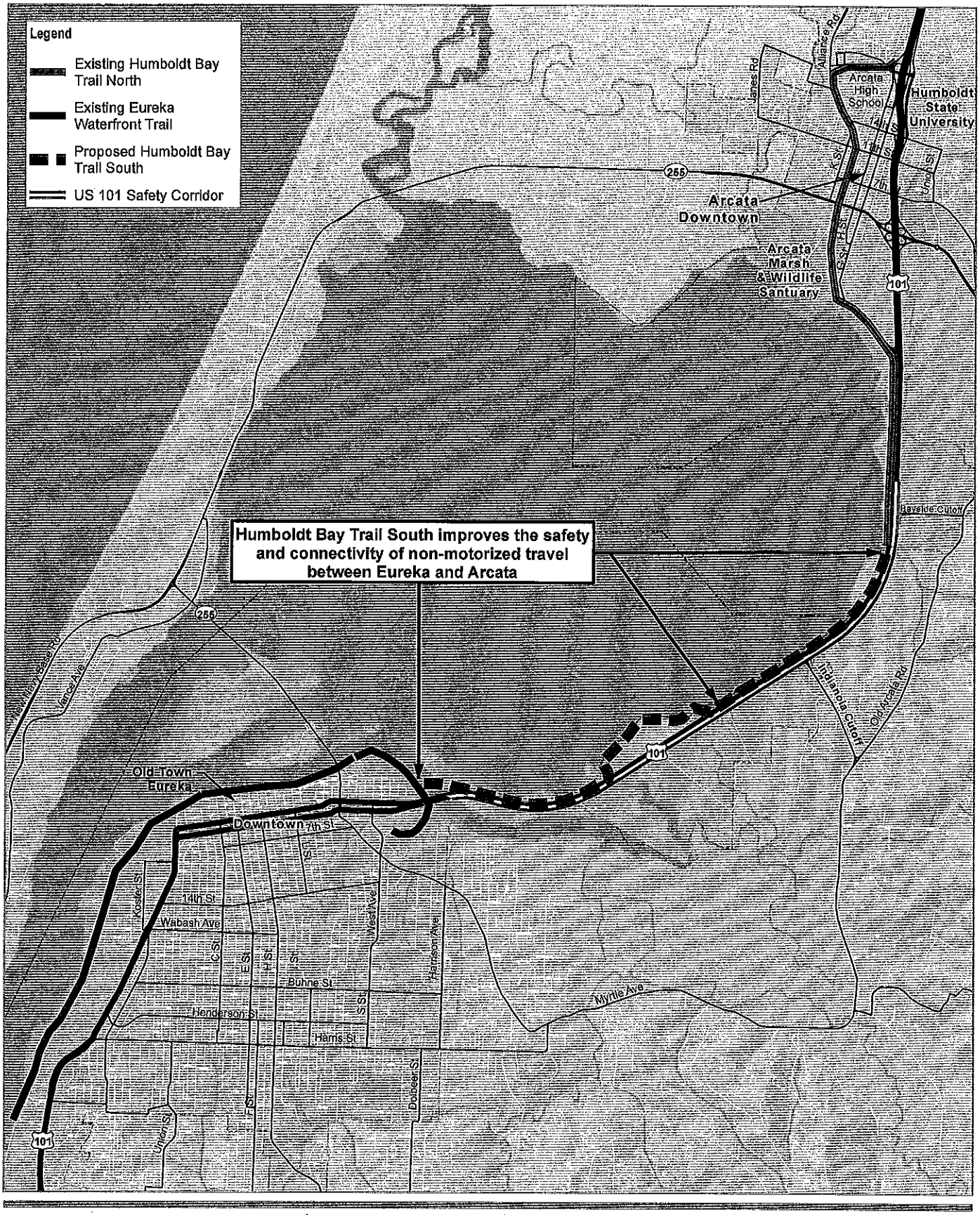

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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GHD

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
ATP Application

Proposed Humboldt Bay Trail South Improves Safety for Non-Motorized Travel

Project No. 11110166
Revision No. B
Date 23 Jul 2018

FIGURE 7

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Part B: Narrative Questions

Question #3

QUESTION #3
POTENTIAL FOR REDUCING THE NUMBER AND/OR RATE OF PEDESTRIAN AND BICYCLIST FATALITIES AND INJURIES, INCLUDING THE IDENTIFICATION OF SAFETY HAZARDS FOR PEDESTRIANS AND BICYCLISTS. (0-20 POINTS)

A. Describe the project location's history of pedestrian and bicycle collisions resulting in fatalities and injuries to non-motorized users, which this project will mitigate. (10 points max)

Applicants are encouraged to use the new UC Berkeley SafeTREC TIMS tool which was specifically designed for the ATP to produce these documents in an efficient manner. Applicants with access to alternative collision data tools and training can utilize their choice of methods/tools. Applicants must respond to question 1 or 2, and have the option to respond to both.

1. For applications using the TIMS ATP tool, attach the following:
   a. **Collision Heat-map of the area surrounding the project limits - demonstrating the relative collision history of the project limits in relation to the overall jurisdiction/community's collision history**
   b. **Project Area Collision Map - identifying the past crash locations within the project limits**
   c. **Collision Summaries and collision lists/reports - demonstrating collision trends, collision types, and collision details**
   d. **For a Combined INI project - If the NI project area is different than the Infrastructure portion, the applicant may attach NI related heat-maps, etc in Attachment J**

   Combine the various maps/summaries into one PDF file and attach it in the field below.

   ATP Question 3 collision data_maps compiled.pdf

2. Applications that do not have the collision data above OR that prefer to provide additional collision data and/or safety in a different format can provide this data below. (Examples include: Collision Rates, Community Observations, surveys, etc.)

   The data and corresponding methodologies can be included in written/text form and/or via a separate attachment in the field below.

   (Max of 200 Words) (optional) **Words Remaining:** 34

   In addition to the TIMS collision data described in Subpart A.4, county-wide data from the California Office of Traffic Safety (OTS) and other sources are relevant for understanding the history of pedestrian and bicycle collisions. Humboldt County ranked the highest among all California counties in pedestrian-involved collisions in 2015 (the most recent year with available OTS data), and the highest for collision victims between the ages of 21-34 years when alcohol is involved. In addition, according to the Humboldt County Automated Vital Statistics System (2009-2011), the average annual mortality rate for Humboldt County residents due to vehicle collisions is 15.7 per 100,000 people, over twice as high as the California rate of 7.5 per 100,000 people. According to the 2013 Humboldt County Community Health Assessment, injuries from motor vehicle crashes are a major public health concern in Humboldt County as they were the leading or second-highest cause of death every year between 2007 and 2011 for people under the age of 45. Supporting documentation is attached.

   Data and methodologies Attachment (optional)

   Additional data pdf for ATP Question 3 attachment.pdf

3. From the project-area collision summaries/data provided in questions 1 and/or 2, enter the total reported pedestrian and/or bicycle collisions using the most recent 5 to 11 years of available data:

   How many years of collision data were used in the Heat Maps and collision summaries: 11

# of Crashes	Pedestrian	Bicycle	Total	Average Per Year
Fatalities	4	0	4	0.36
Injuries	3	6	9	0.82
Total	7	6	13	1.18

4. Referencing project's heat-maps, collision map and collision summaries provided in above, discuss the extent to which the proposed project limits represents one of the agency's top priorities for addressing ongoing safety and discuss how the proposed safety improvements correspond to the types and locations of the past collisions. (e.g. sidewalks, bike lanes, lighting, bulb-outs, signals/ barriers, etc.)

For Projects with Non-Infrastructure elements (Combined I/NI projects):
As appropriate, describe how the NI program elements:
- educates bicyclists, pedestrians, and/or drivers about safety hazards for pedestrians and bicyclists; and
- encourages safe behavior, including through enforcement.

(Max of 700 Words) **Words Remaining:** 171

The Humboldt Bay area experiences the highest rates of non-motorized collisions within Humboldt County (see attached Collision Heat Map). Eureka and Arcata are the two most populous communities in the county and generate the most commerce. The micro-urban areas of Eureka and Arcata have more non-motorized collisions than the Highway 101 corridor; however, these downtown areas have an exponentially higher rate of walking and biking than Highway 101 under existing conditions. The project area had 13 reported fatal or injury collisions, including four fatalities, involving pedestrians or bicyclists from 2007 through 2017 – an average of 1.18 non-motorized collisions per year for a corridor that averages only 39 non-motorized trips per day.

Collisions on Highway 101 south of Arcata and north of the limits of the Humboldt Bay Trail South project were included in this analysis (and the Project Area Map and Collision Diagram) because northbound bicyclists and southbound pedestrians do not have access to Humboldt Bay Trail North. The southern extent of the Humboldt Bay Trail North segment ends north of Bracut Industrial Park along the west side of Highway 101, and is inaccessible to the northbound cyclists or southbound pedestrians (unless they cross four lanes of Highway 101 and illegally travel in the wrong direction to reach the Bay Trail North).

Highway 101 between Eureka and Arcata has the highest traffic volume of any section of roadway in the county and no non-motorized facilities, which creates safety hazards for pedestrians and bicyclists. The likelihood of a collision as a pedestrian or bicyclist along this stretch of Highway 101 is extremely high at 83/100,000 people (calculation = 1.18 average non-motorized collisions per year / [39 non-motorized users daily average]* [365 days]).

Non-motorized collisions have occurred regularly throughout the past eleven years, in all seasons, throughout the week, and throughout the length of Highway 101 between Eureka and Arcata. Collisions are generally clustered near on/off ramps at intersections (such as Indianola Cutoff, Bayside Cutoff, and Jacobs Avenue). The reported reasons for the collisions include pedestrian violations, improper turning (notably turning into the path of cyclists), wrong-way travel, unsafe driving speeds, and driving or bicycling under the influence.

Humboldt Bay Trail South is the County's top priority to address safety concerns for pedestrians and bicyclists around Humboldt Bay. The project was developed to create a facility for walking and biking separated from highway-speed vehicles so that potential conflict points with motor vehicles are drastically reduced. Northbound and southbound cyclists and pedestrians will have the benefit of a separated facility the entire length of Highway 101 between Eureka and Arcata. This direct connectivity between the two cities will encourage safe pedestrian and bicyclist behavior by discouraging wrong-way travel, which is more likely to lead to collisions. In addition, having the trail on the west side of Highway 101 eliminates the need for pedestrians and bicyclists to cross dangerous intersections, where collisions are clustered. Navigating on- and off- ramps on foot or bike with vehicles at highway speeds is extremely dangerous as vehicles are speeding up and paying more attention to merging into the flow of traffic than looking for slower-traveling vehicles/people trying to cross the ramp in a gap in vehicle traffic.

B. Safety Countermeasures (10 points max)

Describe how the project improvements will remedy (one or more) potential safety hazards that contribute to pedestrian and/or bicyclist injuries or fatalities. Referencing the information you provided in Part A, demonstrate how the proposed countermeasures directly address the underlying factors that are contributing to the occurrence of pedestrian and/or bicyclist collisions.

1. **Reduces speed or volume of motor vehicles in the proximity of non-motorized users?** ☒ Yes ☐ No

   a. Current speed and/or volume: (Max of 100 Words) **Words Remaining:** 1

   The current posted speed limit on Highway 101 is 50 mph on the Safety Corridor between Eureka and north of Bayside Cutoff, where the posted speed limit increases to 65 mph two miles south of Arcata. Highway 101 between Eureka and Arcata has the highest volume of traffic of any section of roadway in Humboldt County (37,000 vehicles per day in 2014). Non-motorized users must travel in the roadway shoulder adjacent to vehicular traffic on this busy highway and cross five intersections/driveways in the northbound direction, or two driveways in the southbound direction, without any bicycle facilities or signage.

b. Anticipated speed and/or volume after project completion : (Max of 100 Words) **Words Remaining:** 0

Once the Humboldt Bay Trail is completed, non-motorized users will be able to commute between Eureka and Arcata on a facility completely separated from motor vehicles. The NHTSA identifies separation of non-motorized and motorized users as one of the highest safety benefits to cyclists and pedestrians. The creation of a separated non-motorized route between the two largest population centers in Humboldt County will encourage higher rates of bike commuting and is expected to reduce motor vehicle volume on Highway 101. 22% of recent survey respondents indicated they would utilize the trail for commuting, indicating high latent demand for active commuting.

2. Improves sight distance and visibility between motorized and non-motorized users? ☒ Yes ☐ No

a. Current sight distance and/or visibility issue: (Max of 100 Words) **Words Remaining:** 13

Highway 101 between Eureka and Arcata parallels the Humboldt Bay shoreline, and heavy fog frequently reduces visibility on the highway, particularly in the morning. As a designated Safety Corridor, vehicle headlights are currently required to be on 24 hours a day to enhance visibility. Non-motorized users traveling along the highway shoulder are particularly vulnerable when driver visibility is impaired. The on/off ramps to Highway 101 can have poor visibility for drivers to notice cyclists and pedestrians as the ramp curves and the roadway shoulder often becomes narrower.

b. Anticipated sight distance and/or visibility issue resolution: (Max of 100 Words) **Words Remaining:** 45

This project creates a permanent solution to the visibility deficiencies on the Highway 101 Safety Corridor by providing a separated non-motorized facility parallel to Highway 101. Separation of non-motorized users will eliminate the concern of driver visibility impairment which can cause motor vehicles to veer into the roadway shoulder where non-motorized users must currently travel.

3. Eliminates potential conflict points between motorized and non-motorized users, including creating physical separation between motorized and non-motorized users? ☒ Yes ☐ No

a. Current conflict point description: (Max of 100 Words) **Words Remaining:** 0

Non-motorized users are currently exposed to conflicts with motor vehicles throughout the entire length of Highway 101 between Eureka and Arcata due to the absence of non-motorized infrastructure (with the exception of the northbound Eureka Slough bridge). The critical conflict points are at on/off ramp intersections where collisions involving non-motorized users are concentrated. Navigating on ramps on foot or bike with vehicles at highway speeds is extremely dangerous as vehicles are speeding up and paying more attention to merging into the flow of traffic than looking for slower-traveling vehicles/people trying to cross the ramp in a gap in vehicle traffic.

b. Improvement that addresses conflict point: (Max of 100 Words) **Words Remaining:** 16

Once the Humboldt Bay Trail South is completed, non-motorized users will be able to commute between Eureka and Arcata on a facility completely separated from motor vehicle traffic. The National Highway Traffic Safety Administration (NHTSA) identifies separation of non-motorized and motorized users as one of the highest safety benefits to cyclists and pedestrians. The location of the trail on the west side of Highway 101 eliminates the need for pedestrians and bicyclists to cross the dangerous intersections along Highway 101, where collisions are clustered.

4. Improves compliance with local traffic laws for both motorized and non-motorized users? ☒ Yes ☐ No

a. Which Law: Wrong Way Travel of non-motorized user

b. How will the project improve compliance: (Max of 100 Words) **Words Remaining:** 0

Currently some northbound cyclists travel against traffic (not following California Vehicle Code 21650.1) in the southbound shoulder of Highway 101 in order to avoid the safety hazards of crossing the on/off ramps at the intersections on the northbound side of the highway. In addition, some cyclists cross four lanes of highway at the Bracut Industrial Park crossing to travel against traffic in the southbound highway shoulder to reach the existing Humboldt Bay Trail North segment. This project will close the gap in multi-use trails so non-motorized users are safely separated from highway speeds and turning vehicles at highway on/off ramps.

5. Addresses inadequate vehicular traffic control devices? ☒ Yes ☐ No

a. List traffic controls that are inadequate: (Max of 100 Words) **Words Remaining:** 35

• Caltrans places temporary warning signs and channelizing devices on the highway shoulder to notify drivers and guide them through a work zone or controlled traffic situation.

• Highway 101 lacks a positive barrier between the vehicle travel lanes and the shoulder for Humboldt Bay Trail South segment, and between the vehicle travel lanes and the bike path for the Humboldt Bay Trail North segment.

b. How are they inadequate? (Max of 100 Words) **Words Remaining:** 1

Warning signs and channelizing devices for work zones are often placed within the highway shoulder, the only available place for non-motorized users to travel along Highway 101. When maintenance work occurs, warning signs often force non-motorized users to cross the rumble strip into the vehicle travel lane to get passed the work zone or parked cars (e.g. broken down cars or CHP conducting enforcement). The absence of a positive barrier between the existing Humboldt Bay Trail North and highway vehicle lanes creates elevated safety hazards that a roadway departure will result in severe injury to a cyclist or pedestrian.

c. How does the project address the inadequacies? (Max of 100 Words) **Words Remaining:** 0

This project completes the last gap in the 14-mile, continuous multi-use trail between Arcata and south Eureka so that people walking and

biking can have a separate corridor of travel and avoid traveling on Highway 101, with its inadequate non-motorized infrastructure and vehicular traffic control devices. Construction zones, disabled cars, and enforcement operations will no longer force people walking and biking to share the vehicle travel lane with vehicles traveling at highway speeds.
This project includes the extension of a cable barrier along segments of both Humboldt Bay Trail North and South to provide a physical barrier from highway vehicles.

6. Addresses inadequate or unsafe bicycle facilities, trails, crosswalks and/or sidewalks? ☒ Yes ☐ No

a. List bicycle facilities, trails, crosswalks and/or sidewalks that are inadequate: (Max of 100 Words) **Words Remaining: 0**

Currently, the only non-motorized facility on the entire Highway 101 between Eureka and Arcata is an inadequate, five-foot wide, 950-foot long stretch of elevated sidewalk on the northbound 101 bridge over Eureka Slough. The sidewalk on the bridge connects to the roadway shoulder rather than pedestrian infrastructure. Additionally, the roadway shoulder of the 101 Safety Corridor between Eureka and Arcata is colorized a red-brick color to visually delineate the shoulder from the vehicle travel lanes; however, the colorized pavement does not continue through on/off ramps intersections, which are the places with the most potential conflicts between motorized and non-motorized users.

b. How are they inadequate? (Max of 100 Words) **Words Remaining: 2**

There are no non-motorized facilities along Highway 101 with the exception of the short stretch of sidewalk on the northbound Eureka Slough bridge. The sidewalk on this bridge is too narrow for non-motorized users to pass safely and there is not a corresponding sidewalk on the southbound highway bridge over Eureka Slough. The colorized pavement shoulders, though not a non-motorized facility, does provide a visual cue to drivers to stay within the vehicle travel lanes; however, this visual delineation does not continue through the on/off ramps and intersections with 101 where the majority of non-motorized collisions are clustered.

c. How does the project address the inadequacies? (Max of 100 Words) **Words Remaining: 19**

The Humboldt Bay Trail South project completes the 4.2-mile gap in the 14-mile, continuous multi-use trail between Arcata and Eureka so that people walking and biking can avoid traveling on Highway 101 with its high speeds and traffic volume. Non-motorized users will be able to access the project from the highly-utilized trails in both Eureka and Arcata, cross the Eureka Slough on a separate bridge from the highway, and completely avoid the hazardous intersections along Highway 101 with high collision rates.

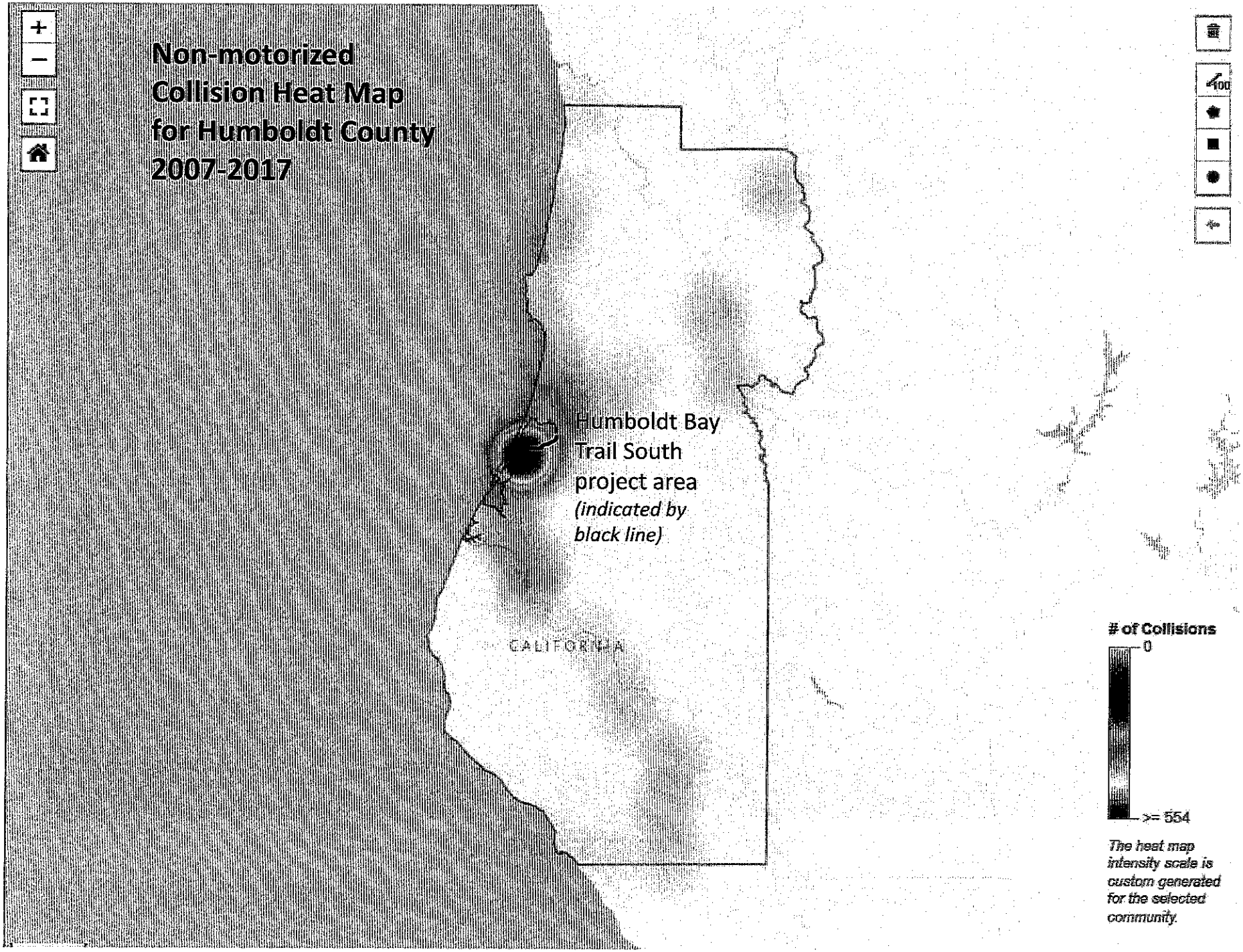
7. Eliminates or reduces behaviors that lead to collisions involving non-motorized users? ☒ Yes ☐ No

a. List of behaviors: (Max of 100 Words) **Words Remaining: 89**

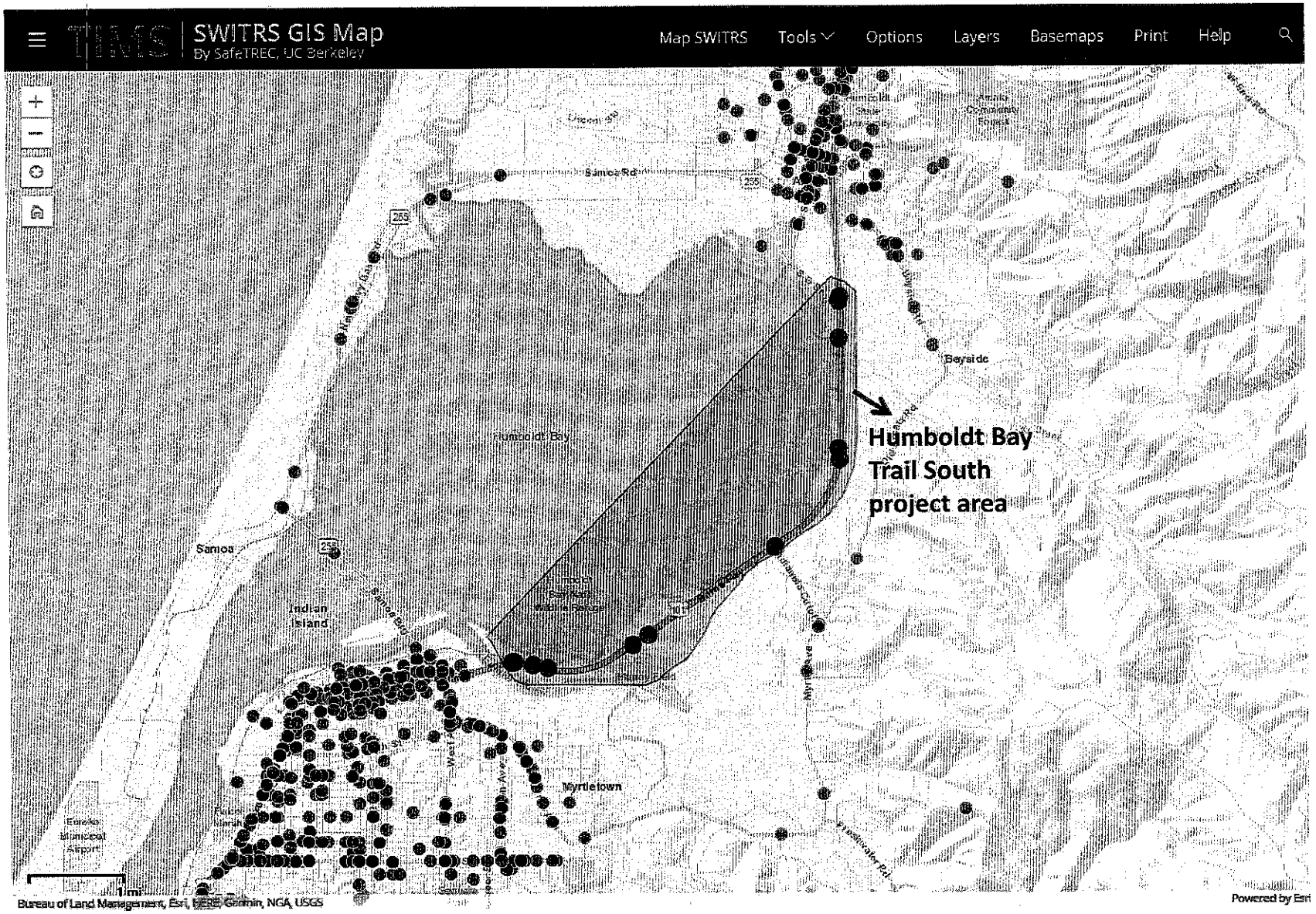
Distracted driving
Driving under the influence
Speeding
Wrong way bike riding

b. How will the project eliminate or reduce these behaviors? (Max of 100 Words) **Words Remaining: 5**

By providing a separated facility for walking and biking parallel to Highway 101, Humboldt Bay Trail South will protect non-motorized users from dangerous driver behaviors such as distracted driving, speeding, and driving under the influence, which have been causes of non-motorized collisions within this project area. Additionally, by filling the gap in the Humboldt Bay Trail this project will complete a network of multi-use trails accessible from key trip generators such as neighborhoods, employment centers, and schools which will greatly reduce the likelihood of bicyclists riding against traffic to access the Humboldt Bay Trail North.


Non-motorized
Collision Heat Map
for Humboldt County
2007-2017
Humboldt Bay
Trail South
project area
(indicated by
black line)
CALIFORNIA
# of Collisions
0
>= 554
The heat map
intensity scale is
custom generated
for the selected
community.

Humboldt Bay Trail South Project Area Non-Motorized Collisions 2007-2017

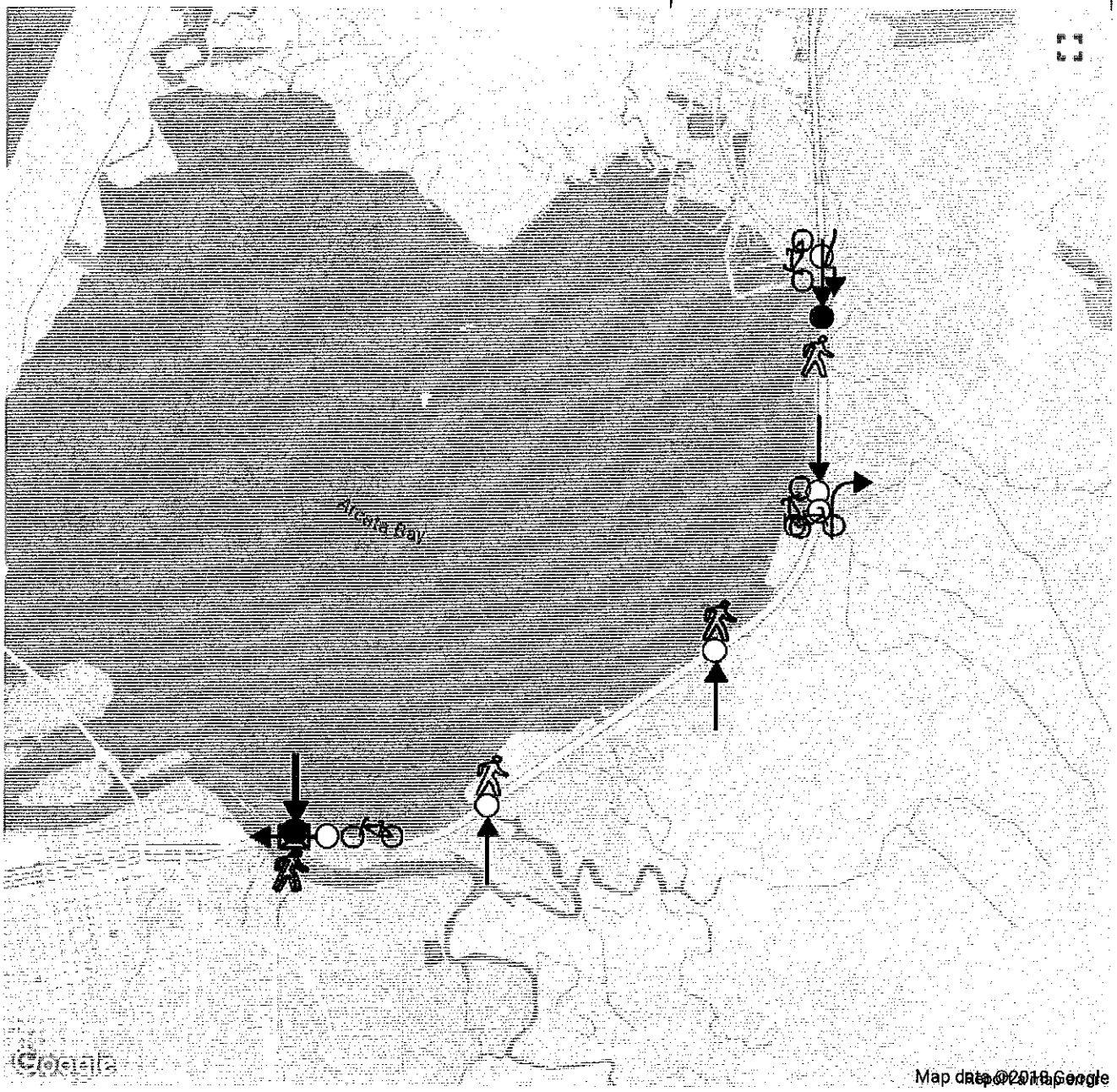


COLLISION DIAGRAM

Primary Street:
Highway 101
Secondary Street:
Between Eureka and Arcata
Time Period:
2007-2017
Agency Name:
County of Humboldt

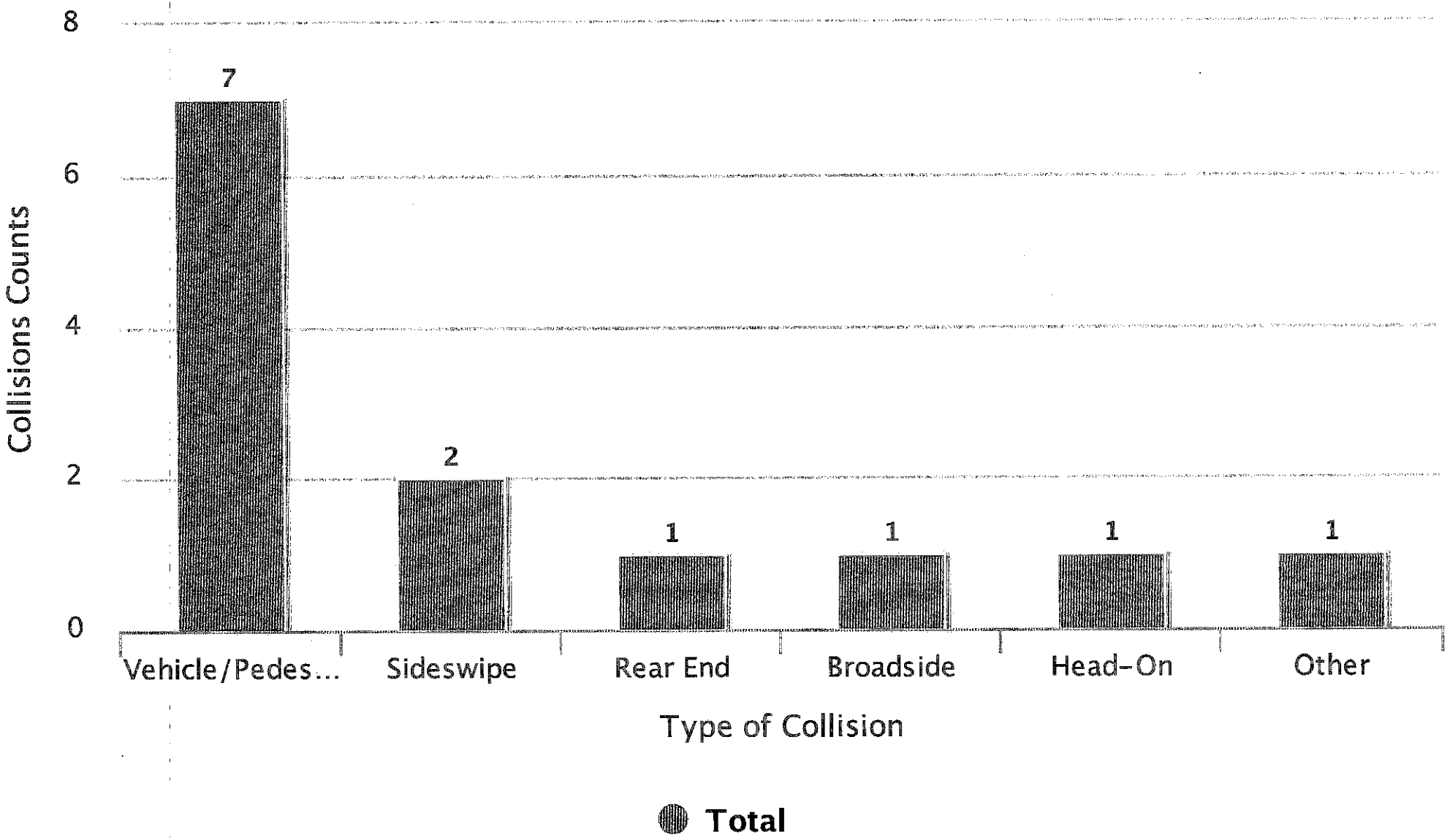
Mapping Summary:	
Fatal Collision	3
Injury Collision	7
Mapped	10
Not Drawn	3
Total	13

- Straight
- Left Turn
- Right Turn
- U-Turn
- Overturned
- Ran Off Road
- Stopped
- Parked
- Pedestrian
- Bicycle
- Object
- Fatal Crash
- Injury Crash

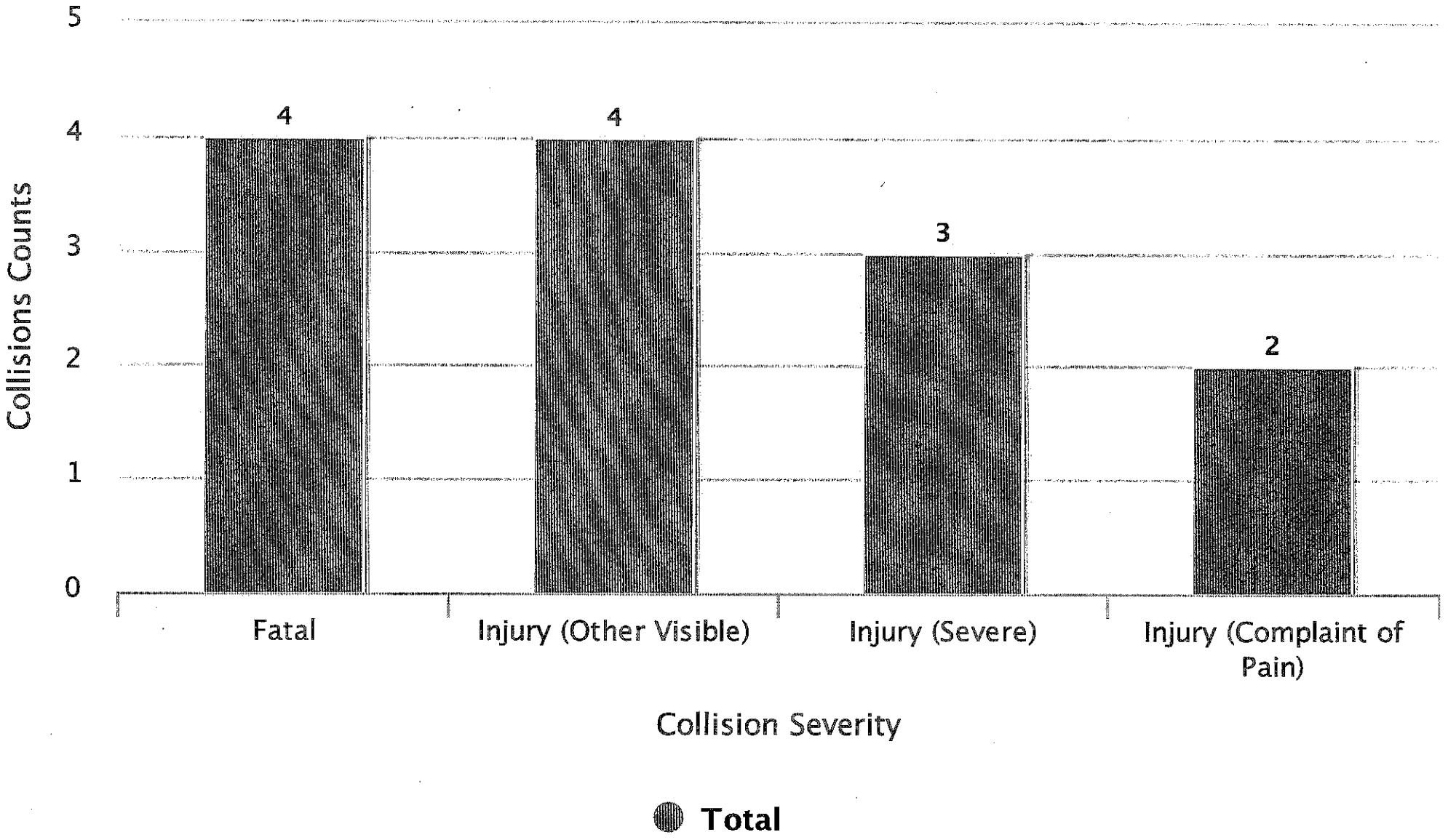


Date Created: 06/11/2018
Created by TIMS (https://tims.berkeley.edu) © UC Regents, 2014-2018

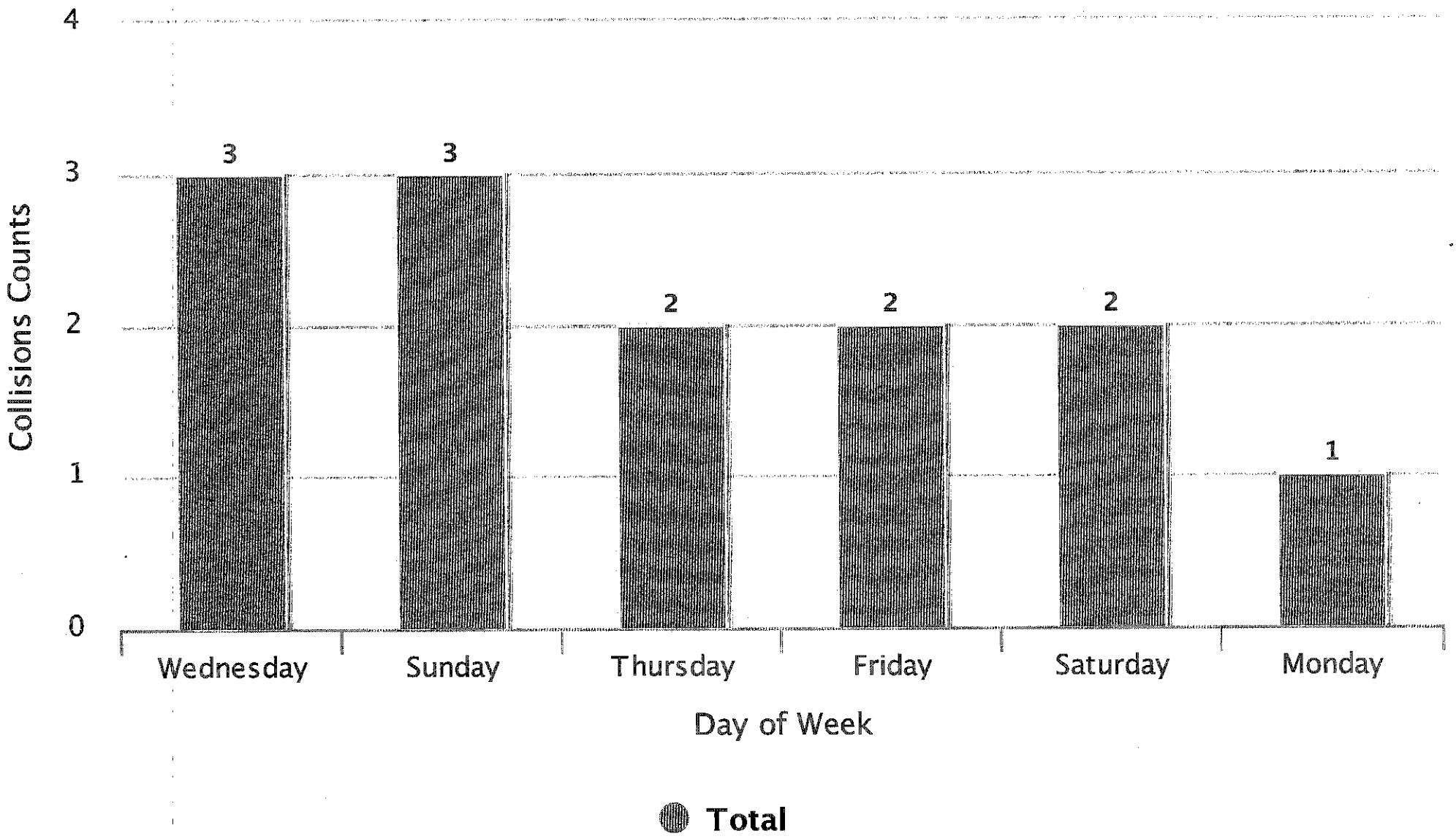
Humboldt - All: 01/01/2007 - 12/31/2017

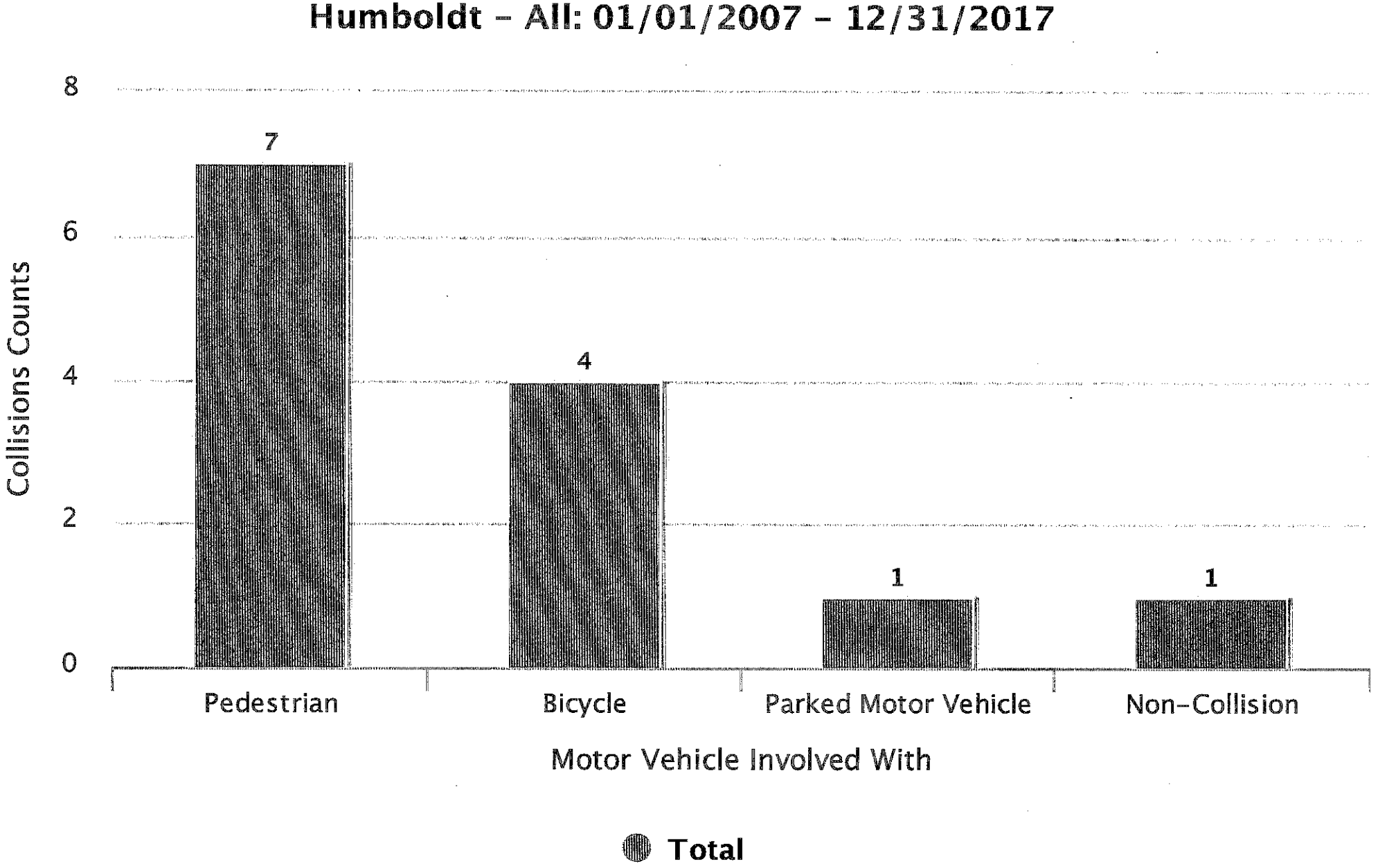


Humboldt - All: 01/01/2007 - 12/31/2017

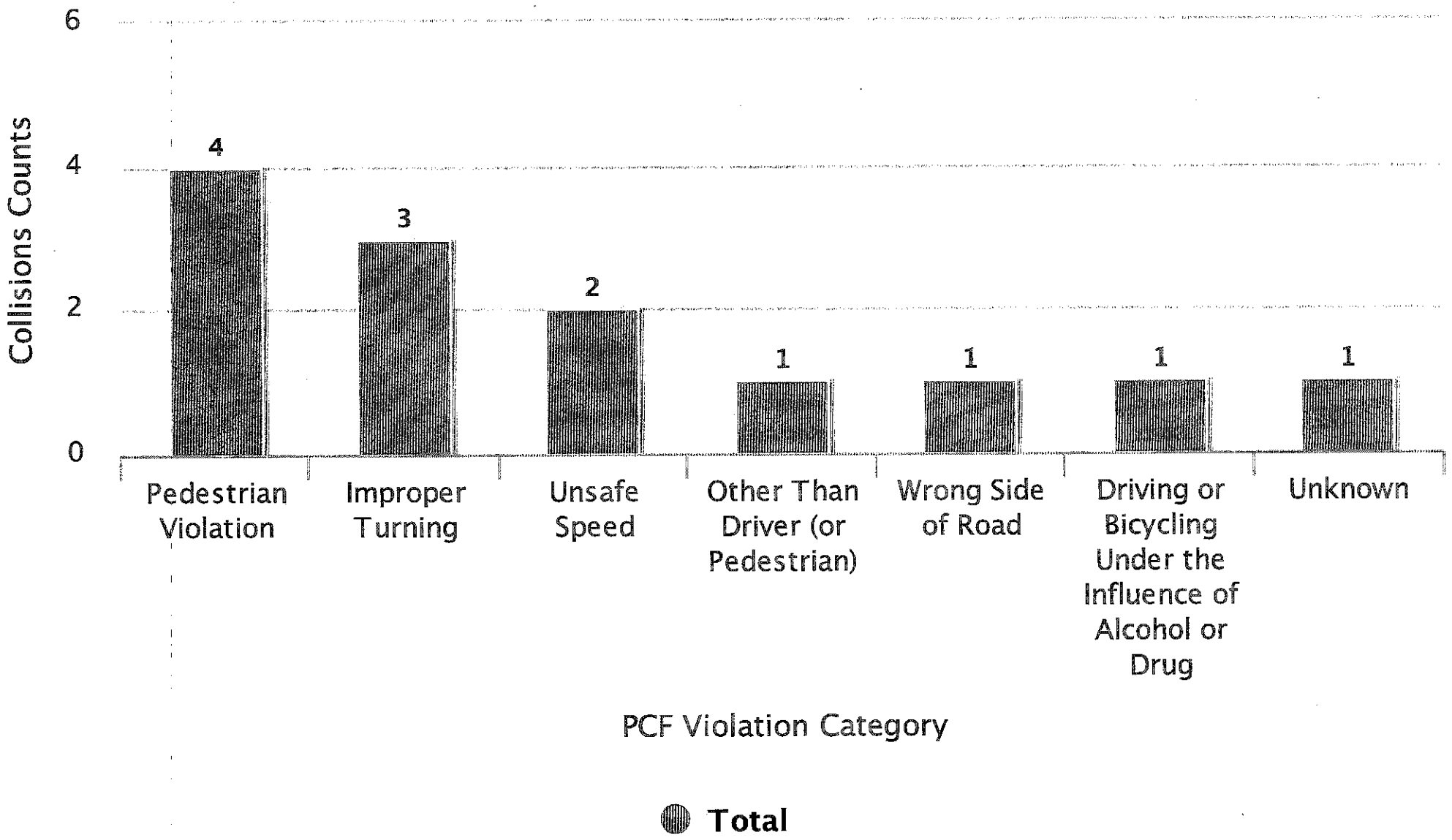


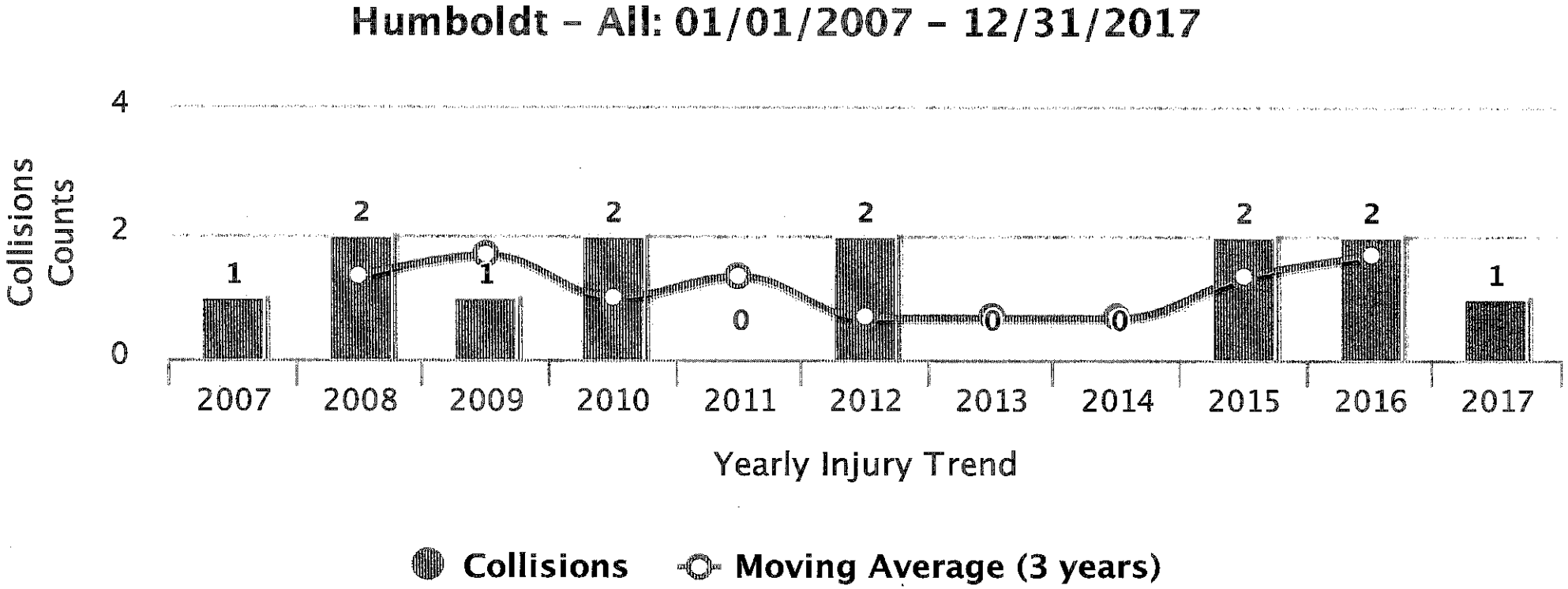
Humboldt - All: 01/01/2007 - 12/31/2017

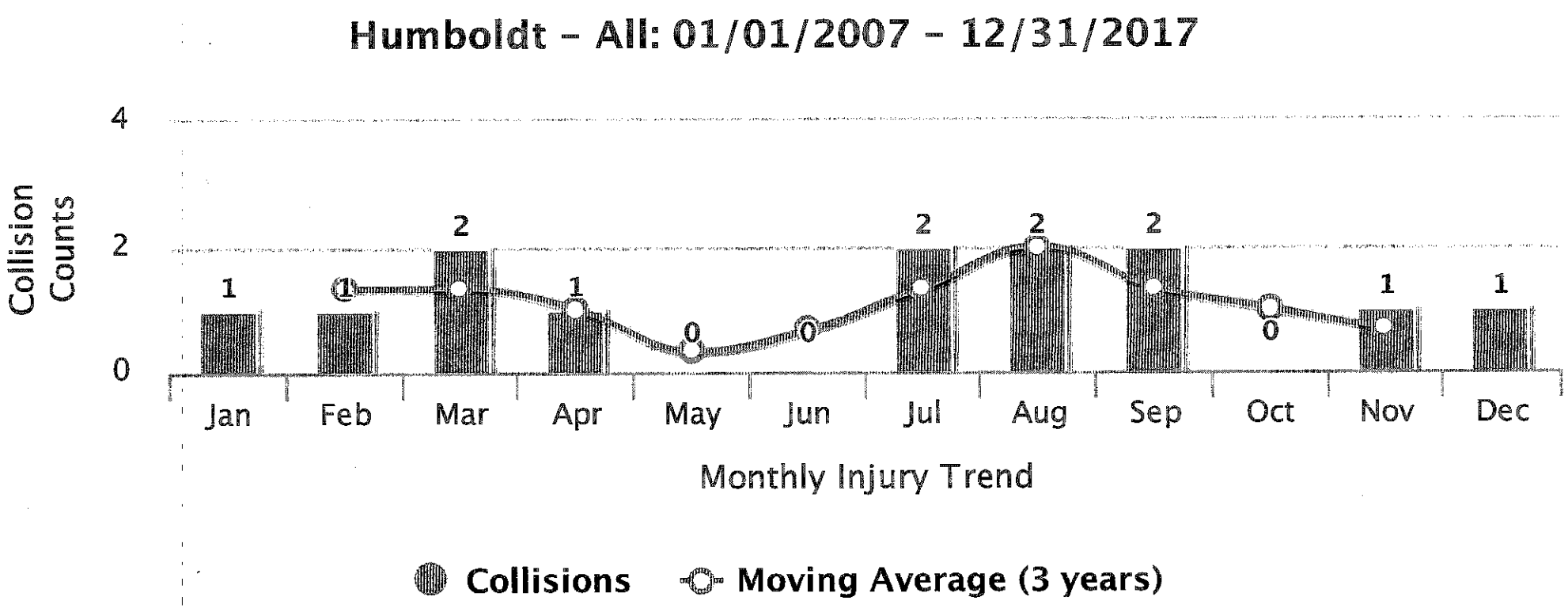



Humboldt - All: 01/01/2007 - 12/31/2017
Collisions Counts
8
6
4
2
0
7
4
1
1
Pedestrian
Bicycle
Parked Motor Vehicle
Non-Collision
Motor Vehicle Involved With
Total

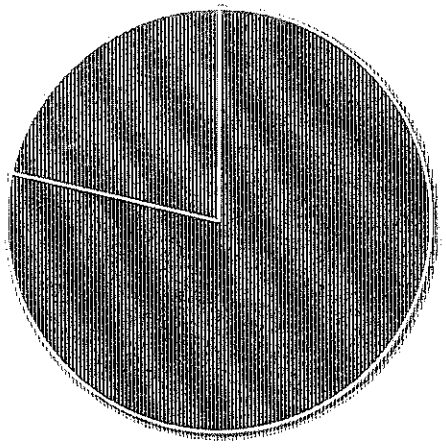
Humboldt - All: 01/01/2007 - 12/31/2017



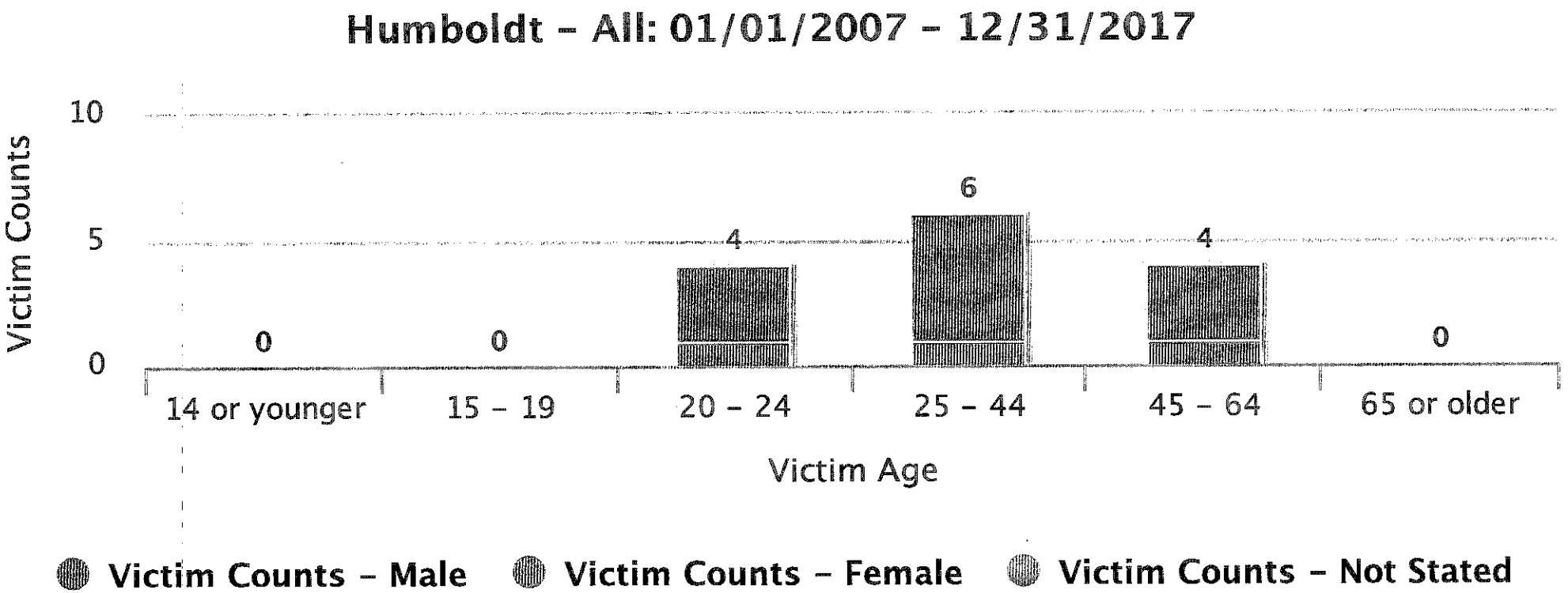

Humboldt - All: 01/01/2007 - 12/31/2017
Collisions Counts
4
2
0
1
2
1
2
0
2
0
2
0
2
1
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
Yearly Injury Trend
Collisions
Moving Average (3 years)

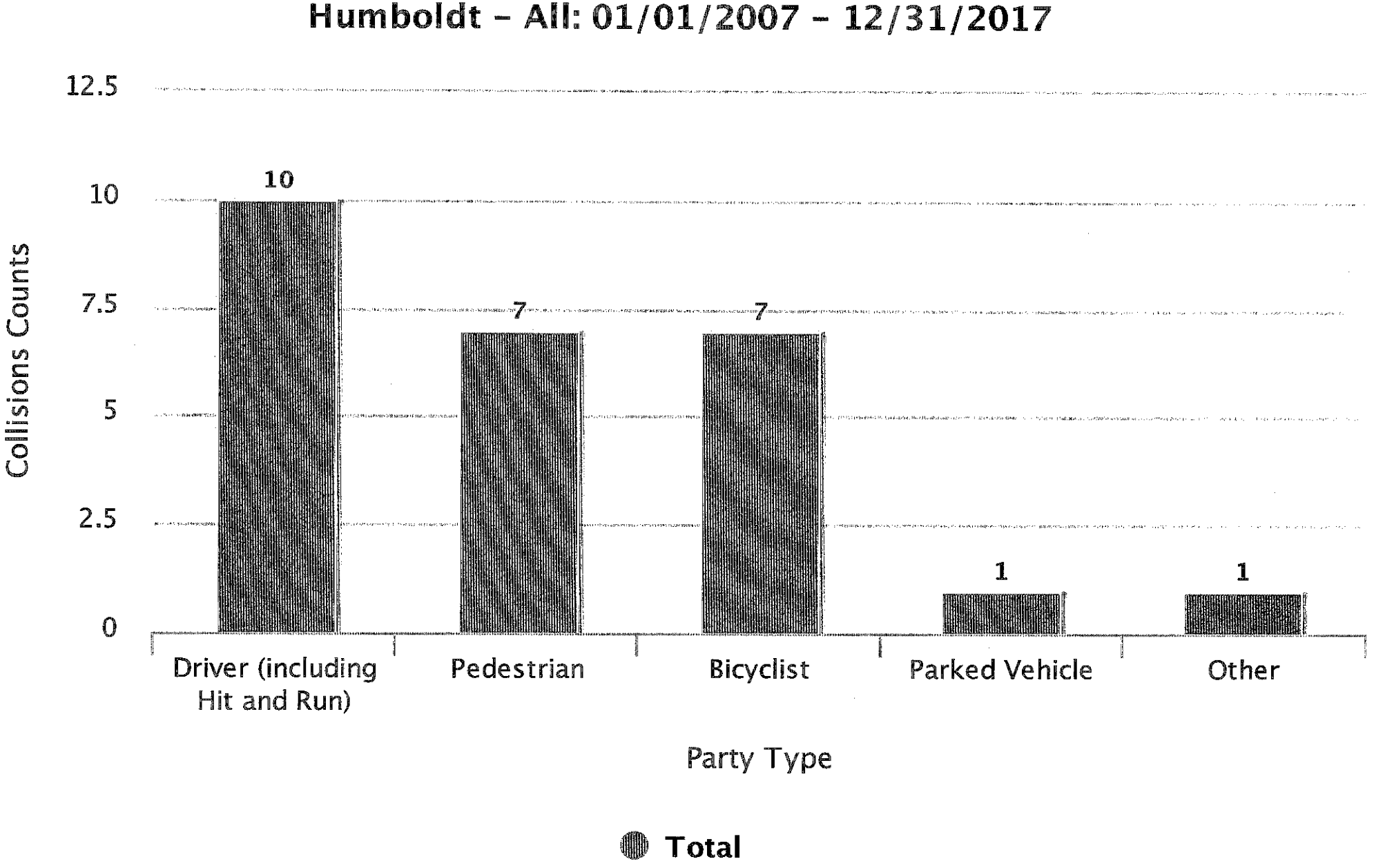

Humboldt - All: 01/01/2007 - 12/31/2017
Collision Counts
4
2
0
1
1
2
1
0
0
2
2
2
0
1
1
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Monthly Injury Trend
Collisions
Moving Average (3 years)

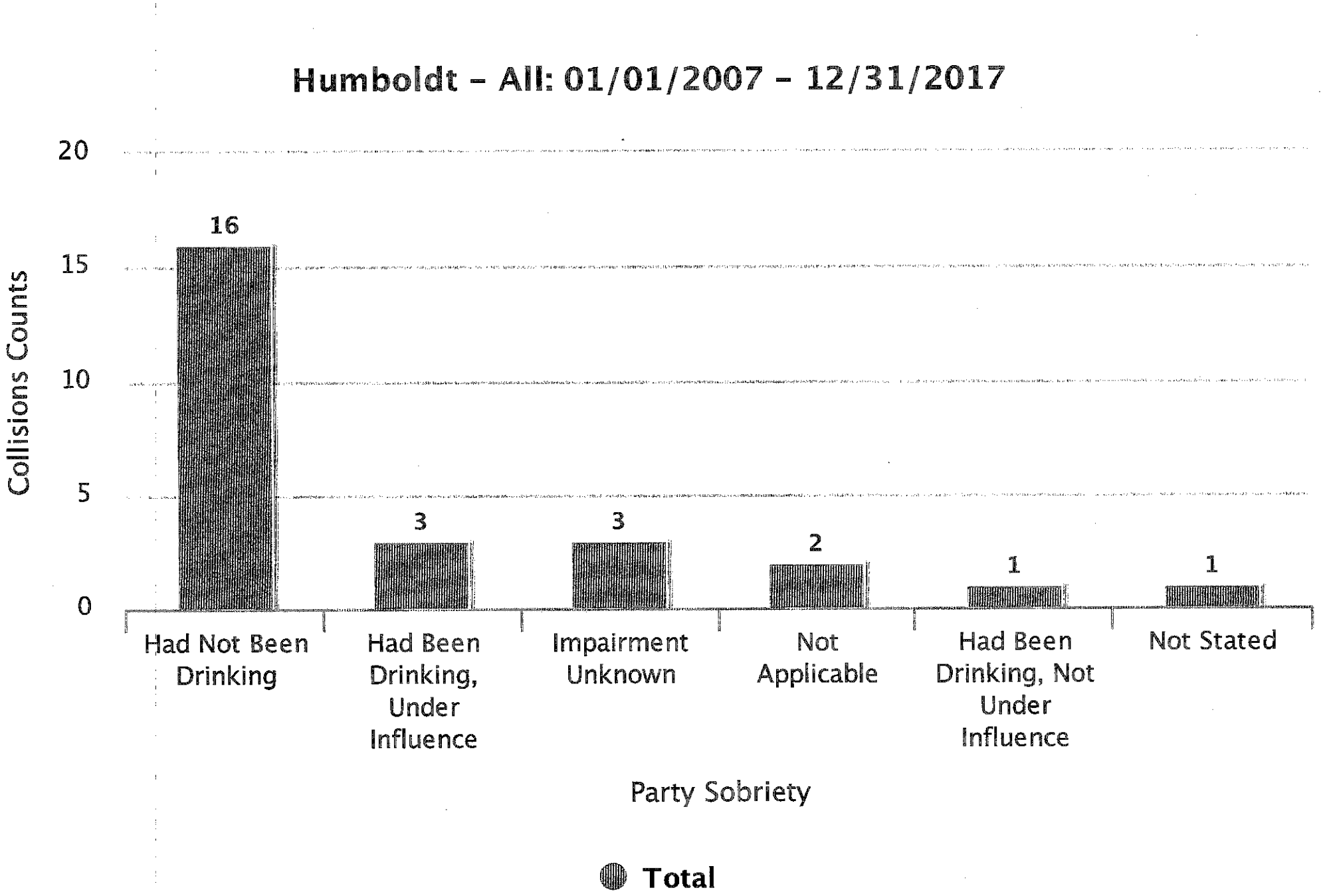
Humboldt - All: 01/01/2007 - 12/31/2017

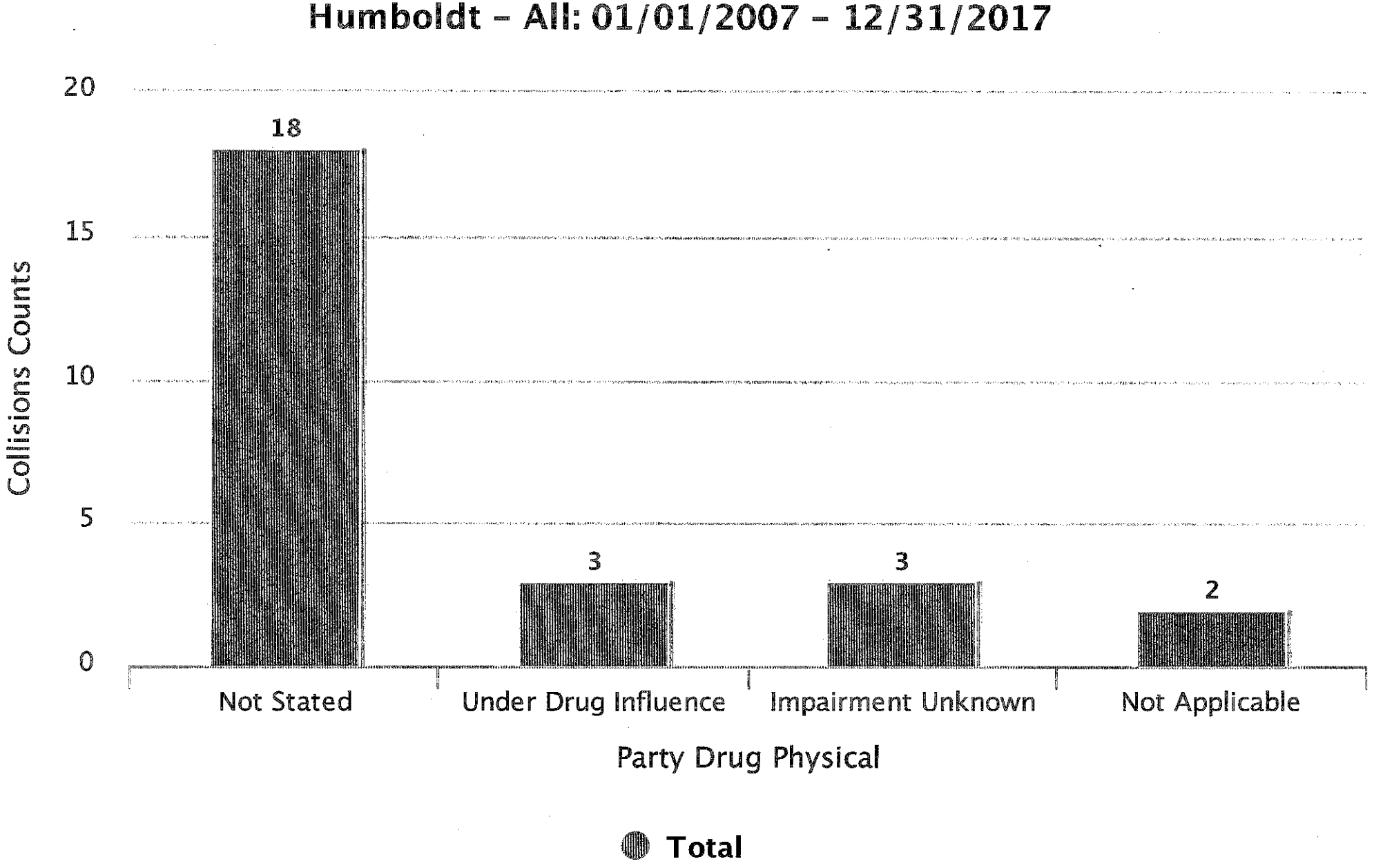


Male: 11 (78.57%) Female: 3 (21.43%)

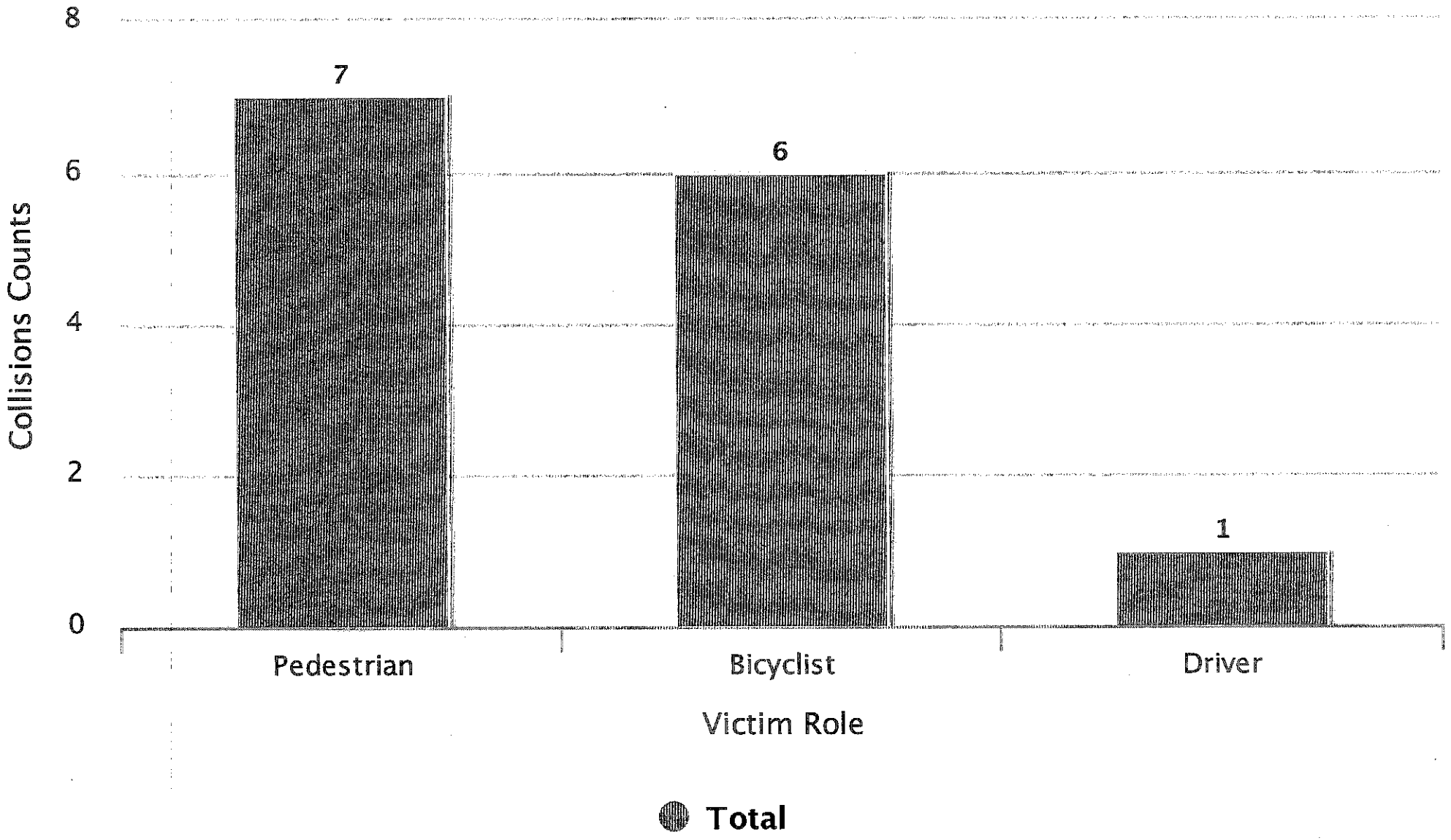

Humboldt - All: 01/01/2007 - 12/31/2017
Victim Counts
10
5
0
0
0
4
6
4
0
14 or younger
15 - 19
20 - 24
25 - 44
45 - 64
65 or older
Victim Age
Victim Counts - Male
Victim Counts - Female
Victim Counts - Not Stated


Humboldt - All: 01/01/2007 - 12/31/2017
12.5
10
7.5
5
2.5
0
Collisions Counts
10
7
7
1
1
Driver (including Hit and Run)
Pedestrian
Bicyclist
Parked Vehicle
Other
Party Type
Total

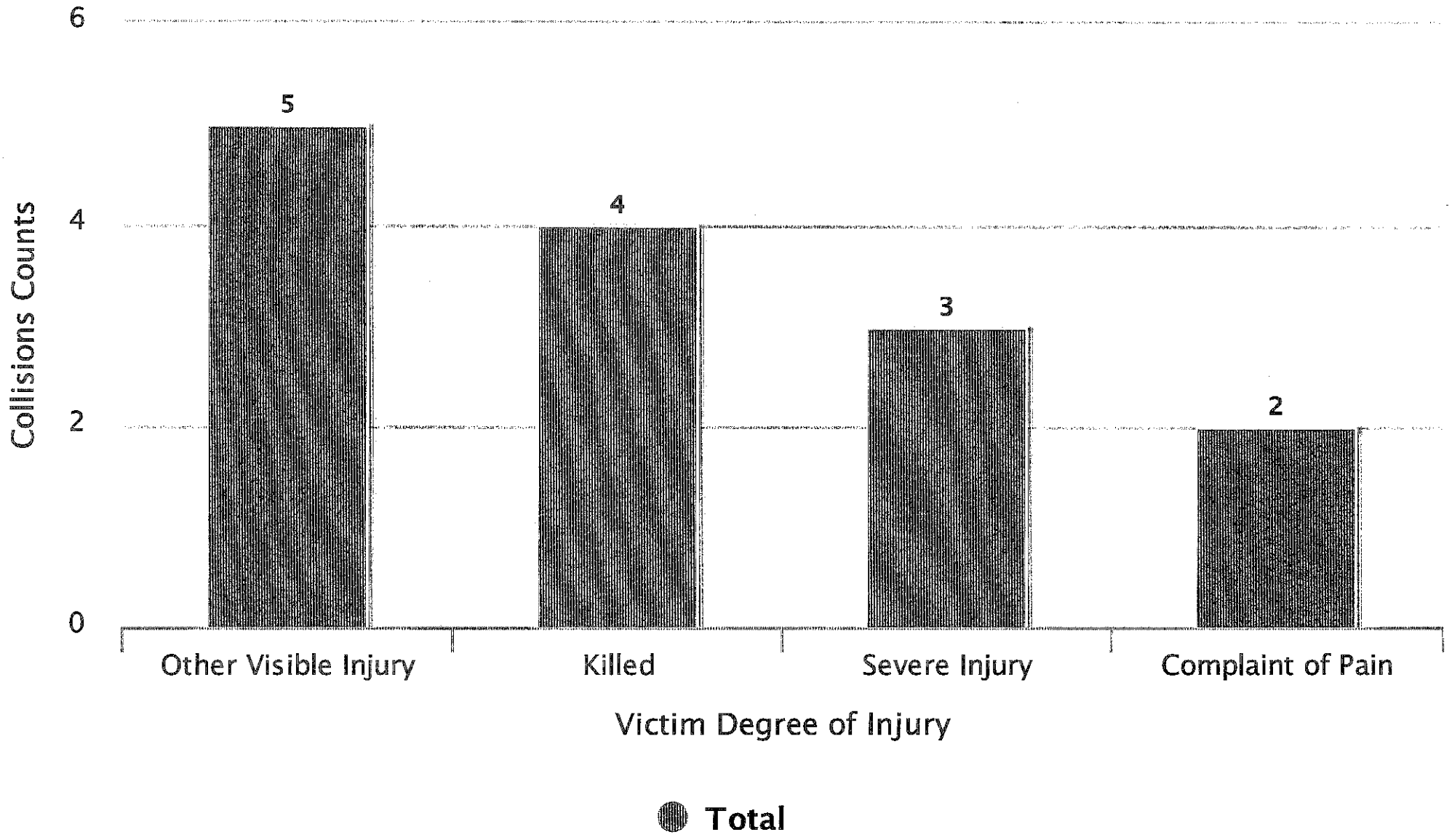

Humboldt - All: 01/01/2007 - 12/31/2017
Collisions Counts
20
15
10
5
0
16
3
3
2
1
1
Had Not Been Drinking
Had Been Drinking, Under Influence
Impairment Unknown
Not Applicable
Had Been Drinking, Not Under Influence
Not Stated
Party Sobriety
Total

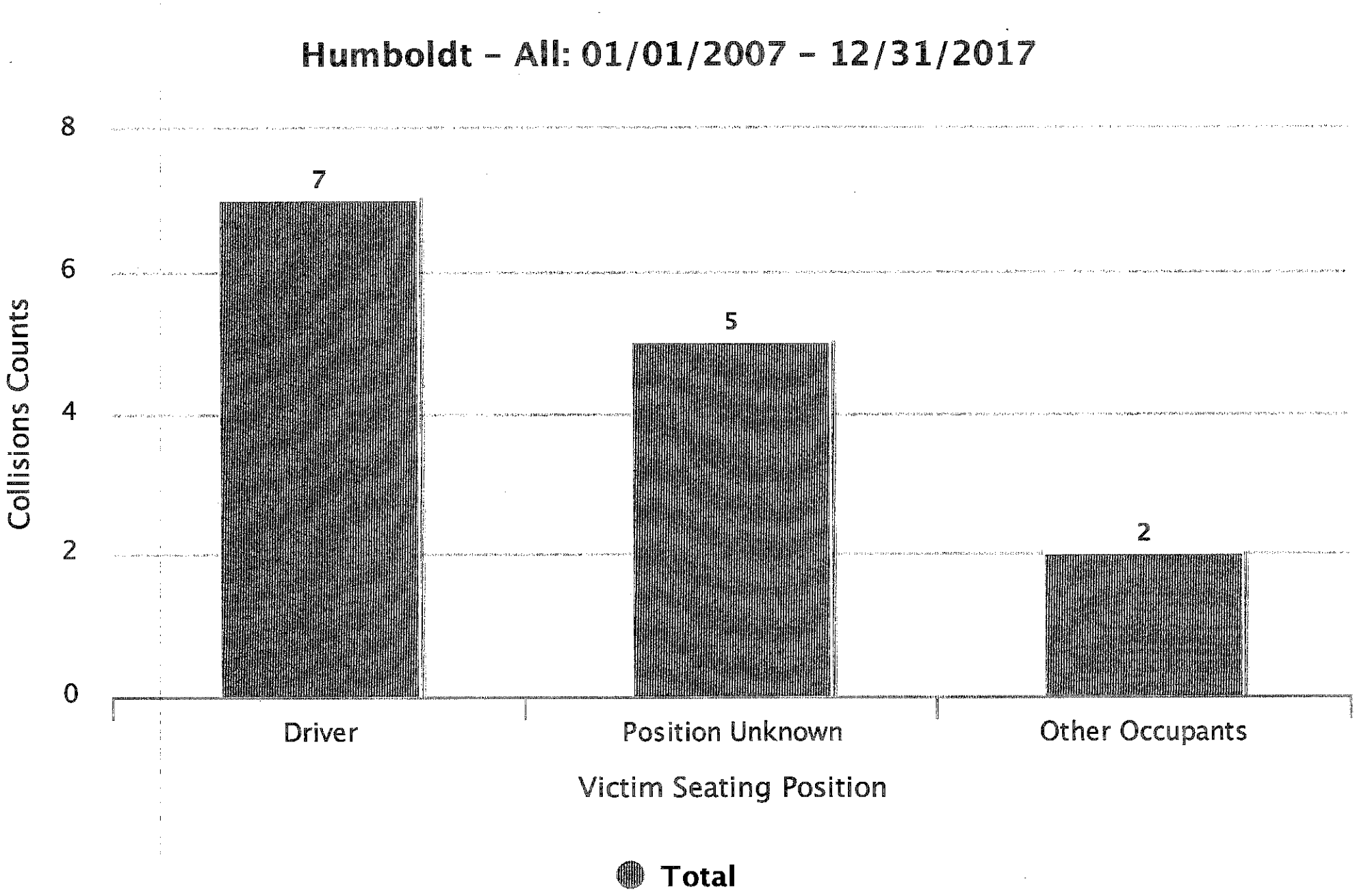

Humboldt - All: 01/01/2007 - 12/31/2017
20
15
10
5
0
Collisions Counts
18
3
3
2
Not Stated
Under Drug Influence
Impairment Unknown
Not Applicable
Party Drug Physical
Total

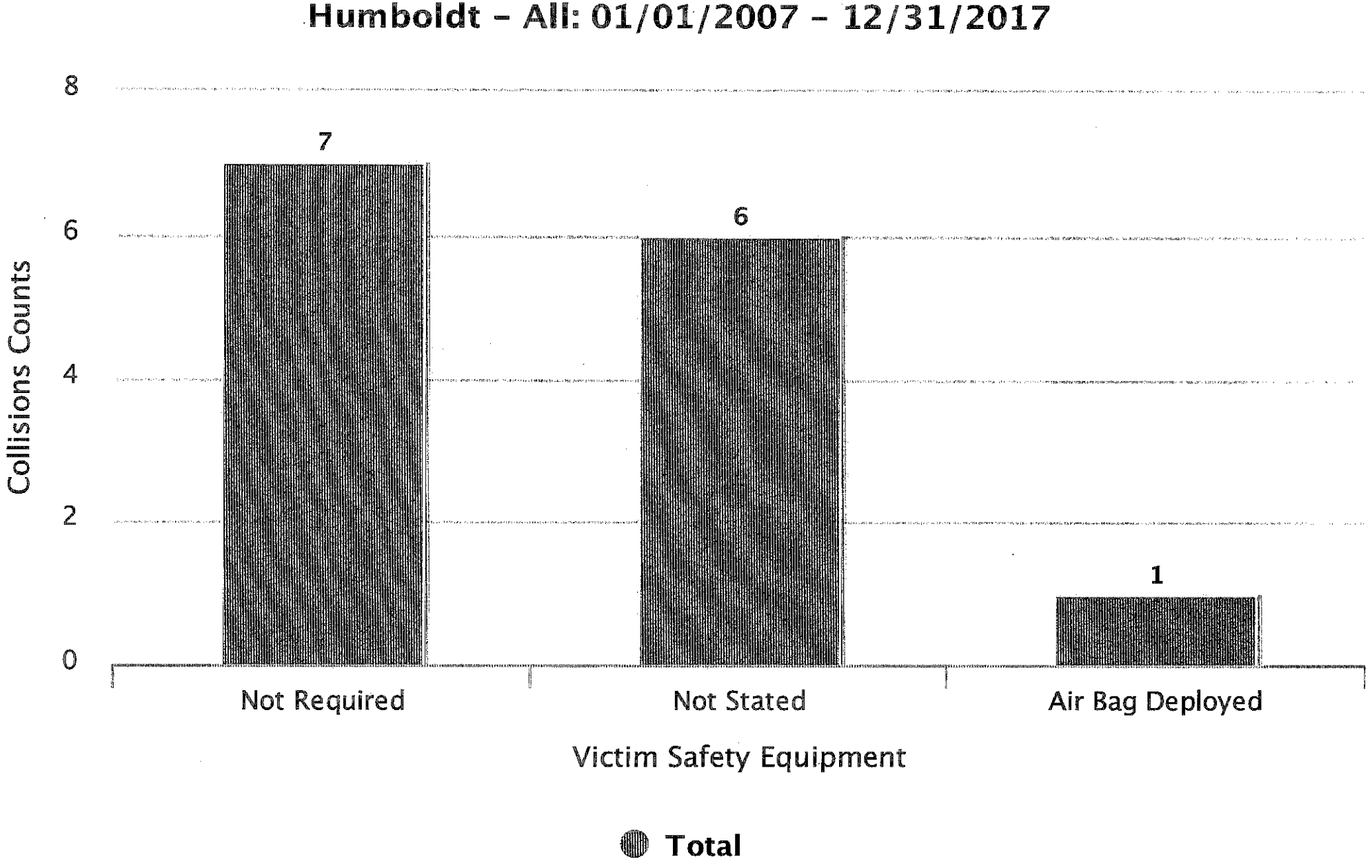
Humboldt - All: 01/01/2007 - 12/31/2017

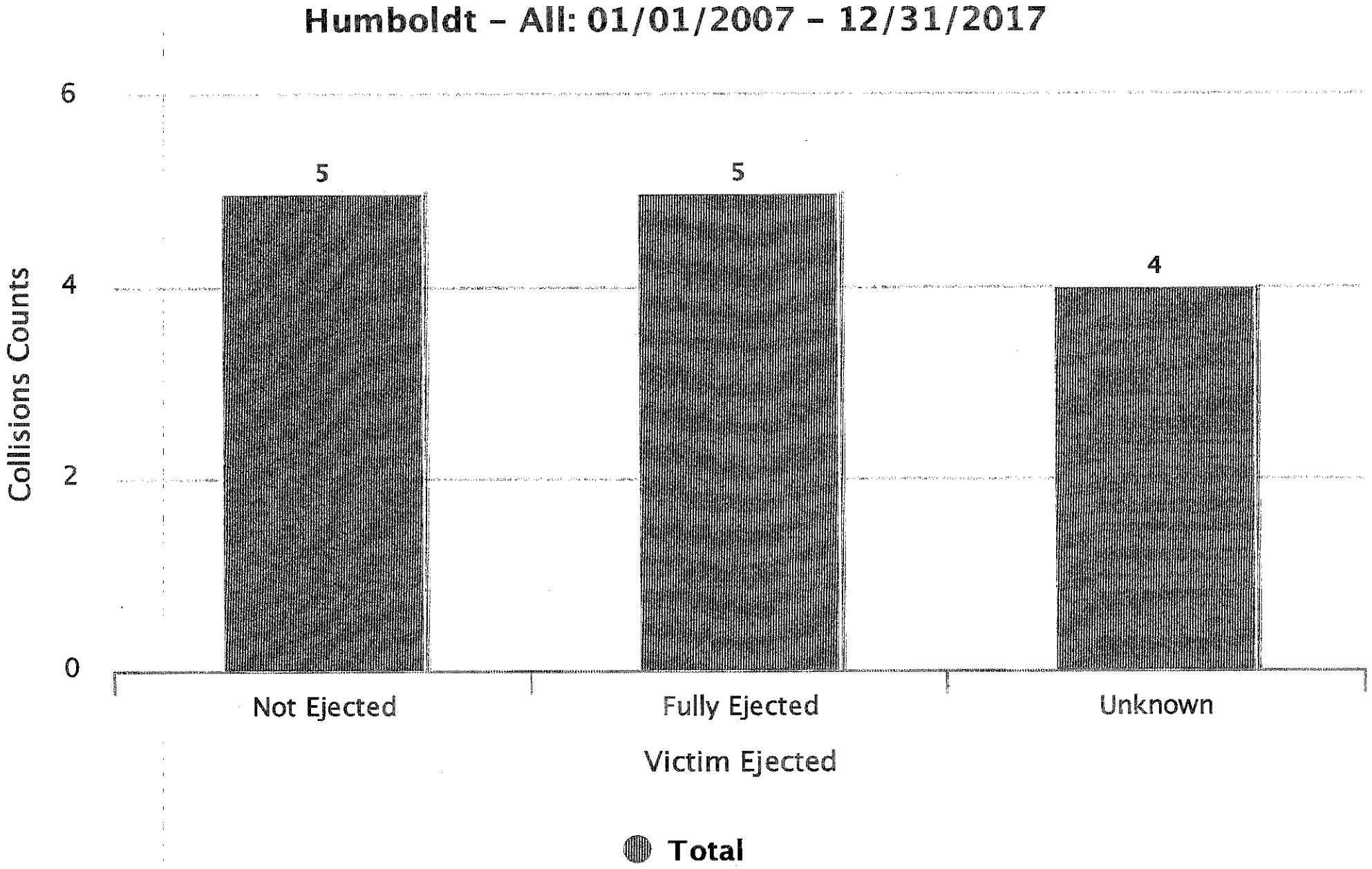


Humboldt - All: 01/01/2007 - 12/31/2017




Humboldt – All: 01/01/2007 – 12/31/2017
8
6
4
2
0
Collisions Counts
7
5
2
Driver
Position Unknown
Other Occupants
Victim Seating Position
Total


Humboldt - All: 01/01/2007 - 12/31/2017
8
6
4
2
0
Collisions Counts
7
6
1
Not Required
Not Stated
Air Bag Deployed
Victim Safety Equipment
Total


Humboldt – All: 01/01/2007 – 12/31/2017
Collisions Counts
6
4
2
0
5
5
4
Not Ejected
Fully Ejected
Unknown
Victim Ejected
Total

Print Rankings

Agency	Year	County	Group	Population (Avg)	DVMT
Humboldt County	2015	HUMBOLDT COUNTY		135,557	3,672,915

TYPE OF COLLISION	VICTIMS KILLED & INJURED	OTS RANKING
Total Fatal and Injury	886	29/58
Alcohol Involved	129	20/58
Had Been Drinking Driver < 21	5	37/58
Had Been Drinking Driver 21 - 34	68	1/58
Motorcycles	47	44/58
Pedestrians	67	1/58
Pedestrians < 15	6	12/58
Pedestrians 65+	9	6/58
Bicyclists	45	14/58
Bicyclists < 15	4	29/58

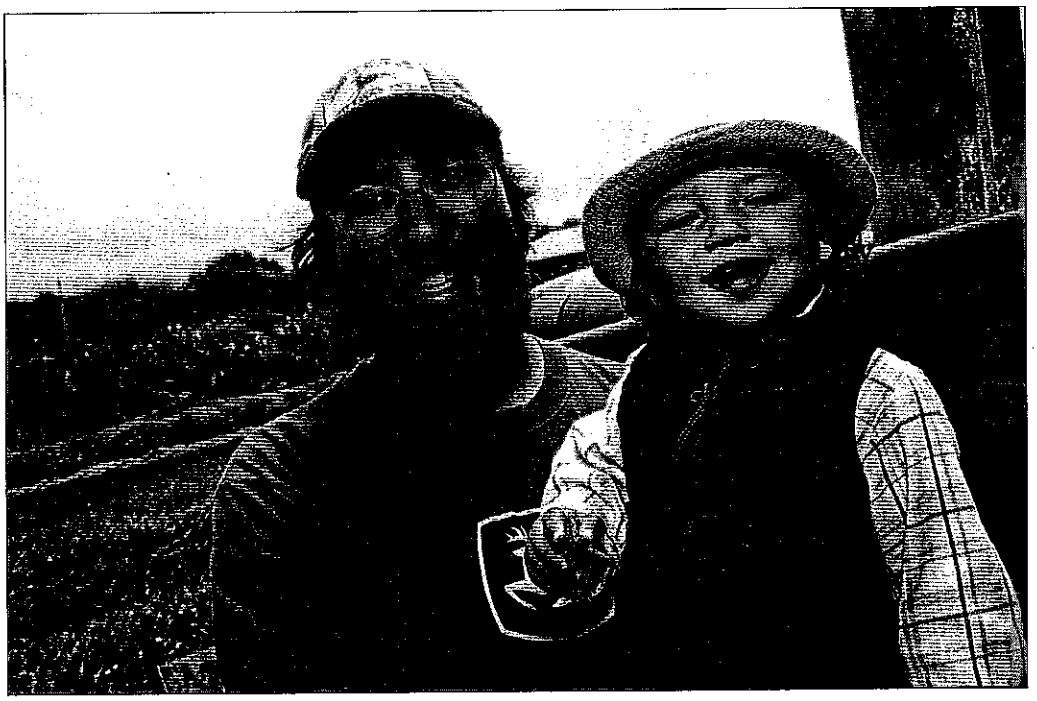
Humboldt County has highest pedestrian collision rate of all counties in California.

TYPE OF COLLISION	FATAL & INJURY COLLISIONS	OTS RANKING
Speed Related	134	49/58
Nighttime (9:00pm - 2:59am)	87	19/58
Hit and Run	49	12/58

READING AND UNDERSTANDING THE OTS RANKINGS

Humboldt County Department of Health & Human Services
People helping people live better lives

Community Health Assessment 2013



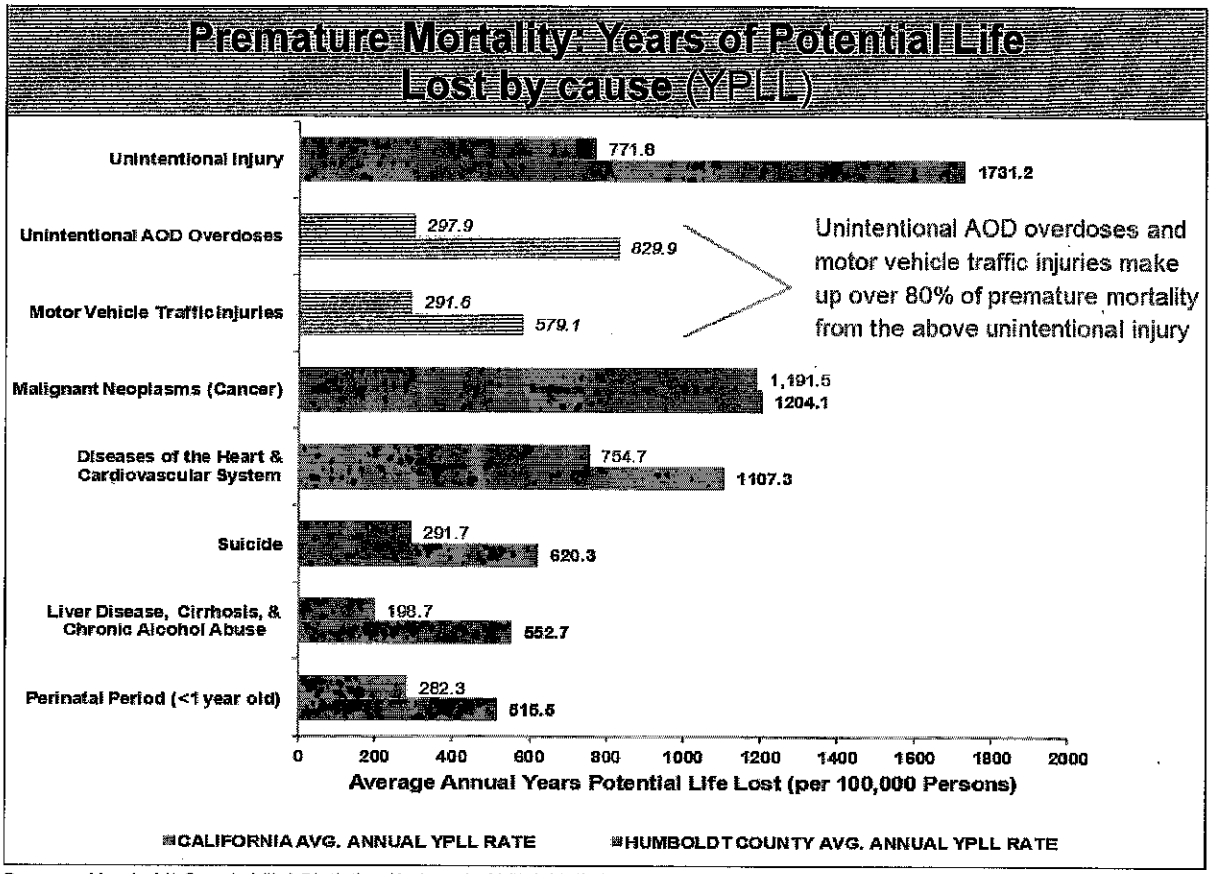
Data for planning and policy making

Mortality

Life expectancy in the United States is approximately 78 years. Death prior to age 75 is considered premature. As with lifespan, there are a variety of factors that contribute to premature death.

Five of the eight leading causes of premature death are either largely or entirely preventable. These are unintentional injury, alcohol and other drug (AOD) overdoses, motor vehicle traffic injuries, heart disease, suicide, and liver disease/cirrhosis.

The table on the facing page shows how Humboldt County compares to California and the US Healthy People objectives.



Sources: Humboldt County Vital Statistics (Automated Vital Statistics System (AVSS), California Electronic Death Registration System (CA-EDRS), Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System (WISQARS)(http://www.cdc.gov/injury/wisqars/index.html), National Center for Health Statistics (NCHS) Vital Statistics System, California data covers 2008-2010; Humboldt County data covers 2008-2012.

Average Annual Mortality Rate
(per 100,000 except as noted)

	Humboldt (2009-2011)	+/-	California (2009-2011)	+/-	Healthy People 2020 Goal
Total cancer	182.4	22.0	156.4	1.4	160.6
Female breast cancer	23.9	12.9	21.3	0.7	20.6
Colorectal cancer	16.8	8.0	14.7	0.4	14.5
Prostate cancer	23.4	***	21.9	0.8	21.2
Lung cancer	47.0	12.5	36.5	0.7	45.5
Cirrhosis of the liver	15.1	7.7	11.4	0.4	8.2
Drug-induced deaths	36.7	11.6	10.9	0.4	11.3
COPD	56.2	13.5	37.5	0.6	98.5
Coronary heart disease	107.5	16.9	122.4	1.2	100.8
Infant mortality (per 1,000) 2008-10	4.9	***	5.0	0.2	6.0
Motor vehicle accidents	15.7	8.1	7.5	0.3	12.4
Homicide	5.9	***	5.2	0.2	5.5
Suicide	22.7	9.2	9.6	0.3	10.2
Stroke	52.4	12.9	38.1	0.6	33.8
Unintentional injury	65.2	14.9	27.6	0.6	36.0
Diabetes-related deaths (2008-2012)	71.4	13.6	- -	- -	65.8

Sources: Humboldt County Vital Statistics (Automated Vital Statistics System (AVSS), California Electronic Death Registration System (CA-EDRS). "***" Signifies the rate is statistically unstable.

Mortality

The chart below illustrates the five leading causes of mortality by age group in Humboldt County for 2007 to 2011 with the Average Annual Age-Specific Mortality Rate (AASMR) per 100,000 persons (in parentheses).

Injuries from motor vehicle crashes were the leading or second-highest cause of death between 2007 and 2011 for people under the age of 45.

Suicide is the leading cause of death in the 15-24 age group, the fourth leading cause in the 25-44 age group, and the sixth leading cause in the 45-64 age group.

From age 65 on, the leading causes of death in Humboldt are related to chronic illness.

From age 65 on, the leading causes of death in Humboldt are related to chronic illness.

Deaths related to the acute and chronic effects of alcohol, drug and tobacco abuse remain a leading cause of preventable mortality in Humboldt County.

All Gender/Race/Ethnicity 2008 - 2012
with average annual age-specific rate per 100,000 persons

Age Range	#1 Cause	#3 Cause	#4 Cause	#5 Cause	#5 Cause
< Age 1 (35 deaths)	The 2008-2012 average annual infant mortality (under age 1) from all causes for Humboldt County is 5 per 1000 live births				
1 to 14 (16 deaths)	The 2008-2012 average annual mortality rate for ages 1-14 from all causes for Humboldt County is 17.3 per 100,000 persons				
15 to 24 (85 deaths)	Suicide (22.4)	Motor Vehicle Injuries (21.5)	Drug-related deaths (15.9)	Fatal Unintentional Injuries (6.5)	
25 to 45 (320 deaths)	Drug-related deaths (53.0)	Motor Vehicle Injuries (24.0)	Liver disease and cirrhosis, chronic ETOH abuse (22.8)	Suicide (21.7)	Cardiovascular disease (14.3)
45 to 64 (1,446 deaths)	Cancer, all (210.4)	Cardiovascular disease (145.8)	Drug-related deaths (92.3)	Liver disease and cirrhosis, chronic ETOH abuse (92.3)	COPD and Emphysema (35.7)
65+ (4,204 deaths)	Cardiovascular disease (1197.2)	Cancer, all (1027.9)	Stroke (520.2)	COPD and emphysema (380.3)	Alzheimer's Disease (223.4)

Source: Humboldt County Vital Statistics (CA-EDRS accessed 1/31/2013). ETOH=Ethanol (Alcohol).

Part B: Narrative Questions

Question #4

QUESTION #4
PUBLIC PARTICIPATION and PLANNING (0-10 POINTS)

Describe the community based public participation process that culminated in the project.

A. What is/was the process of defining future policies, goals, investments and designs to prepare for future needs of users of this project? How did the applicant analyze the wide range of alternatives and impacts on the transportation system to influence beneficial outcomes? (3 points max) (Max of 200 words)

Words Remaining: 1

The Humboldt Bay Trail is a community-driven vision to transform transportation and coastal access around the bay. A community organization (RCAA) developed the initial planning documents in 1997 and 2001, and community members advocated in the early 2000s for public agencies to prioritize the delivery of projects to create a continuous trail network. In the mid-2000s, the Humboldt Bay Trail started being incorporated into regional planning documents, and public agencies began programming funds, initiating projects, and leading outreach. In 2012, Humboldt County and the North Coast Railroad Authority (NCRA) initiated community dialogue regarding the future use of the railroad corridor through a series of meetings and technical studies, resulting in consensus on a rails-with-trails approach and a commitment from NCRA to support trail projects. For the proposed project, Humboldt County completed an Initial Engineering Study in 2013 to evaluate feasible alignments. The 2016 Basis of Design Report for Trail Width analyzed the trail user profile and developed use estimates to support project design. Project leaders have engaged the community in potential trail alignments and design options through trail summits, meetings, radio shows, brochures, and in-person and on-line surveying to ensure the public participation process was accessible to disadvantaged residents.

B. Who: Describe who was/will be engaged in the identification and development of this project and how they were engaged. Describe and provide documentation of the type, extent, and duration of outreach and engagement conducted to relevant stakeholders. (3 points max) (Max of 150 words)

Words Remaining: 2

For over two decades, project leaders have engaged residents, non-profit organizations, public health professionals, trail advocates, mobility and disability advocates, businesses, adjacent landowners, local jurisdictions, and state and federal agencies in envisioning the Humboldt Bay Trail. The public was engaged to help identify the preferred alignment, refine the design elements, and determine its priority amongst other transportation needs. Project leaders led a cooperative planning process for all aspects of the Humboldt Bay Trail through numerous trail summits, meetings, and in-person and online surveying to ensure the public participation process was accessible to disadvantaged residents. Most recently, Humboldt County held a public meeting attended by 135 residents in February 2018. 719 people responded to a survey in May-June 2018. 70 comments were received on the CEQA environmental document. Humboldt County prepared a comment evaluation memo which identified how suggestions and requests would be considered in the detailed design phase.

C. What: Describe the feedback received during the stakeholder engagement process and describe how the public participation and planning process has improved the project's overall effectiveness at meeting the purpose and goals of the ATP. (2 points max) (Max of 200 words)

Words Remaining: 3

Feedback from residents and stakeholders over two decades has elevated the Humboldt Bay Trail as the highest-priority non-motorized transportation project in regional planning documents. Stakeholders requested that public agencies commit to working through the complex issues and identify the most cost-effective and sustainable project design. Stakeholders supported working with NCRA to achieve a rails-with-trails design as the most practical approach, which is reflected in the proposed project. Stakeholders supported planning for sea-level rise, which is incorporated through shoreline revetment repair and setting minimum elevations for the trail surface based on detailed hydraulic modeling. In response to stakeholder preference, Humboldt County has committed to avoid metal decks in order to provide a quieter tread and reduce noise. Other responses to stakeholder feedback include: a commitment to minimize signs, especially in scenic areas; incorporating opportunities for turnouts; and incorporating opportunities for re-vegetation with native species.

In 2017, trail supporters created the Humboldt Bay Trail Fund after hearing community feedback that trail maintenance is a top priority and concern that agencies struggle with maintenance funding. Nearly 400 local residents and businesses have contributed over $240,000 in just over one year to support Humboldt County and other local agencies with maintenance.

D. Describe how stakeholders will continue to be engaged in the implementation of the project. (1 point max)
(Max of 150 words) **Words Remaining:** 19

Humboldt County will continue to provide public notices regarding project milestones via press releases and updates on the project website. The Coastal Commission permitting process will provide an opportunity for stakeholders to provide input on design refinements and permitting conditions. The Humboldt Trails Council will continue to provide stakeholder updates of project implementation through their quarterly e-newsletter. Humboldt County will work with the community partners to sponsor celebration events for kick-off of construction and project completion. After the project is completed, the Volunteer Trail Stewards (VTS) program of the Humboldt Trails Council will engage its network of dedicated and skills volunteers to support Humboldt County with trail maintenance. HCAOG has programmed funds in FY 2018-19 to support development of an adopt-a-trail program to enhance stakeholder engagement with the Humboldt Bay Trail.

E. Is this project specifically listed in an approved Transportation Plan? (1 point max)
(Max of 50 words) **Words Remaining:** 17

The Humboldt Bay Trail South project is listed in HCAOG's 2017 VROOM Regional Transportation Plan as a priority project for the region. The Humboldt Bay Trail has been a regional priority since 2000.

Attach the applicable plan page with the project highlight:

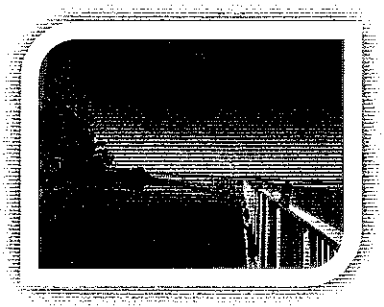
Bay Trail South in RTP for Question 4 attachment.pdf

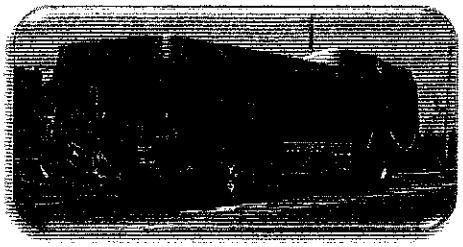
Attach any applicable Public Participation & Planning documents:

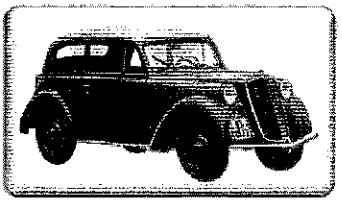
Additional attachment to support Public Participation.pdf

VROOM...

Variety in Rural Options of Mobility







This document can be viewed at www.hcaog.net

HCAOG

20-YEAR

REGIONAL TRANSPORTATION PLAN

2017 UPDATE

HUMBOLDT COUNTY ASSOCIATION of GOVERNMENTS

GOAL, OBJECTIVES, & POLICIES

HCAOG shall carry out transportation planning for the regional roadway system with this goal:

GOAL: Throughout Humboldt County, the streets, roads, and highway system meet the transportation and safety needs of all users, including pedestrians, transit users, bicyclists, motorists, the elderly, youth, and the disabled. The region's jurisdictions have the resources to preserve, enhance, and maintain the roadway network to support bicycle, bus, pedestrian, automobile, and truck travel.

OBJECTIVES: The policies listed in the Complete Streets Element will help meet the RTP's main objectives (listed in alphabetical order):

- Balanced Mode Share/Complete Streets
- Economic Vitality
- Efficient & Viable Transportation System (includes Preserving Assets)
- Environmental Stewardship
- Equitable & Sustainable Use of Resources
- Safety

The policies below are grouped according to the RTP's main objectives (chapter 1, Introduction, fully describes the six main objectives). The objectives support and work in tandem with one another. Thus, a policy can help meet more than one objective.

OBJECTIVE: BALANCED MODE SHARE/ COMPLETE STREETS

- *Maximize multi-modal access to the roadway system and eliminate barriers to non-motorized transportation.*
- *Expand and maintain a regional network of inter-connected pedestrian and bicycle facilities for active transportation.*
- *Support and implement projects and policies that increase biking and walking, especially for short trips, first/ last mile transit trips, and school trips.* {*California Transportation Plan 2040*}
- *Create safe and effective walking and bicycling facilities that create neighborhood connectivity and continuity.* {*California Transportation Plan 2040*}

Policy CS-1 HCAOG shall encourage and facilitate local jurisdictions, local Native American Tribes, Caltrans, and non-profits to individually and collaboratively plan, install, and maintain roads in Humboldt County to build a coordinated and balanced transportation system. *(Also supports objectives: Efficient & Viable Transportation System, Economic Vitality)*

Policy CS-2 HCAOG recognizes the planned Humboldt Bay Trail as a regional priority multi-use trail, and supports multi-jurisdictional, public, and private efforts to develop it. *(Also supports objectives: Efficient & Viable Transportation System, Economic Vitality)*

COMPLETE STREETS Project Location	Short or Long Term[1]	Complete Sts	Economic	Environment	Operations	Preserve Sys	Safety	Description	Funding Source	Implementation Year(s)	Cost in Year of Expenditure[2] ($000)
Agency: COUNTY OF HUMBOLDT											
Honeydew Bridge	ST	X	X	X	X	X	X	Replace existing bridge	HBP	2017	$6,600
Central Avenue	ST	X		X	X	X	X	Shoulder widening & overlay	Not funded	TBD	$900
Harris & Hall	ST	X			X		X	Safety improvements	Not funded	TBD	$500
Herrick & Elk River Intersection	LT	X	X	X	X	X	X	Signalize	Not funded	TBD	$1,500
Fairfield, Meyer, Eureka	LT	X	X	X	X	X	X	Route improvement	Not funded	TBD	$1,000
McKinleyville Avenue Extension	ST	X	X	X	X		X	Connect to School Road	Not funded	TBD	$1,500
Bald Hills Road	LT		X	X	X			Pave Surface	Not funded	TBD	$6,000
New Navy Base Road, SR 255 to Humboldt Bay	LT	X	X	X	X	X	X	Reconstruct roadway from SR 255 to Humboldt Bay	Not funded	TBD	$1,500
Myrtle Ave. at Freshwater Road	ST	X		X	X		X	Intersection improvement	Not funded	TBD	$1,900
Central Avenue, McKinleyville	ST	X		X	X		X	Shoulder widening	Not funded	TBD	$800
Central Avenue, McKinleyville	ST		X	X	X		X	Synchronize traffic signals	Not funded	TBD	$1,800
Hammond Trail Bridge–Mad River	ST	X		X	X	X	X	Replace existing bridge	Not funded	TBD	$6,400
Hammond Trail: Clam Beach to Scenic Drive	LT	X	X	X			X	Class I, II, and III (0.3 miles). *(Interagency coordination with City of Trinidad)*	Not funded	2027/28	$2,200 (1,800 in 2017)
Annie & Mary Trail: Blue Lake to Glendale (Chartin Road to Glendale Drive)	ST	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$2,000
Annie & Mary Trail: Glendale Bridge	LT	X		X	X		X	Rehabilitate or replace railroad bridge to establish Class I trail	Not funded	TBD	$5,000
Little River Trail, (Moonstone Beach to Clam Beach)	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$9,900
Humboldt Bay Trail South (Eureka to Bracut segment)	ST	X	X	X	X			Rail with Trail Class I multi-use trail	Not funded	TBD	$12,000
Humboldt Bay Trail: Elk River to King Salmon	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$1,800
Humboldt Bay Trail: King Salmon to Fields Landing	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$1,400
Humboldt Bay Trail: Fields Landing to Humboldt Bay Nat'l Wildlife Refuge/College of the Redwoods	LT	X		X	X		X	Construct Class I multi-use trail	Not funded	TBD	$2,400
Humboldt Hill to Thompkins Hill	LT	X	X	X	X		X	Connector road	Not funded	TBD	$2,000
Harris to Fern Street, Cutten	LT	X	X	X	X		X	Connector road	Not funded	TBD	$2,000
Alderpoint/Mattole/Maple Creek	LT		X	X	X	X	X	Reconstruct rural routes	Not funded	TBD	$100,000

PACIFIC COAST BIKE ROUTE

The Pacific Coast Bike Route (PCBR) runs the length of California, from the California/Oregon State line to the California/Mexico border. The northern tip begins on Highway 101 in Del Norte, takes local roads around Crescent City, and enters Humboldt County via the Newton B. Drury Scenic Parkway in Redwood National & Prairie Creek Redwoods State Park. Within Humboldt, the PCBR travels local roads in McKinleyville, Arcata, and Eureka. Several of these roads are also part of the California Coastal Trail.

HAMMOND TRAIL

The Hammond Trail links the south bank of the Mad River with Clam Beach County Park and travels through coastal McKinleyville to the Hammond Bridge. The trail is approximately 5.5 miles long of Class I multi-use trail, paved, and separated from motorized traffic. The Hammond Trail is part of the Pacific Coast Bike Route, and was designated a part of the California Coastal Trail in June 2010.

EUREKA WATERFRONT TRAIL & PROMENADE

The Eureka Waterfront Trail is envisioned to run the length of the city's bayfront, from Tydd Street (near the Eureka Slough) to Herrick Avenue at the Pound Road Park-and-Ride. Some segments of the trail are already in place: Eureka Slough trail (bayside of the Target Store), the trail near the Adorni Center, the Old Town Boardwalk, PALCO Marsh trail, and the 1.5-mile multi-use Hikshari' Trail in south Eureka's Elk River Access Area. Hikshari' is the Wiyot place name for this coastal area west of Broadway Street where the Elk River flows into Humboldt Bay. The City of Eureka completed "Phase A," in December 2016, which extends the trail north from the Hikshari' Trail, adding Class I multi-use trail from Truesdale to Del Norte Street. Phase B, from Del Norte to C Street, and Phase C, from Halvorsen Trail to Tydd Street, will be constructed in 2017. Existing segments of the Waterfront Trail are part of the Pacific Coast Bicycle Route.

HUMBOLDT BAY TRAIL

What is now collectively referred to as the Humboldt Bay Trail has been the region's top trail priority for over a decade. The grand vision is to have a multi-use trail for non-motorized travel from Trinidad and Blue Lake to College of the Redwoods. This is a multi-jurisdictional trail within Humboldt County.

The following briefly summarizes current progress on the trails.[2]

Caltrans: Caltrans will be implementing a large-scale wetland mitigation

[2] Source: County of Humboldt, *State of the Trails Report*, June, 2016.

Trail Project	Jurisdiction	Description	In Other HCAOG Adopted Plan(s)[1]:
Humboldt Bay Trail North and South*	Arcata, Humboldt County	Arcata to Eureka Segment: A 6.5-mile Class I/multi-use path around the east side of Humboldt Bay, between Arcata and Eureka. The trail would follow the North Coast Railroad rail corridor and parallel U.S. 101.	HCCTIS, Humboldt Bay Trail Feasibility Study, RBP, RPP, RTMP
Humboldt Bay Trail (Continuation)*	Humboldt County	This would continue the Class I/multi-use path from Humboldt Bay Trail South Trail further south in three conceptual segments: Elk River to King Salmon; King Salmon to Fields Landing; and Fields Landing to the Humboldt Bay National Wildlife Refuge and College of the Redwoods.	*new in 2017 RTP Update*
Hoopa Valley Trail	Humboldt County	A 6-mile segment along SR 96 from the south end of Shoemaker Road northward (in Caltrans right-of-way). The long-term vision is to expand the trail throughout the Hoopa Valley.	RPP
John Campbell Memorial Greenway*	Fortuna	Multi-purpose from the Riverwalk Trail to the south entrance of the Headwaters Reserve	RBP, RTMP
Little River Trail (Hammond Trail Extension)*	Humboldt County	Multi-use (Class I) trail between Clam Beach and Moonstone Beach. The trail would connect the Hammond Trail and Clam Beach Road to Scenic Drive.	RBP
Manila Shared Use Path*	Humboldt County	Class I multi-use trail adjacent to Highway 255, from the intersection of Dean Street and Pacific Avenue, to Carlson Avenue intersection.	RBP
Orick Levee Coastal Trail	Humboldt County	Multi-purpose trail on north Redwood Creek levee to the U.S. 101 bridge (0.69 miles), south levee to Redwood National Park Visitor Center (2.45 miles).	HCCTIS (Priority Project)
Riverwalk Trail	Humboldt County	Fortuna City limits to Sandy Prairie	RTMP
Eureka Loop Trail*	Eureka	Multipurpose trail connecting the north and south ends of the Eureka Waterfront Trail to key destinations in the south, east and west of Eureka and portions of the Greater Eureka Area.	

The symbol identifies trails that are or would be part of the California Coastal Trail.

[1]HCCTIS=*Humboldt County Coastal Trail Implementation Strategy* (2011); RBP=*Regional Bicycle Plan* (2017); RPP=*Regional Pedestrian Plan* (2008); RTMP=*Regional Trails Master Plan 2010).*

*See the Complete Streets Element, Table *Streets*-4 for estimated project costs.

Humboldt Bay Trail Public Participation Opportunities

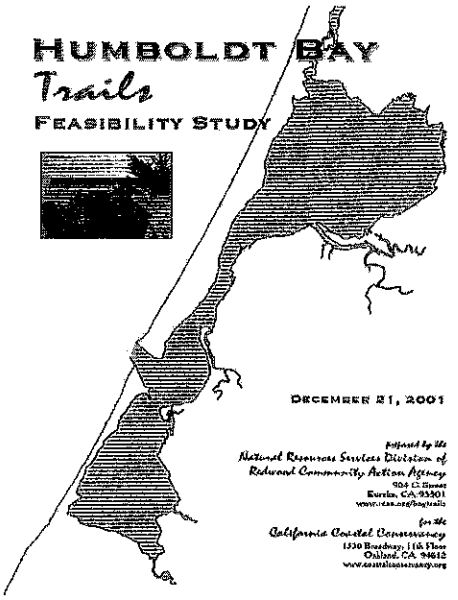
The Humboldt Bay Trail has been a community priority for over two decades. Numerous community outreach efforts detailed below have ensured that disadvantaged communities around Humboldt Bay have been involved in shaping a project that will have lasting safety, health and economic benefits.

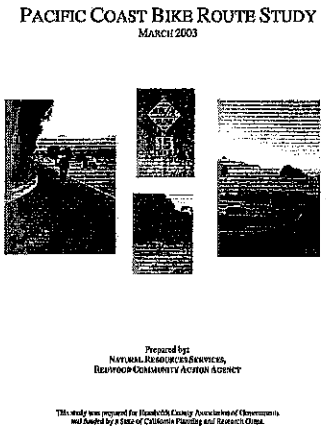
Humboldt Bay Bicycle Facilities Feasibility Study 1997

This was the first study, funded by the North Coast Unified Air Quality Management District, to examine active transportation facilities and opportunities around Humboldt Bay. Community members were engaged about which types of improvements for bicycle transportation could benefit them and their families.

Humboldt Bay Trails Feasibility Study 2001

The Humboldt Bay Trails Feasibility Study was the first look at the "big picture" of non-motorized access to and around Humboldt Bay. The intent of the study was to provide a full spectrum of information, public and professional input, recommendations, and conceptual designs and preliminary environmental checklists for projects that will promote public access to and around the entire 48-mile shoreline of Humboldt Bay. Three public visioning meetings were hosted with the purpose of these meetings to build a sense of excitement about improving access to and around the bay, and to have a charrette-style workshop for the public to share their visions and priorities for access projects.



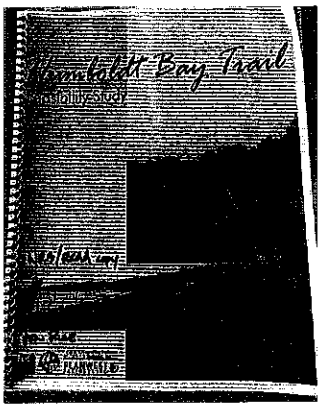


Pacific Coast Bike Route Study 2003

Redwood Community Action Agency assisted Caltrans in analyzing opportunities for the PCBR through District 1 including Humboldt County by engaging with communities throughout the District. This was the first study to examine the existing PCBR route and recommend facility and route improvements since the PCBR was first created over 25 years prior. The PCBR follows Highway 101 between Eureka and Arcata which rose as a top priority for bicycle improvements.

National Park Service Consultation – Humboldt Bay Trail: Eureka to Arcata – A Guiding Framework

The National Park Service facilitated a community discussion to support the region's vision for a pedestrian / bicycle trail between Arcata and Eureka.



Humboldt Bay Trail Feasibility Study: Arcata to Eureka 2007

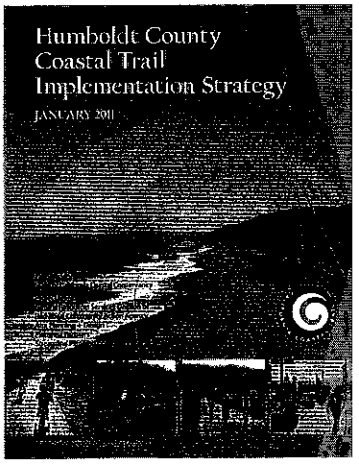
Working from the progress made through the Humboldt Bay Trails Feasibility Study in 2001, this study focused on the Arcata to Eureka corridor and outreach to identify a feasible trail corridor. Numerous stakeholder and public meetings were held to examine potential trail corridors along Highway 101 and the rail corridor, eventually coming to consensus that the most feasible Humboldt Bay Trail alignment was within the rail corridor and the west side of Highway 101.

Humboldt County Regional Trails Master Plan 2010

This plan completed by the Humboldt County Association of Governments compiled all regional and local information on existing trails and active transportation planning in Humboldt County. The plan focused on a long-range plan and community outreach for active transportation connections within and between communities, particularly the Humboldt Bay Trail, to ensure safe and equitable access for non-motorized users.

Humboldt County Coastal Trail Implementation Strategy 2011

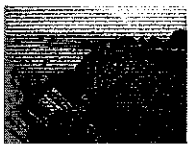
The *Humboldt County Coastal Trail Implementation Strategy* was a collaborative effort to plan a continuous public right-of-way for the California Coastal Trail (CCT) for non-motorized users along the Humboldt County coast – funded by the California State Coastal Conservancy and led by Redwood Community Action Agency (RCAA). Seven community workshops were held throughout Humboldt County, and the Humboldt Bay Trail was a priority project for even communities located further afield from Humboldt Bay.



California Coastal Commission: Fall 2013

On Thursday, November 14, 2013, the California Coastal Commission approved the 'Revised Findings on Consistency Certification' for the Eureka-Arcata Route 101 Corridor Improvement Project. At the Coastal Commission hearing in Eureka, many community

members spoke of the need for a completed Humboldt Bay Trail to ensure safety for biking and walking between Eureka and Arcata. One of the conditions from the final Coastal Commission ruling requires that construction of the highway improvements will not commence until adequate commitments are in place to assure that a separate trail parallel to Route 101 will be constructed. The Eureka-Arcata Route 101 highway project and Humboldt Bay Trail projects have thus become linked.



NCRA Humboldt Bay Rail Corridor subcommittee meetings – 2012

The NCRA held a series of three public meeting in 2012 to respond to community interest in trail development between Arcata and Eureka. The Ad Hoc Committee Resolution highlighted on page 3 the following finding: "NCRA will prioritize rail infrastructure restoration **and trail development in the Eureka to Arcata corridor** to more clearly align its timing and objectives with those of the Humboldt County Association of Governments/Caltrans' US 101 Corridor Improvement Project.

101 Bay Trail and Corridor Ad Hoc meetings through HCAOG – December 2013 – ongoing

In Fall 2013, an ad-hoc committee was formed with the purpose to ensure that the local agencies continue to work together and communicate effectively with Caltrans, elected officials, stakeholders, and the general public about the Humboldt Bay Trail and the Eureka-Arcata Route 101 Corridor Improvement Project. Regularly scheduled Ad Hoc 101 meetings take place the second Thursday of each quarter.

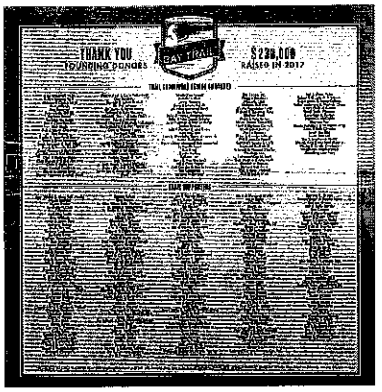
Best of Humboldt Fair outreach & Humboldt Bay Trail Project Update brochure – June 2014

The County of Humboldt and Redwood Community Action Agency conducted creative community outreach about the Humboldt Bay Trail at the well-attended Best of Humboldt Fair at the public fairgrounds in Eureka. The County developed an informative yet approachable brochure to update the public on the progress and next steps for the Humboldt Bay Trail.

Regional Trails Summit – June 2016

The regional trails summit brought the community together with leaders from local, state and federal agencies to share progress on developing trails to connect communities in our region and how the public could be

active in supporting and providing input on trail planning, design and implementation.



Public launch of the Humboldt Bay Trail Fund – 2017

The Humboldt Bay Trail Fund was established at the Humboldt Area Foundation as a way for private donors to assist in the continued development of the trail by focusing on the critical need for trail maintenance funds. In just over a year over $240,000 has been raised with donations from community members and local businesses. A Fund Working Group continues to outreach to grow the community the Humboldt Bay Trail.

2nd Annual Regional Trails Summit – June 2017

Based on the tremendous success from the 2016 Trails Summit, the County, HCAOG, local jurisdictions and trail supporters collaborated to host the second annual Regional Trails Summit. The cities of Eureka and Arcata shared progress in the active construction of their segments of the Humboldt Bay Trail, the Eureka Waterfront Trail and the Humboldt Bay Trail North. The County provided updates on how the community could support and comment on the design of Humboldt Bay Trail South.

Humboldt Bay Trail South CEQA Public Meeting – February 2018

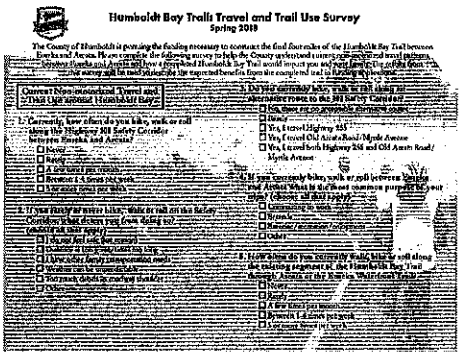
The County of Humboldt sponsored a public meeting to discuss the plan to complete the Humboldt Bay Trail between Eureka and Arcata. The meeting began with an informal open house to view exhibits of the current design and talk with planners and engineers, followed by a project update presentation and question-and-comment session. Approximately 135 people attended.

KHUM
104.7FM · 104.3FM
HUMBOLDT COUNTY
HAPPY TRAILS

Happy Trails – weekly local radio show on KHUM

This weekly radio show on a local station was spearheaded in 2010 in large part to keep the pressure on community leaders to complete a trail between Eureka and Arcata. Numerous shows over the years have been

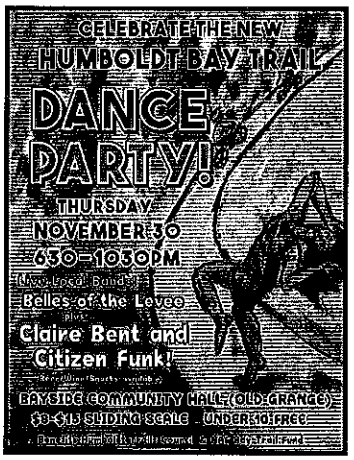
dedicated to updating the community on the Humboldt Bay Trail and inviting participation in its planning. Podcasts of past shows can be found at: http://www.khum.com/podcasts/


Humboldt Bay Trails Travel and Trail Use Survey
Spring 2018

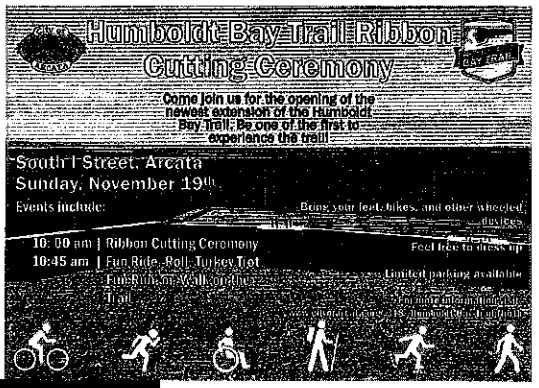
Humboldt Bay Trail South Survey – May & June 2018

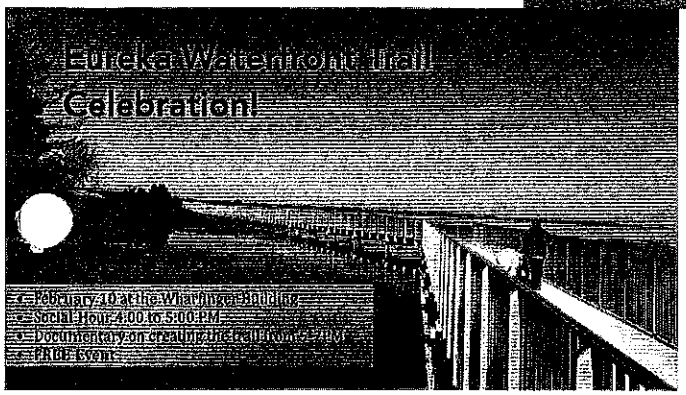
In May and June 2018 the County conducted an online and in-person survey to understand current non-motorized travel patterns between Eureka and Arcata and how a completed Humboldt Bay Trail would impact residents and local businesses. 719 people completed the survey and also gave feedback on the Bay Trail South project.

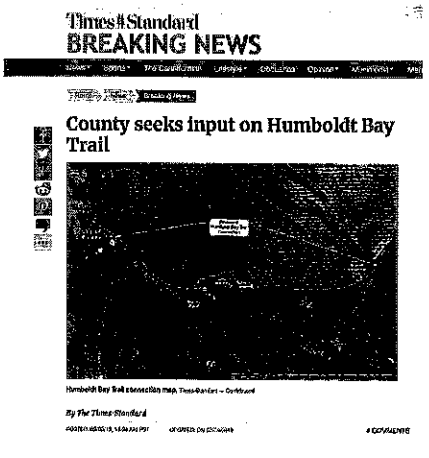
Additional Humboldt Bay Trail public outreach opportunities and materials




Times-Standard
NEWS
Hundreds attend Waterfront Trail celebration
MOST POPULAR






Times-Standard
BREAKING NEWS
County seeks input on Humboldt Bay Trail

Part B: Narrative Questions

Question #5

CONTEXT SENSITIVE BIKEWAYS/WALKWAYS and INNOVATIVE PROJECT ELEMENTS (0-5 POINTS)

A. How are the "recognized best" solutions employed in this project appropriate to maximize user comfort and for the local community context?

As you address this question consider the following:

- The posted speed limits and actual speed
- The existing and future motorized and non-motorized traffic volume
- The widths for each facility
- The adjacent land use, and
- How the project is advancing a low(er) stress environment on each facility or a low stress network
    - What is the current stress level? (low, medium, or high?
    - If the stress level is medium or high, is the project going beyond minimum design standards to maximize potential users of all ages and abilities?

(Max of 500 words) **Words Remaining:** 0

Two decades of planning and community and outreach in support of the Humboldt Bay Trail have yielded design solutions that maximize trail user comfort, fit the context of Humboldt Bay communities, integrate with the highway and railroad rights-of-way, while also being feasible to permit within the coastal zone.

Highway 101 between Eureka and Arcata is currently posted at 50 mph (legislatively mandated as a safety corridor). Once the Highway 101 Eureka-Arcata Corridor Improvement Project is constructed (expected 2022), speed limits are planned to be set using the California Vehicle Code (85th percentile of prevailing speeds). Thus speed limits are expected to increase as the temporary speed reduction measure sunsets. A separated trail facility is widely recognized as the best solution for active transportation alongside a 50-65 mph highway.

Current non-motorized traffic volume is low because Highway 101 has no designated facilities. However there is a high latent demand for a separated multi-use trail as detailed elsewhere in this application. The future non-motorized traffic volume in the project area is expected to increase once this project is complete, which will also help reduce the volume of motorized traffic on Highway 101.

Humboldt County prepared an innovative Basis of Design Report for Trail Width in 2016 (see Attachment K) which applied a context-based approach to identify the appropriate trail width based on specific needs of Humboldt Bay Trail users. This approach evaluated the specific context of the project and user profile and utilized a Federal Highways Administration calculator to forecast trail level of service for various trail widths. The trail width and periodic resting spaces have been designed to ensure user safety and comfort while minimizing resource impacts and right-of-way encroachments. City of Arcata relied on this report for its project design and permitting.

Humboldt County has closely coordinated with adjacent landowners to ensure the trail does not disrupt commercial operations at Bracut Industrial Park or the former lumber mill property. The trail has been aligned to follow the recently improved levee surrounding the mill site to route trail users around and not through any future commercial activities on the property. This alignment avoids a majority of the mature eucalyptus trees adjacent to Highway 101 and the mill property driveway, while also providing a significantly higher quality user experience (next to the bay, away from the highway).

The current stress level for walking or biking along Highway 101 is extremely high as no non-motorized facility exists for a four-mile gap. Of the 719 people who completed a survey for the Humboldt Bay Trail South project in May-June 2018, 79% of survey respondents indicated that the stress level on the 101 corridor was so high that they did not feel safe and therefore never or rarely biked or walked between Eureka and Arcata.

The Humboldt Bay Trail will offer a non-motorized facility separated from vehicle traffic. Building bicycle facilities separated from vehicles has been shown through national studies to lower stress and encourage more people to actively commute, even those with reduced mobility.

B. Innovative Project Elements

Does this project propose any solutions that are new to their region? Were any innovative elements considered, but not selected? Explain why they were not selected. (Max of 500 words) **Words Remaining:** 34

The Humboldt Bay Trail has required an unprecedented level of coordination and collaboration between HCAOG, Humboldt County, the cities of Eureka and Arcata, Caltrans, State Coastal Conservancy, NCRA, and community groups over the last ten years because the proposed network of trails was too large for one agency to delivery alone. These agencies have worked together on design standards, project integration, funding support, community outreach, permitting, and planning for wetland mitigation and maintenance.

This project proposes the first cooperative use of the NCRA rail line to occur anywhere in the North Coast. All multi-use trail projects that have so far been constructed within the rail right-of-way and approved by the NCRA (e.g. in Arcata, Eureka and Ukiah) have followed the NCRA Rail-with-Trail Guidelines. Additionally, the proposed cooperative use of an existing rail bridge to accommodate trail users and retain use of the rails will be the first of its kind in California.

In December 2012, the NCRA unanimously supported a resolution stating that NCRA will prioritize rail infrastructure restoration and trail development in the Eureka to Arcata corridor to more clearly align its timing and objectives with those of the HCAOG/Caltrans U.S. 101 Corridor Improvement Project and the Humboldt Bay Trail. NCRA recognized that temporary use of the rail line, particularly the rail bridge over Eureka Slough, is likely needed to realize the completion of the Humboldt Bay Trail because a new bridge would be cost-prohibitive.

The County of Humboldt and its project designers researched innovative design options for rail and trail users to utilize the same bridge structure. The design team found an example from Chicago and adapted it for the trail crossing of Eureka Slough on the existing NCRA rail bridge. The cooperative use design for the bridge will install an asphalt, concrete, wooden or pre-manufactured surface up to the level of the rails that allows for cooperative use with trains. As trains have not been operational around Humboldt Bay since the late 1990s and no tourist train or freight train service has yet to be feasibly proposed, there will likely be very few times when trail traffic would need to be delayed for a train to pass over the bridge. Speeder cars run on the rails during a special event by the Timber Heritage Society is likely to be the only rail traffic. The railroad bridge is expected to be used for 20 to 30 years until Caltrans replaces the bridges on Highway 101 over Eureka Slough and designs them with bike and pedestrian facilities.

An innovative design for the trail crossing at the Bracut Industrial Park (to slow both trail and motor vehicle users before the crossing) was considered but not selected because the width of the access control break along Highway 101 was prohibitive for the geometry of the innovative design.

Part B: Narrative Questions

Question #6

TRANSFORMATIVE PROJECTS (0-5 POINTS)

A. Describe how your project will transform the non-motorized environment? (Max of 500 words)

Words Remaining: 2

Completing the four-mile gap in the Humboldt Bay Trail will transform the existing non-motorized environment by separating pedestrians and cyclists from motorists on Highway 101 and eliminating a major barrier to active transportation between the two largest population centers in Humboldt County. Currently, the only direct route for non-motorized users traveling between Eureka and Arcata is the shoulder of a hazardous state highway corridor with vehicles traveling 50 miles per hour or higher. The existing environment is inadequate for the small number of non-motorized users who currently ride on the highway shoulder exposed to high-speed vehicle traffic on a congested highway with an elevated collision history.

Decades of community input at public meetings as well as recent survey responses received in May-June 2018 demonstrate the ongoing community support for the Humboldt Bay Trail as a facility that will transform the health and well-being of residents by providing a safe, non-motorized alternative for carless residents and those seeking to travel by foot and bicycle. 77% of respondents to the May-June 2018 survey indicated they currently never (51%) or rarely (26%) walk or bike on Highway 101 between Arcata and Eureka. Of these respondents who rarely or never walk or bike between Arcata and Eureka, 75% indicated they would regularly walk or bike between Arcata and Eureka once the Humboldt Bay Trail is complete. The 2016 Basis of Design Report forecasts 130 to 160 peak hourly user trips by cyclists and pedestrians (met or exceeded approximately 50 days per year), which is significantly higher than the observed counts of 39 users per day in 2016. The project will enable a major mode shift toward active transportation for regular travelers between Eureka and Arcata and create an opportunity for an outstanding recreational experience. The completed Humboldt Bay Trail will be a major destination for residents and visitors seeking to be physically active along a 14-mile continuous trail while enjoying the scenic beauty of Humboldt Bay.

Stakeholders have regularly expressed that completing the Humboldt Bay Trail will contribute positively to the local economy by attracting tourism, and improve the physical and mental health of residents by providing a safe options for physical activity, transportation, and recreation. Comments from residents on recent surveys include, "Humboldt Bay is a treasure. This trail is an exponential upgrade for the area, enhancing the quality of life for those who live work and go to school here as well as being a significant boon to tourism." "Completing the Humboldt Bay Trail would open up bike commuting to whole new group of cyclists. I have been so happy to bike on the sections in Arcata and Eureka; I actually go out of my way to ride on the Humboldt Bay Trail, even if my ride is longer. The trail makes a commute to work feel like an adventure." "This helps more Humboldt people to keep active – walking improves fitness and mental health." "I'm in a wheelchair. I would like to use a safe, smooth path to motivate."

B. Describe how other new or proposed funded projects or policies in the vicinity of this project will attribute to the transformative nature of this project?

As you address this question consider items like the following:
- Transit
- Land Use
- Overall non-motorized network

For projects please attach one of the following:
- The meeting minutes voting to fund the project, or
- The approved environmental document,
- Other important documentation demonstrating the transformation

(Max of 500 words)

Words Remaining: 1

The Humboldt Bay Trail South project will complete the four-mile gap between the Eureka Waterfront Trail and Arcata's Humboldt Bay Trail North, both completed in the past year with ATP funding. Humboldt Bay Trail South, once constructed, will transform the non-motorized transportation environment by completing the 14-mile Humboldt Bay Trail stretching from south Eureka to north Arcata and connecting neighborhoods, services, schools and employment centers. Arcata and Eureka are expected to continue to have dense employment centers and be the two largest population centers in Humboldt County. While directly along Bay Trail South the Bracut Industrial Park and the former lumber mill are commercial properties that have the potential to generate even more employment potential and traffic.

Completion of Humboldt Bay Trail South will also leverage the transformation of vehicular safety at intersections along on Highway 101 between Eureka and Arcata, as the trail project has been directly linked to highway safety project. Highly elevated collision rates at at-grade crossings on Highway 101 between Eureka and Arcata led to a legislatively mandated Safety Corridor in 2002, reducing the speed limit from 60 mph to 50 mph and requiring daylight use of headlights. Caltrans and HCAOG then initiated the Eureka-Arcata Route 101 Corridor Improvement Project which will include the construction of an overpass at Indianola Cutoff, installation of a half signal at another intersection, and the closing of the remaining median crossings, with expected construction in 2022. As traffic volumes increase on Highway 101 between Eureka and Arcata, the effectiveness of the current Safety Corridor has declined and the average annual daily traffic is expected to increase from 36,300 vehicles per day (2011 data) to an estimated 48,800 by

2033. The Corridor Improvement Project would eliminate the uncontrolled crossing and left turn moves, improving safety for all.

The Humboldt Bay Trail and the Highway 101 Eureka-Arcata Corridor Improvement Project were formally linked by the California Coastal Commission in 2013 which ruled that for consistency with the Coastal Act construction and right-of-way funding for the Humboldt Bay Trail must be secured before the Eureka-Arcata Route 101 Corridor Improvement Project can move forward. Delivery of these two important projects ensures improved safety for all modes of travel between Eureka and Arcata. The Corridor Improvement Project has been a top regional priority for highway safety since 2002 and is fully funded, but depends on completion of the Humboldt Bay Trail to enable its construction.

Completion of the Humboldt Bay Trail will also provide active transportation access to the Indianola neighborhood east of Highway 101 as currently there are no public transit services to this area. Once Humboldt Bay Trail South and the Corridor Improvement Project are complete, trail users will be able to cross under Highway 101 to access the trail from Indianola. Rural neighborhood residents in this area without access to a vehicle will thus have safer alternative transportation access to Eureka and Arcata utilizing the planned underpass under 101 to reach the Humboldt Bay Trail once both projects have been completed.

Eureka Arcata Route 101 Corridor Improvement Project feirs_v1.pdf

Eureka-Arcata Route 101
Corridor Improvement Project

Humboldt County, California
District 1 – HUM – 101 PM 79.9 / 86.3
EA / EFIS
01-36600 / 0100000127
01-0E000 / 0113000091
01-0C970 / 0113000094
01-0C930 / 0113000078
01-0F220 / 0115000092
State Clearinghouse Number: 200109035

Final Environmental Impact Report/Statement

Volume I of IV

December 2016

Prepared by the U.S. Department of Transportation
Federal Highway Administration (FHWA) and the
State of California Department of Transportation (Caltrans)
For the Humboldt County Association of Governments (HCAOG)

Part B: Narrative Questions

Question #7

COST EFFECTIVENESS (0-5 POINTS)

A project's cost effectiveness is considered to be the relative costs of the project in comparison to the project's benefits as defined by the purpose and goals of the ATP. This includes the consideration of the safety and mobility benefit in relation to both the total project cost and the funds provided.

Explain why this project is the best use of State Resources. (5 points max.) (Max of 250 words) **Words Remaining:** 0

The project's cost is relatively high due to the length, project area constraints, and elements such as bridges, retaining wall, revetment repair, eucalyptus tree removal, and cable barrier. The retaining wall (item 21: $1,230,000) is needed to maintain capacity of the adjacent drainage ditch. Shoreline revetment repair (items 25-26: $845,000) is needed due to erosion damage and high flood hazard vulnerability. Eucalyptus tree removal (item 9: $380,000) is needed due to safety hazards. The cable barrier (items 31-33: $1,347,350) is incorporated as a safety enhancement due to recent vehicle departures from the highway.

Humboldt County has looked closely over the last five years to identify the most cost-effective alignments and project elements. Notable features include:

Integrating the multi-use trail into the railroad right-of-way and a private levee.
Utilizing a cooperative use design for the existing railroad bridge rather than constructing a new bridge (savings of nearly $10 million).
Reducing the setback from the railroad in Segment 3 to minimize wetland impacts.
Incorporating on-site wetland creation to minimize off-site mitigation.
Occupying the former highway fill prism near the new Indianola Interchange (where Highway 101 will shift eastward) to minimize wetland impacts.
Utilizing basic designs for the three new bridges.
Accounting for flood hazards and sea-level rise in trail elevations.

Project benefits are extremely high due to the connecting of disadvantaged communities, enabling full utilization of adjoining trail segments, new trip generation, supporting the linked Corridor Project, and outstanding user experience along Humboldt Bay. The project has exceptionally high leveraging funding (41%).

Part B: Narrative Questions

Question #8

LEVERAGING FUNDS (0-5 POINTS)

A. The application funding plan will show all federal, state and local funding for the project: (5 points max)

Based on the project funding information provided earlier in the application (Part 6: Project Funding), the following Leveraging amounts are designated for this project. If these numbers do not match the applicant's expectations, the numbers shown earlier need to be revised.

Non-ATP funding can only be considered "Leveraging" funding if it goes towards ATP eligible costs. If the project includes ineligible costs, the application must confirm the leveraging funding shown below does not include the non-ATP funds for ineligible items.

PA&ED Phase Project Delivery Costs:
Leveraging Funding: $1,460 Designate the Funding Type: State

PS&E Phase Project Delivery Costs:
Leveraging Funding: $550 Designate the Funding Type: State

Right of Way Phase Project Delivery Costs:
Leveraging Funding: $2,000 Designate the Funding Type: State

Construction Phase Project Delivery Costs:
Leveraging Funding: $5,304 Designate the Funding Type: Coastal Conservancy Funds

Projects with NON-INFRASTRUCTURE (NI) elements:
Leveraging Funding: $0 Designate the Funding Type:

OVERALL TOTALS FOR PROJECT/APPLICATION:
Total Project Costs: $22,600
Leveraging Funding: $9,304
% of Total Project 41.17%

Total Points received for "leveraging funding": (Auto-calculated)

1 Point	At least 1% to 5% of total project cost
2 Points	More than 5% to less than 10% of total project cost
3 Points	At least 10% to 15% of total project cost
4 Points	More than 15% to 20% of the project cost
5 Points	More than 20% of the total project cost

Optional: If desired, clarifications can be added to explain the leveraging funding and its intended use on the ATP project.
(Max of 100 Words) **Words Remaining:** 23

The PA&ED and PS&E phases have been funded through the STIP to the County of Humboldt. The ROW phase is also being funded through the STIP through a transfer of funds from Caltrans/HCAOG originally intended for the Highway 101 Eureka-Arcata Corridor Improvement Project but not utilized for that project. Construction leveraging funds have been offered by both Caltrans through the Minor A program ($1,250,000) and the SHOPP ($2,054,000 for Outer Barrier Separation) and the Coastal Conservancy ($2,000,000).

Part B: Narrative Questions

Question #9

QUESTION #9
SCOPE AND PLAN CONSISTENCY (0 - 2 points)

A. The application, scope and plans are consistent with one another: (2 points max)

The scope and plans are consistent with one another including:
- **Improvement location(s)**
- **Improvement elements(s)**

Part B: Narrative Questions

Question #10

USE OF CALIFORNIA CONSERVATION CORPS (CCC) OR CERTIFIED COMMUNITY CONSERVATION CORPS (0-5 POINTS)

- For project "Plan" types, this section is not required. -

☐ Applicant has not coordinated with both corps, or Tribal Corps (if applicable) (-5 points)

☐ Applicant contacted the corps; but does not intend to partner with any corps (-5 points)

Step 1: The applicant must submit the following information via email concurrently to both the CCC AND Certified Community Conservation Corps at least 5 days prior to application submittal to Caltrans. The CCC and Certified Community Conservation Corps will respond within five (5) business days from receipt of the information.

- Project Title
- Project Description
- Detailed Estimate
- Project Schedule
- Project Map
- Preliminary Plan

Click on the following links for the California Conservation Corps and Certified Community Conservation Corps Representative ATP contact information:
http://www.ccc.ca.gov/work/programs/ATP/Pages/ATP%20home.aspx
http://calocalcorps.org/active-transportation-program/

The applicant must also attach any email correspondence from the CCC and Certified Community Conservation Corps or Tribal Corps (if applicable) to the application verifying communication/participation. Failure to attach their email responses will result in a loss of 5 points.

Attach submittal email, response email and any attachment(s) from the CCC:

Submittal and CCC response to Bay Trail South ATP request.pdf

Attach submittal email, response email and any attachment(s) from the Certified Community Conservation Corps:

Local Corps Response.pdf

Attach submittal email, response email and any attachment(s) from the Tribal Corps (If applicable):

Step 2: The applicant has coordinated with the CCC AND with the Certified Community Conservation Corps, or the Tribal Corps and determined the following: (check appropriate box)

☒ Applicant intends to utilize the CCC, Certified Community Conservation Corps, or the Tribal Corps on the following items listed below. (0 points) (Max of 100 Words)

Words Remaining: 66

The County of Humboldt intends to utilize the CCC on the construction of Bay Trail South. Specifically, the CCCs based out of Fortuna can assist with the 5,400 square yards of clearing and grubbing.

☐ No corps can participate in the project. (0 points)

☐ At the time that the application was submitted, the applicant had not received a response from the following corps: (0 points)

☐ the CCC ☐ the Certified Community Conservation Corps ☐ the Tribal Corps (if applicable)

Gmail by Google

Emily Sinkhorn <emily@nrsrcaa.org>

Humboldt Bay Trail South - request for assistance

2 messages

Seemann, Hank <HSeemann@co.humboldt.ca.us> Wed, Jul 18, 2018 at 5:50 PM
To: "atp@ccc.ca.gov" <atp@ccc.ca.gov>, "inquiry@atpcommunitycorps.org" <inquiry@atpcommunitycorps.org>
Cc: "Allee, Mark@CCC" <Mark.Allee@ccc.ca.gov>, Emily Sinkhorn <emily@nrsrcaa.org>, "Ortega, Raquel@CCC" <raquel.ortega@ccc.ca.gov>

Hello-

Humboldt County is contacting you regarding the following project which will be submitted for ATP Cycle 4 funding later this month:

Project Title – Humboldt Bay Trail South

Project Description – Construction of a 4.2-mile paved bike path along the railroad and Highway 101 transportation corridor between Eureka and Arcata

Detailed Estimate – Attached

Project Schedule – Estimated to start construction in late 2020 or early 2021

Project Map – Attached

Preliminary Plan – Attached

The CCC's worked with the City of Arcata and City of Eureka on similar projects around Humboldt Bay, and we would greatly appreciate working with the CCCs on this Humboldt Bay Trail South project. Specifically, the "clearing and grubbing" item is a great fit. We propose to work with the CCC's in the winter of 2020-2021 on clearing vegetation before the beginning of the 2021 bird nesting season. Please let us know if you are interested in participating on this project, within five business days from receipt of this information. Let us know if you have any questions.

Thank you,

Hank

Hank Seemann
Deputy Director - Environmental Services

Humboldt County Public Works Department
1106 Second Street
Eureka, CA 95501
707-268-2680

4 attachments

Bay Trail South Project Location Map_7_17_18.pdf
406K

Attachment-F-EngrEstimate.pdf
43K

Preliminary Plans.pdf
580K

Segment Figures.pdf
5222K

ATP@CCC <ATP@ccc.ca.gov> Thu, Jul 19, 2018 at 8:54 AM
To: "Seemann, Hank" <HSeemann@co.humboldt.ca.us>, "ATP@CCC" <ATP@ccc.ca.gov>, "inquiry@atpcommunitycorps.org" <inquiry@atpcommunitycorps.org>
Cc: "Allee, Mark@CCC" <Mark.Allee@ccc.ca.gov>, Emily Sinkhorn <emily@nrsrcaa.org>, "Ortega, Raquel@CCC" <raquel.ortega@ccc.ca.gov>

Hi Hank,

Thank you for reaching out to the California Conservation Corps. Mark Allee, Project Coordinator for our Fortuna District has indicated that the CCC can assist with the 5,400 square yards of clearing and grubbing, if funded. Please include this email with your application as proof that you reached out to the California Conservation Corps.

Thanks,

JULIE WOLSEY

Legislative, Proposition 1 and ATP Analyst

Legislative Unit

1719 24th Street

Sacramento, CA 95816

P: (916) 341-3207

Julie.wolsey@ccc.ca.gov

ccc.ca.gov

Hard Work. Low Pay. Miserable Conditions and More

From: Seemann, Hank [mailto:HSeemann@co.humboldt.ca.us]
Sent: Wednesday, July 18, 2018 5:51 PM
To: ATP@CCC <ATP@CCC.CA.GOV>; inquiry@atpcommunitycorps.org
Cc: Allee, Mark@CCC <Mark.Allee@CCC.CA.GOV>; 'Emily Sinkhorn' <emily@nrsrcaa.org>; Ortega, Raquel@CCC <raquel.ortega@ccc.ca.gov>
Subject: Humboldt Bay Trail South - request for assistance

[Quoted text hidden]

Active Transportation Program <inquiry@atpcommunitycorps.org> Jul 25 (5 days ago)

to Hank, atp, Mark.Allee, me, raquel.ortega

Hello Hank,

Thank you for contacting the Local Conservation Corps. Unfortunately, we are unable to participate in this project. Please include this email with your application as proof that you reached out to the Local Conservation Corps.

Thank you,
Dominique

On Wed, Jul 18, 2018 at 5:50 PM, Seemann, Hank <HSeemann@co.humboldt.ca.us> wrote:

Hello-

Humboldt County is contacting you regarding the following project which will be submitted for ATP Cycle 4 funding later this month:

Project Title – Humboldt Bay Trail South

Project Description – Construction of a 4.2-mile paved bike path along the railroad and Highway 101 transportation corridor between Eureka and Arcata

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Project Schedule – Estimated to start construction in late 2020 or early 2021

Project Map – Attached

Preliminary Plan – AttachedThe CCC's worked with the City of Arcata and City of Eureka on similar projects around Humboldt Bay, and we would greatly appreciate working with the CCCs on this Humboldt Bay Trail South project. Specifically, the "clearing and grubbing" item is a great fit. We propose to work with the CCC's in the winter of 2020-2021 on clearing vegetation before the beginning of the 2021 bird nesting season. Please let us know if you are interested in participating on this project, within five business days from receipt of this information. Let us know if you have any questions.

Thank you,

Hank

Hank Seemann
Deputy Director - Environmental Services

Humboldt County Public Works Department
1106 Second Street
Eureka, CA 95501
707-268-2680

--

Dominique Lofton | Program Associate
Environmental & Energy Consulting
1121 L Street, Suite 400
Sacramento, CA 95814
916.426.9170 | inquiry@atpcommunitycorps.org

Part B: Narrative Questions

Question #11

APPLICANT'S PERFORMANCE ON PAST ATP FUNDED PROJECTS (0 to -10 points)

For CTC use only.

Part C: Application Attachments

Applicants must ensure all data in this part of the application is fully consistent with the other parts of the application. See the Application Instructions and Guidance document for more information and requirements related to Part C.

List of Application Attachments

The following attachment names and order must be maintained for all applications. Depending on the Project Type (I, NI or Plans) some attachments will be intentionally left blank. All non-blank attachments must be identified in hard-copy applications using "tabs" with appropriate letter designations

Application Signature Page (Required for all applications) — **Attachment A**

ATP - HBTS - Attachment A.pdf

Engineer's Checklist (Required for Infrastructure & Combo Projects) — **Attachment B**

Attachment-B-Engr-Checklist - signed.pdf

Project Location Map (Required for all applications) — **Attachment C**

Bay Trail South Project Location Map_Final.pdf

Project Map/Plans showing existing and proposed conditions — **Attachment D**
(Required for all Infrastructure Projects; Optional for 'Non-Infrastructure' and 'Plan' Projects)

Attachment D compiled.pdf

Photos of Existing Conditions (Required for all applications) — **Attachment E**

Bay Trail South ATP compiled photos.pdf

Project Estimate (Required for all Infrastructure Projects) — **Attachment F**

Attachment-F-EngrEstimate_Bay Trail ATP final.pdf

.on-Infrastructure Work Plan (Form 22-R) — **Attachment G**
(Required for all projects with Non-Infrastructure Elements)

Plan Scope of Work (Form 22-PLAN) — **Attachment H**
(Required for all Plan Projects)

Letters of Support (10 maximum) — **Attachment I**
(Required or recommended for all projects as designated in the instructions) (All letters must be scanned into one document.)

Combined Bay Trail South Support Letters.pdf

Exhibit 22-F State Funding — **Attachment J**

Additional Attachments — **Attachment K**
(Additional attachments may be included. They should be organized in a way that allows application reviews easy identification and review of the information.) (All additional attachments must be scanned into one document.)

Bay Trail South ATP Attachment K.pdf

Part C: Attachments
Attachment A: Signature Page

IMPORTANT: Applications will not be accepted without all required signatures.

Implementing Agency: Chief Executive Officer, Public Works Director, or other officer authorized by the governing board
The undersigned affirms that their agency will be the "Implementing Agency" for the project if funded with ATP funds and they are the Chief Executive Officer, Public Works Director or other officer **authorized by their governing board with the authority to commit the agency's resources and funds.** They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge. For infrastructure projects, the undersigned affirms that they are the manager of the public right-of-way facilities (responsible for their maintenance and operation) or they have authority over this position.

Signature: [signature] Date: 7/24/18
Name: Thomas K. Mattson Phone: 707 445-7491
Title: Director e-mail: TMattson@co.humboldt.ca.us

For projects with a Partnering Agency: Chief Executive Officer or other officer authorized by the governing board
(For use only when appropriate)
The undersigned affirms that their agency is committed to partner with the "Implementing Agency" and agrees to assume the responsibility for the ongoing operations and maintenance of the facility upon completion by the implementing agency and they intend to document such agreement per the CTC guidelines. The undersigned also affirms that they are the Chief Executive Officer or other officer authorized by their governing board with the authority to commit the agency's resources and funds. They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge.

* within Caltrans R/W

Signature: * [signature] Date: 7/19/2018
Name: Tom Fitzgerald Phone: 707-496-6614
Title: DDD Maint & Ops e-mail: Tom.Fitzgerald@dot.ca.gov

ATP Engineer's Checklist for Infrastructure Projects

Required for "Infrastructure" applications ONLY

This application checklist is to be used by the engineer in "responsible charge" of the preparation of this ATP application to ensure all of the primary elements of the application are included as necessary to meet the CTC's requirements for a PSR-Equivalent document (per CTC's ATP Guidelines and CTC's Adoption of PSR Guidelines - Resolution G-99-33) and to ensure the application is free of critical errors and omissions; allowing the application to be accurately ranked in the statewide and regional ATP selection processes.

Special Considerations for Engineers before they Sign and Stamp this document attesting to the accuracy of the application:

Chapter 7; Article 3; Section 6735 of the Professional Engineer's Act of the State of California requires engineering calculation(s) or report(s) be either prepared by or under the responsible charge of a licensed civil engineer. Since the corresponding ATP Infrastructure-application defines the scope of work of a future civil construction project and requires complex engineering principles and calculations which are based on the best data available at the time of the application, the application must be signed and stamped by a licensed civil engineer.

By signing and stamping this document, the engineer is attesting to this application's technical information and engineering data upon which local agency's recommendations, conclusions, and decisions are made. This action is governed by the Professional Engineer's Act and the corresponding Code of Professional Conduct, under Sections 6775 and 6735.

The following checklist is to be completed by the engineer in "responsible charge" of defining the project's Scope, Cost and Schedule per the expectations of the CTC's PSR Equivalent. The checklist is expected to be used during the preparation of the documents, but not initialed and stamped by the engineer until the final application and application attachments are complete and ready for submission to Caltrans.

1. **Vicinity map /Location map** **Engineer's Initials:** _____
   a. The project limits must be clearly depicted in relationship to the overall agency boundary

2. **Project layout-plan/map** showing existing and proposed conditions must: **Engineer's Initials:** _____
   a. Be to a scale which allows the visual verification of the overall project "construction" limits and limits of each primary element of the project. Scale must be shown on the plan/map
   b. Show the full scope of the proposed project, including any non-participating construction items
   c. Show all changes to existing motorized/non-motorized lane and shoulder widths. Label the proposed widths
   d. Show agency's right of way (ROW) lines when permanent or temporary ROW impacts are possible. (As appropriate, also show Caltrans', Railroad, and all other government agencies ROW lines)

3. **Typical cross-section(s)** showing existing and proposed conditions. **Engineer's Initials:** _____
   (Include cross-section for each controlling configuration that varies significantly from the typical)
   a. Show and dimension: changes in lane widths, ROW lines, side slopes, etc.

4. **Detailed Engineer's Estimate** **Engineer's Initials:** _____
   a. The Caltrans Project Estimate (Attachment F) must be filled out per the instructions and attached to the application, in the appropriate location.
   b. Each of the main project elements are broken out into separate construction items. The costs for each item are based on calculated quantities and appropriate corresponding unit costs
   c. All non-participating costs in relation to the ATP funding are clearly identified and accounted for separately from the eligible costs. The non-participating (or ineligible) costs must be consistent with Caltrans guidelines as shown in Local Assistance Program Guidelines chapter 22.6
   d. All project elements the applicant intends to utilize the CCC, certified community conservation corps, or tribal corps on need to be clearly identified and accounted for
   e. All project development costs to be funded by the ATP need to be accounted for in the total project cost

5. **Crash/Safety Data, Collision maps and Countermeasures**: **Engineer's Initials:** JW
   a. Confirmation that crash data shown is depicted accurately, is shown to scale, and occurred within influence area of proposed improvements.

6. **Project Schedule and Requested programming of ATP funding** **Engineer's Initials:** JW
   a. All applicants must anticipate receiving federal ATP funding for the project and therefore the project schedules and programming included in the application must account for all applicable federal requirements and timeframes.
   b. "Completed Dates" for project Milestone Dates shown in the application have been reviewed and verified
   c. "Expected Dates" for project Milestone Dates shown in the application account for all reasonable project timetables, including: Interagency MOUs, Caltrans agreements, CTC allocations, FHWA authorizations, federal environmental studies and approvals, federal right-of-way acquisitions, federal consultant selections, project permits, etc.
   d. The fiscal year and funding amounts shown in the PPR must be consistent with Implementing Agency's expected project milestone dates and available matching funds.

7. **Warrant studies/guidance (Check if not applicable)** **Engineer's Initials:** _____

☒ N/A

   a. For new Traffic Control Signals – an engineering study that includes analysis of Signal Warrants 1- 9 (CA MUTCD) must be submitted. For ATP funding, warrants 4, 5 or 7 should be met but the final decision to install a signal must be made by the engineer. The engineering study (and any additional documentation of the engineering judgment supporting the Traffic Control Signal, if needed) must include the name and license number of the responsible engineer and must be attached to the application in the "Additional Attachments" section.

8. **Additional narration and documentation:** **Engineer's Initials:** JW
   a. The text in the "Narrative Questions" in the application is consistent with and supports the engineering logic and calculations used in the development of the plans/maps and estimate
   b. When needed to clarify non-standard ATP project elements (i.e. vehicular roadway widening necessary for the construction of the primary ATP elements); appropriate documentation is attached to the application to document the engineering decisions and calculations requiring the inclusion of these non-standard elements.

Licensed Engineer:

Name *(Last, First)*: Wolf, Josh

Title: Civil Engineer

Engineer License Number: C70358

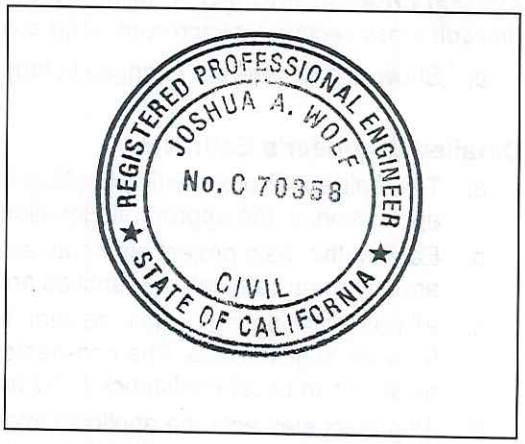
Signature: JW Wolf

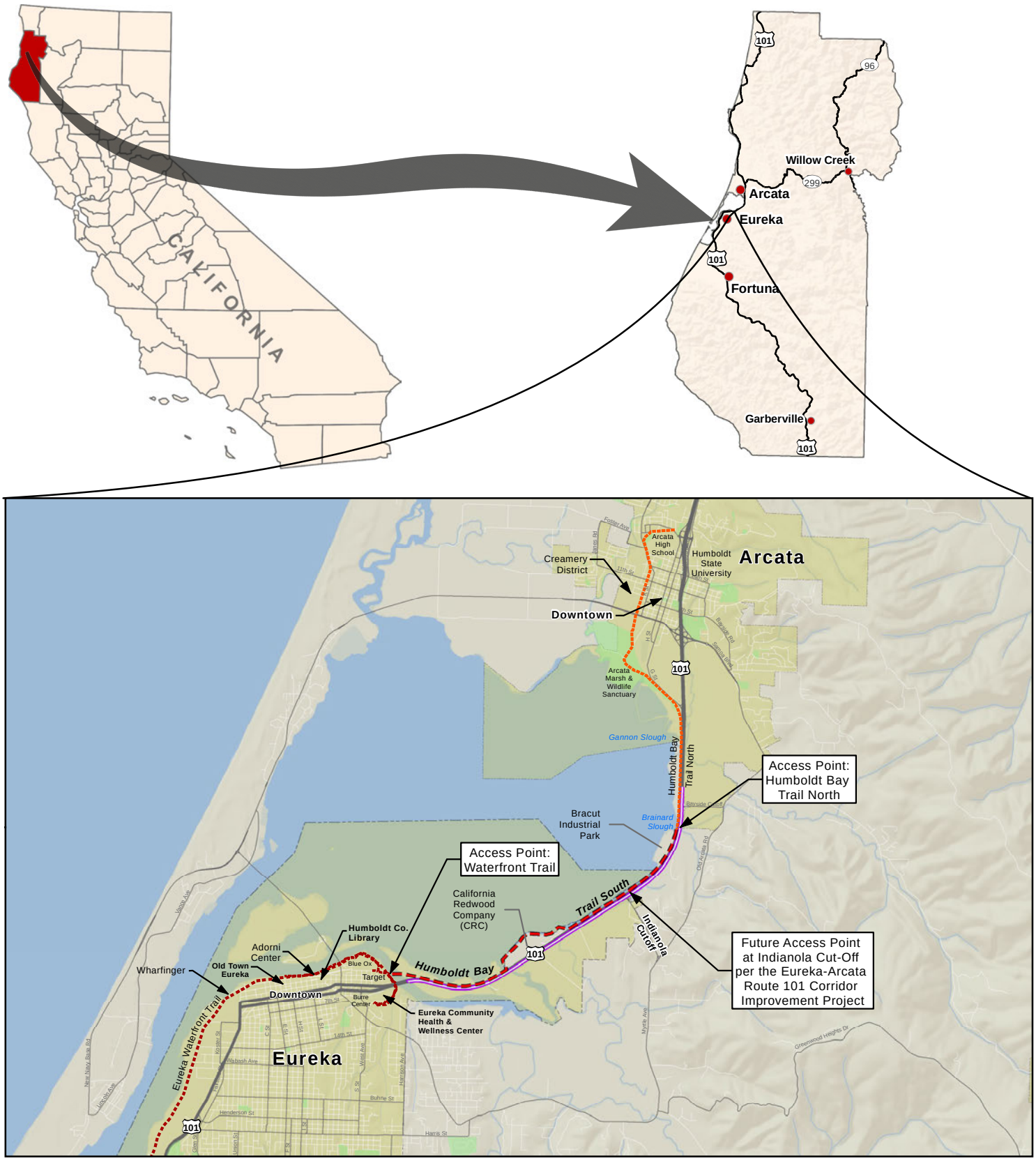
Date: 7/27/2018

Email: josh.wolf@ghd.com

Phone: 707-443-8326

Engineer's Stamp:





Paper Size 8.5" x 11" (ANSI A)
0 0.5 1 1.5
Miles
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

N

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
(Eureka to Bracut)

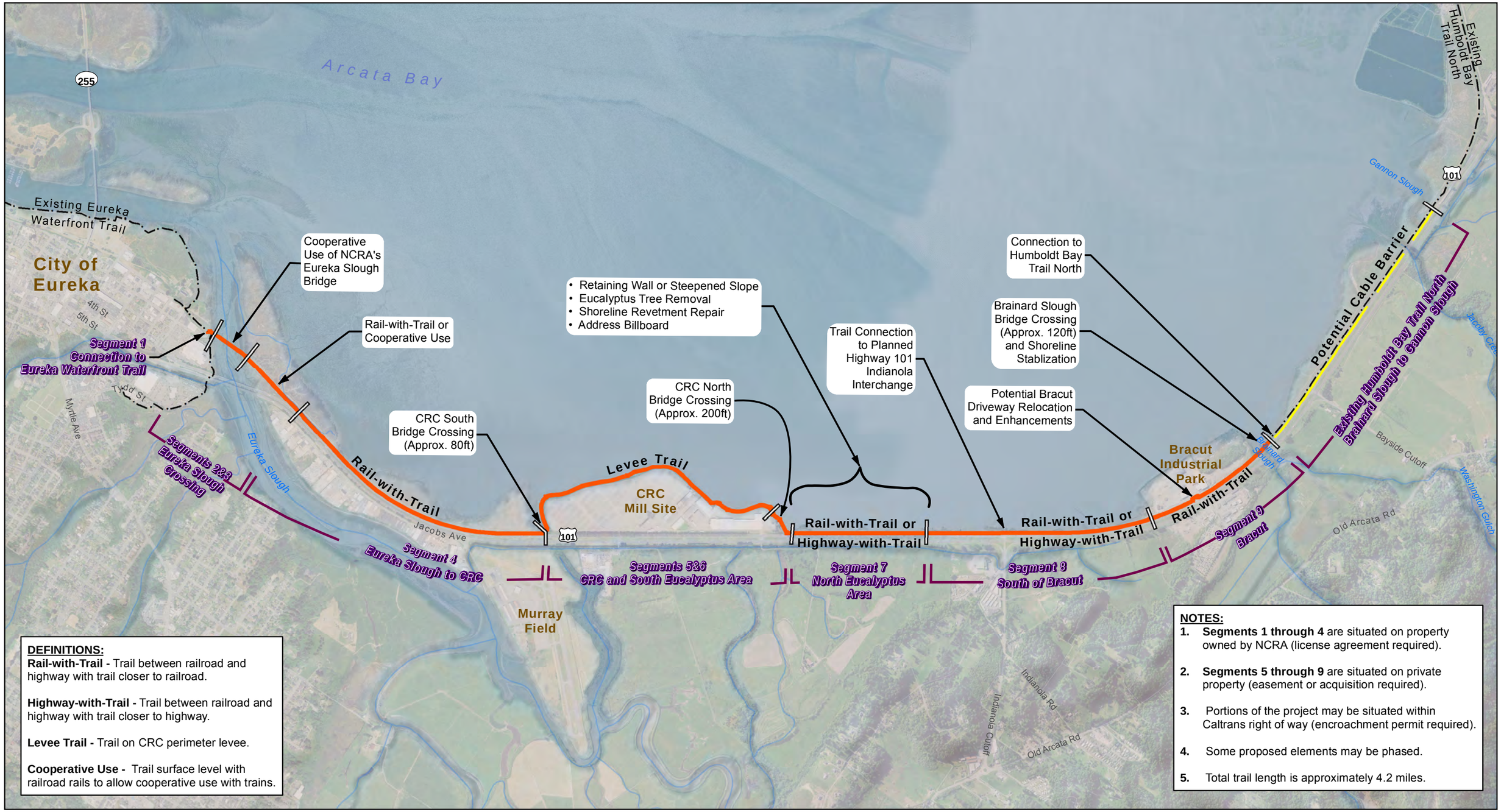
Job Number 11110166
Revision B
Date 23 Jul 2018

Project Location and Existing Conditions Map

Figure 1

718 Third Street Eureka CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

G:\111\11110166 Humboldt Bay Trail South PA&ED PS&E\08-GIS\Maps\Figures\ATP\11110166_01_Vicinity_RevC.mxd



DEFINITIONS:

Rail-with-Trail - Trail between railroad and highway with trail closer to railroad.

Highway-with-Trail - Trail between railroad and highway with trail closer to highway.

Levee Trail - Trail on CRC perimeter levee.

Cooperative Use - Trail surface level with railroad rails to allow cooperative use with trains.

NOTES:

1. **Segments 1 through 4** are situated on property owned by NCRA (license agreement required).
2. **Segments 5 through 9** are situated on private property (easement or acquisition required).
3. Portions of the project may be situated within Caltrans right of way (encroachment permit required).
4. Some proposed elements may be phased.
5. Total trail length is approximately 4.2 miles.

Paper Size 11" x 17" (ANSI B)

0 750 1,500 2,250 3,000

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

LEGEND

- Humboldt Bay Trail South
- Cable Railing - Humboldt Bay Trail North
- Existing Trail
- "Text" Project Segment
- Segment Break

ABBREVIATIONS

CRC	California Redwood Company
NCRA	North Coast Railroad Authority

Humboldt County Public Works Department
Humboldt Bay Trail - Bay Trail South
(Eureka to Bracut)

Job Number	11110166
Revision	E
Date	30 Jan 2018

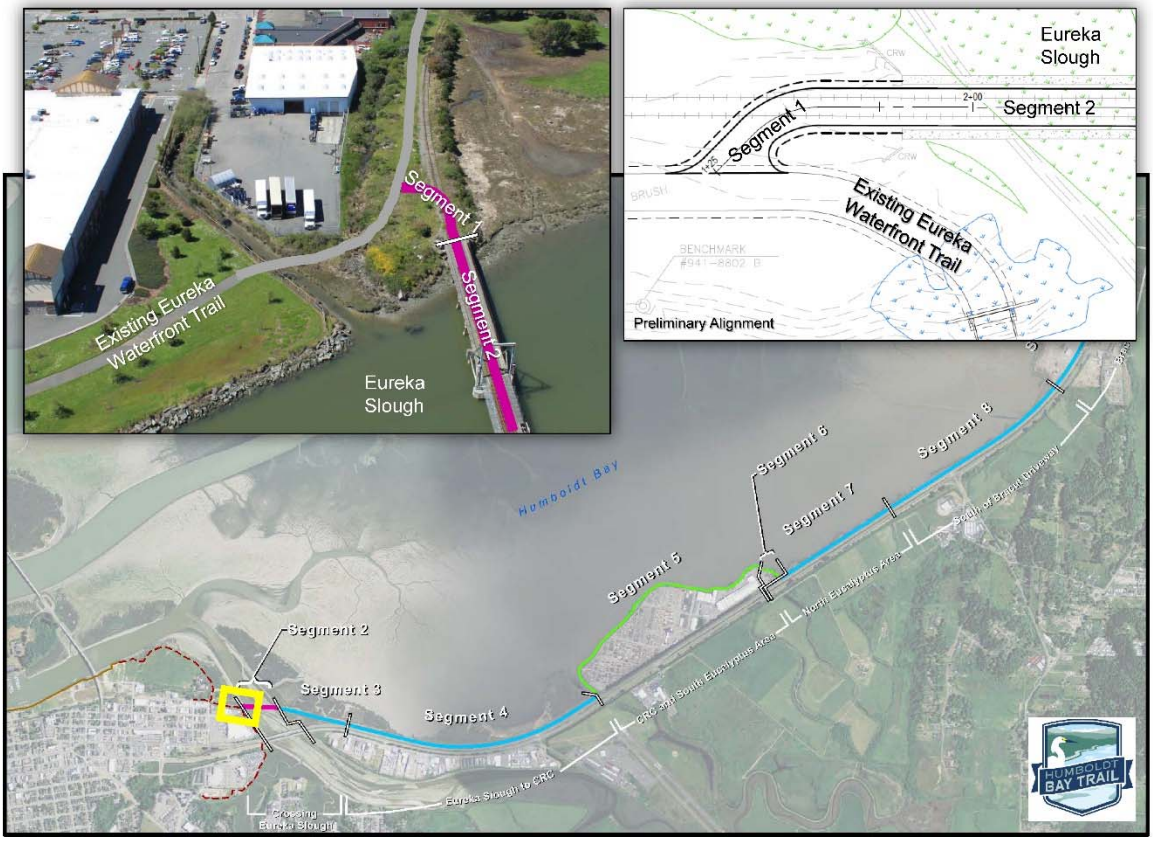
Proposed Trail Alignment and Key Components

Figure 2

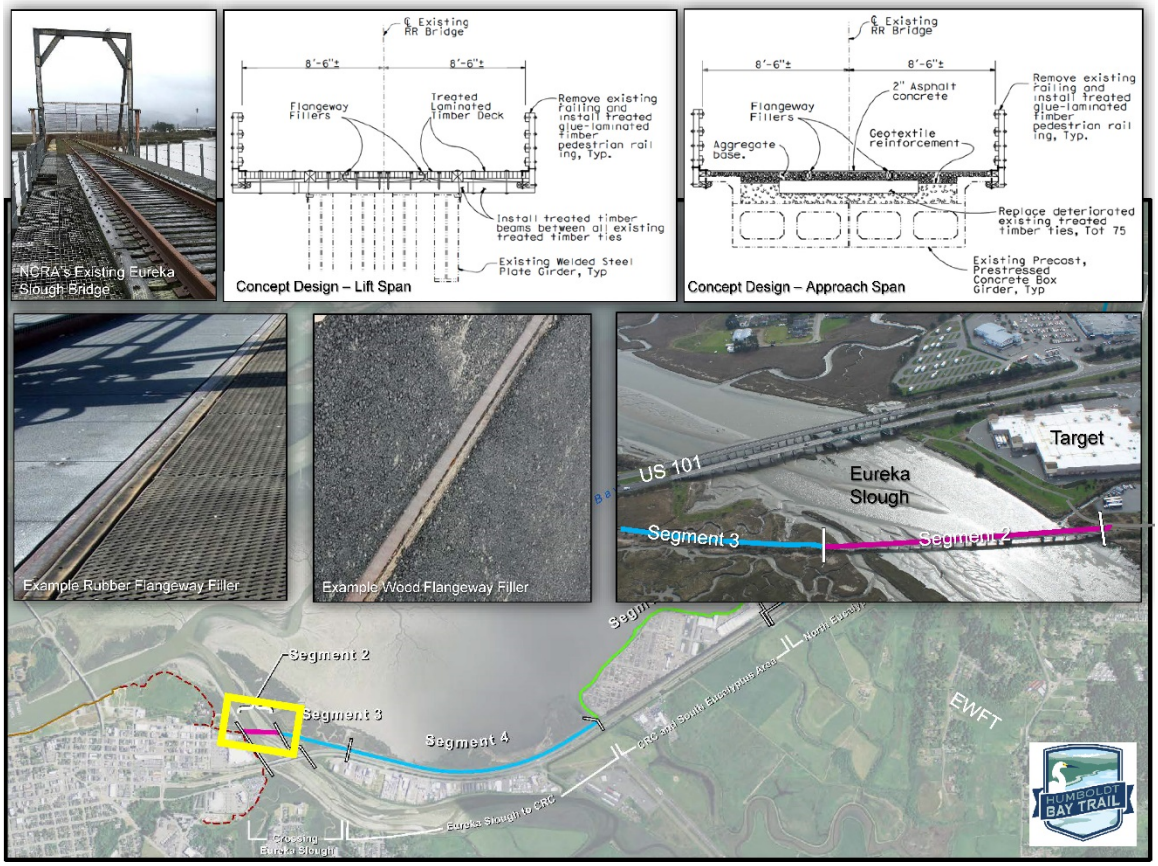
G:\111\11110166 Humboldt Bay Trail South PA&ED PS&E\08-GIS\Maps\Figures\ISMND\11110166_02_TrailAlignmentComponents_RevE.mxd

Data source: Aerial: NAIP USDA. **Created by:gldavidson**

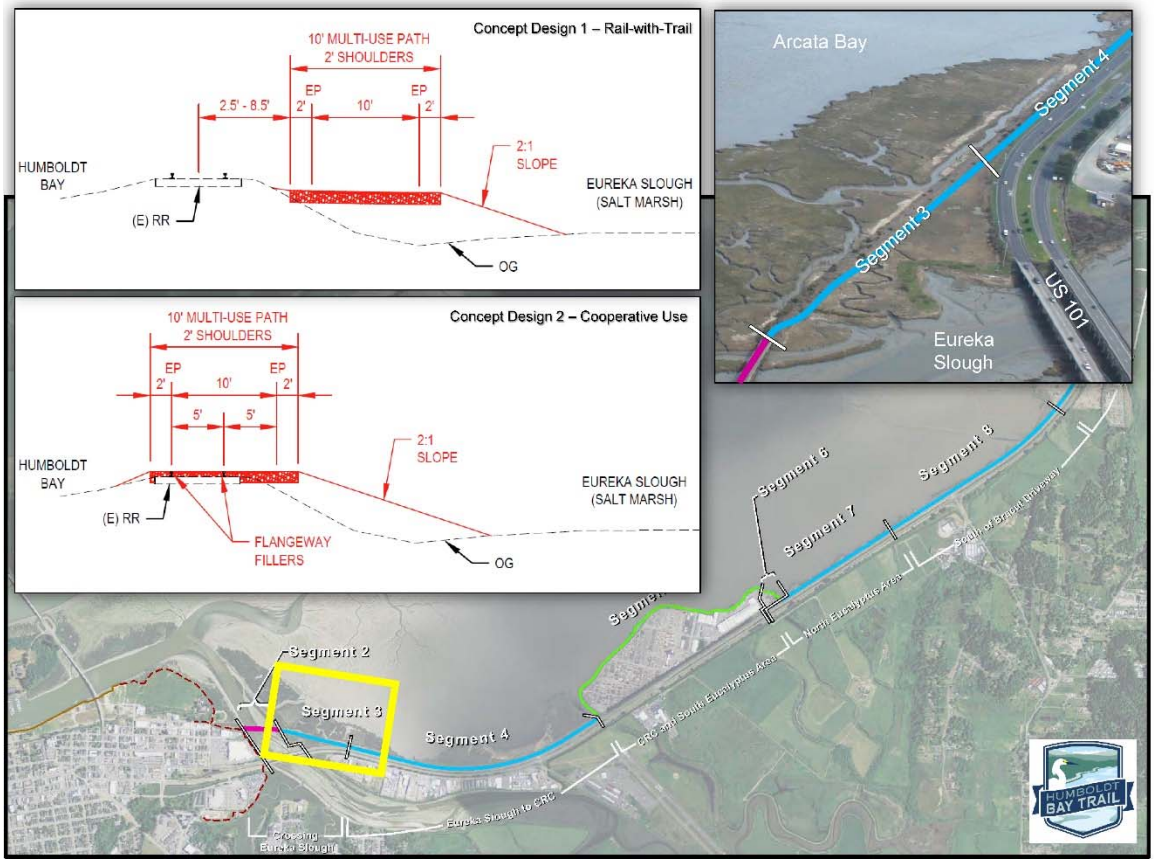
718 Third Street Eureka CA 95501 USA **T** 707 443 8326 **F** 707 444 8330 **E** eureka@ghd.com **W** www.ghd.com



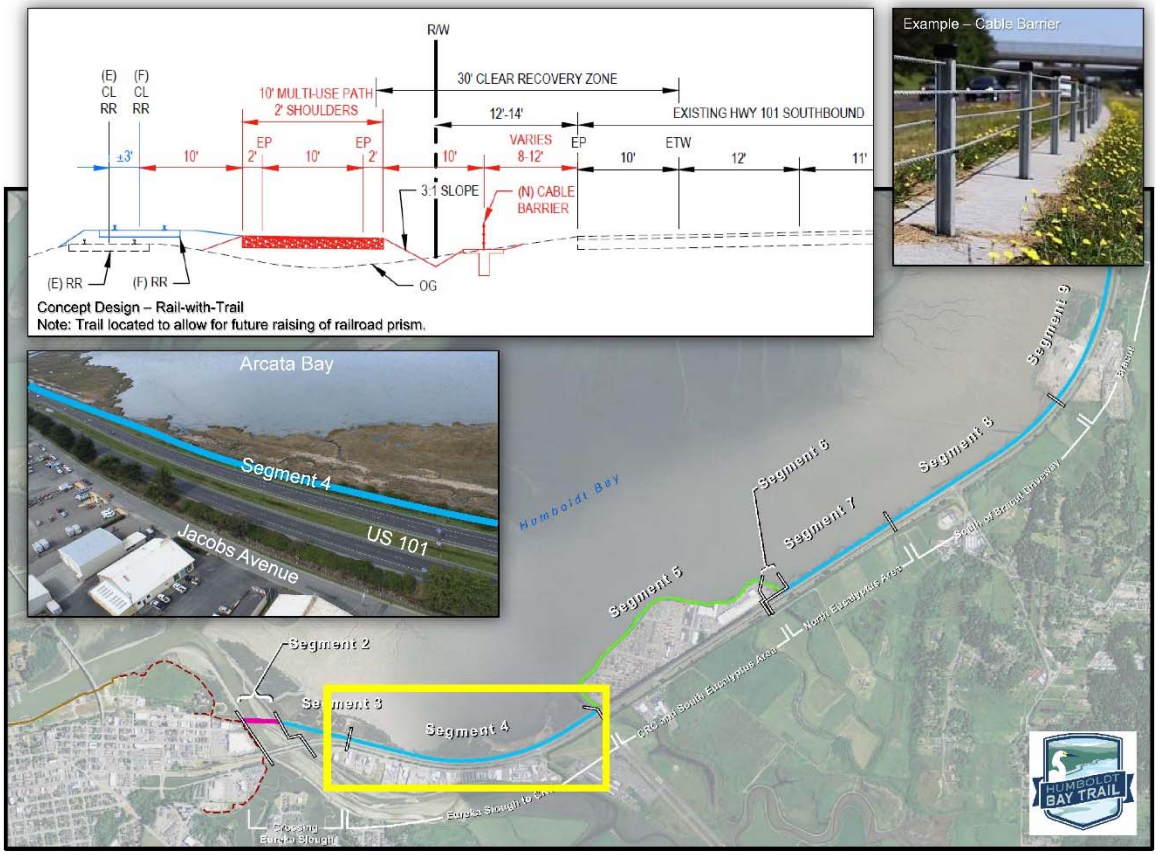
Segment 1 – Connection to Eureka Waterfront Trail



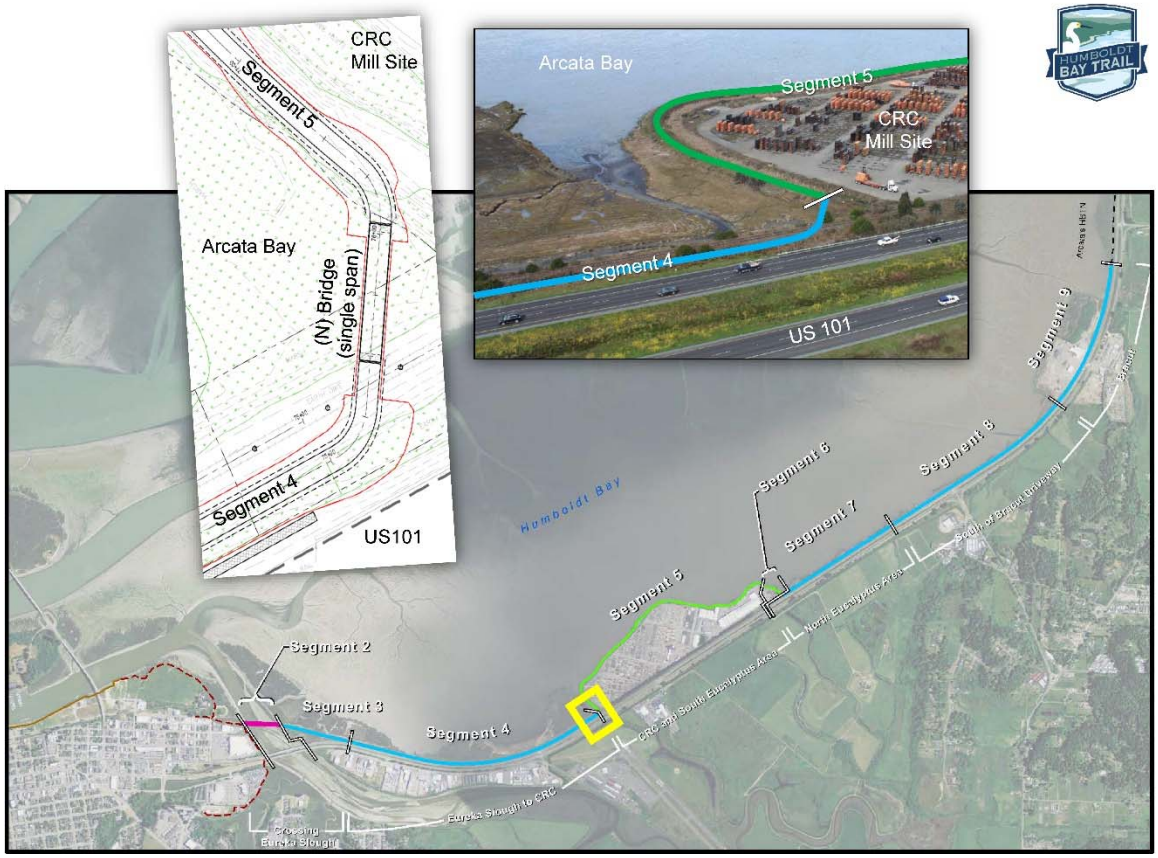
Segment 2 – Eureka Slough Crossing



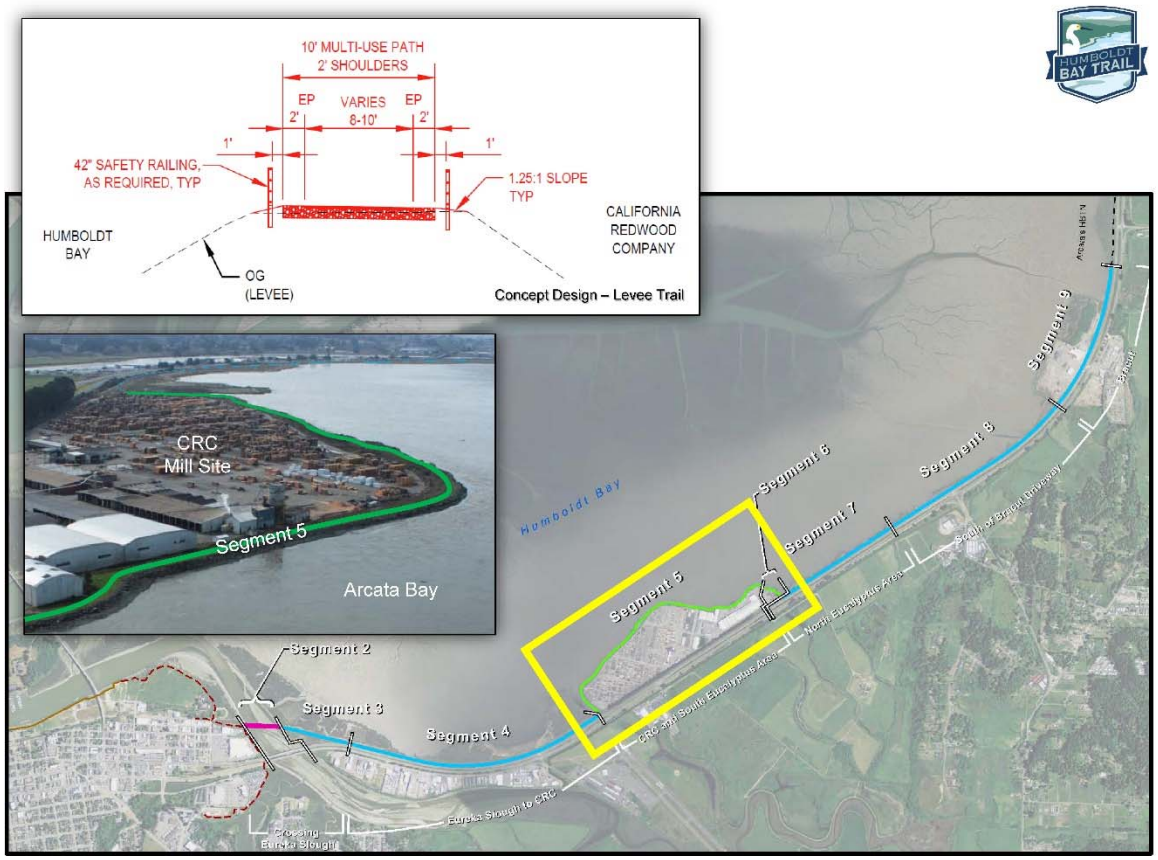
Segment 3 – Eureka Slough North



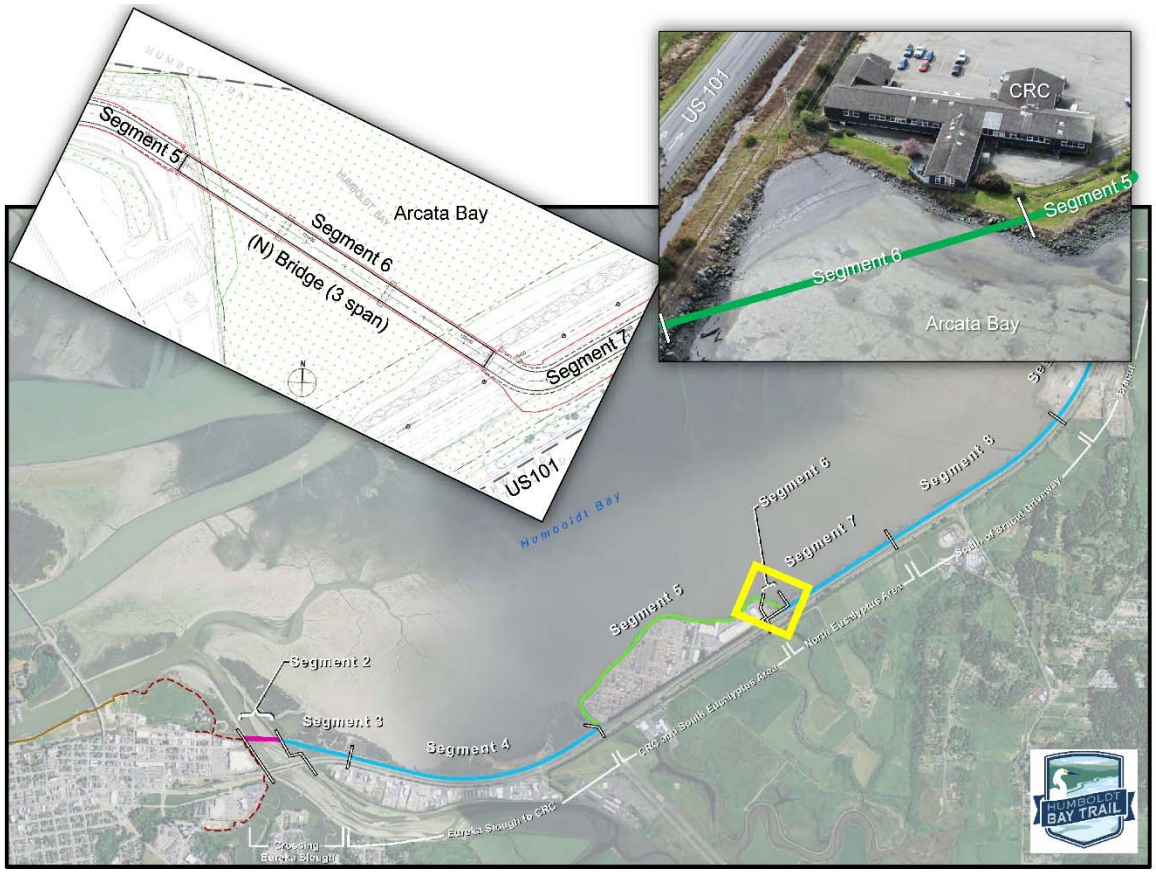
Segment 4 – Eureka Slough to CRC



Segment 4/5 – South CRC Bridge



Segment 5 – CRC



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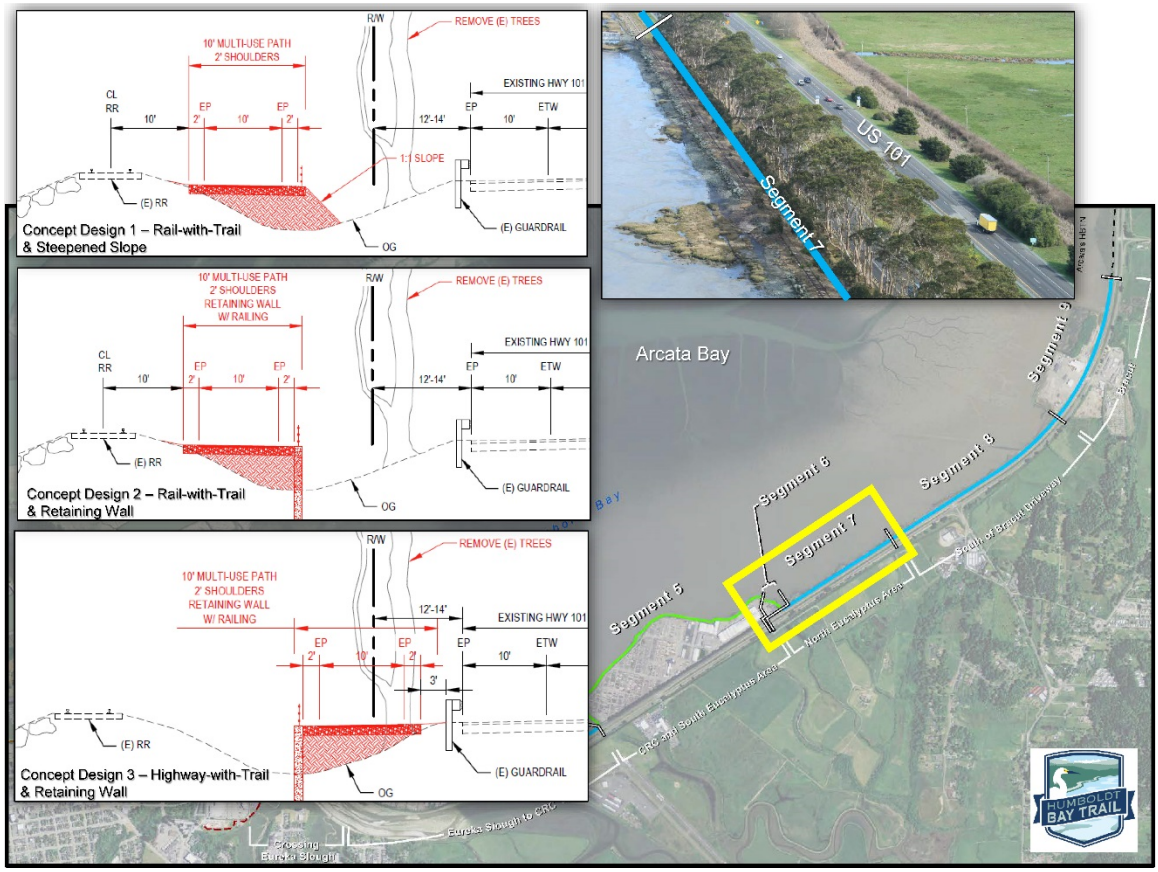
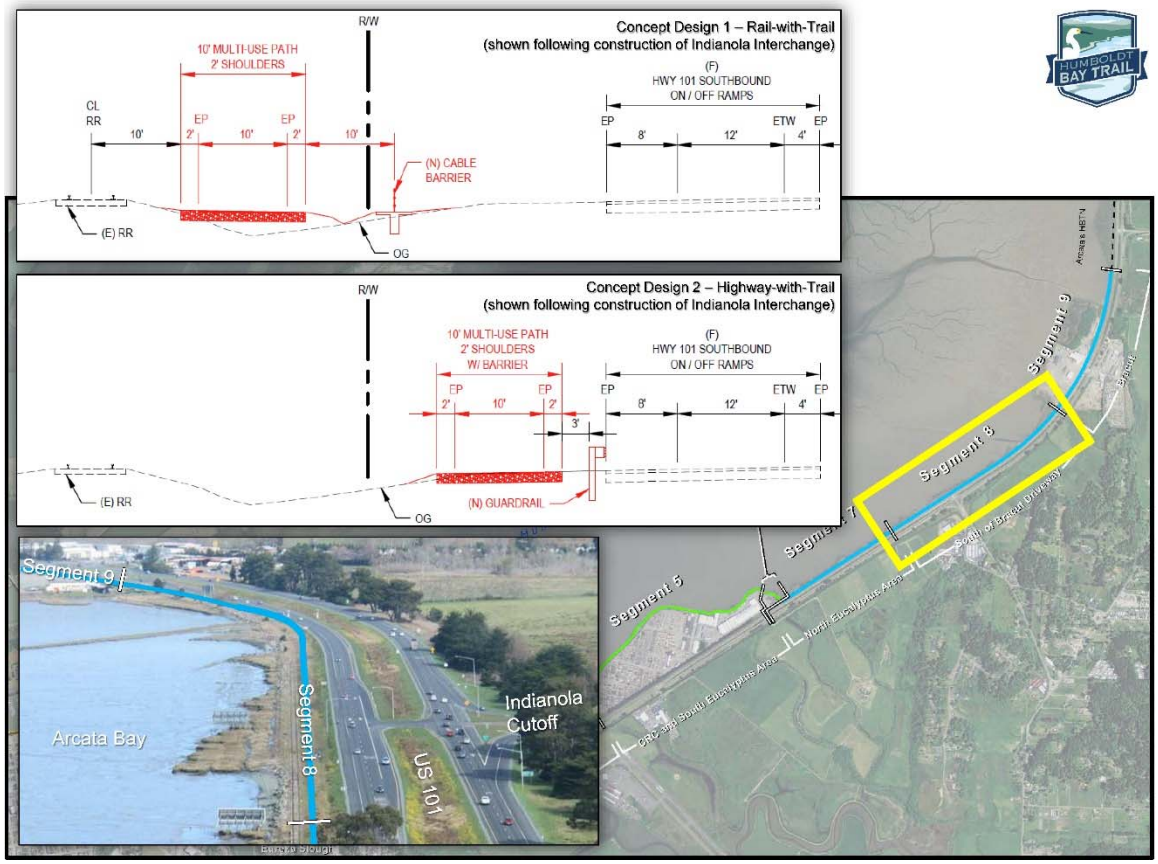
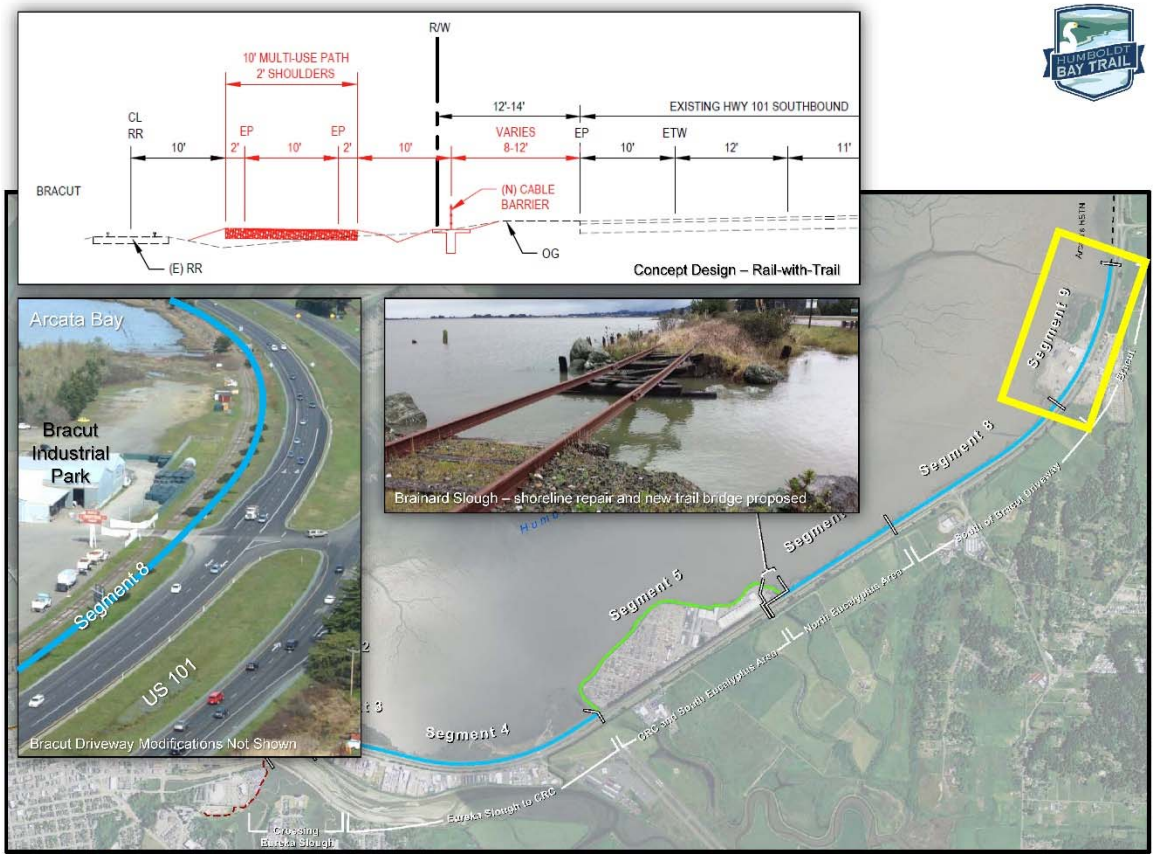


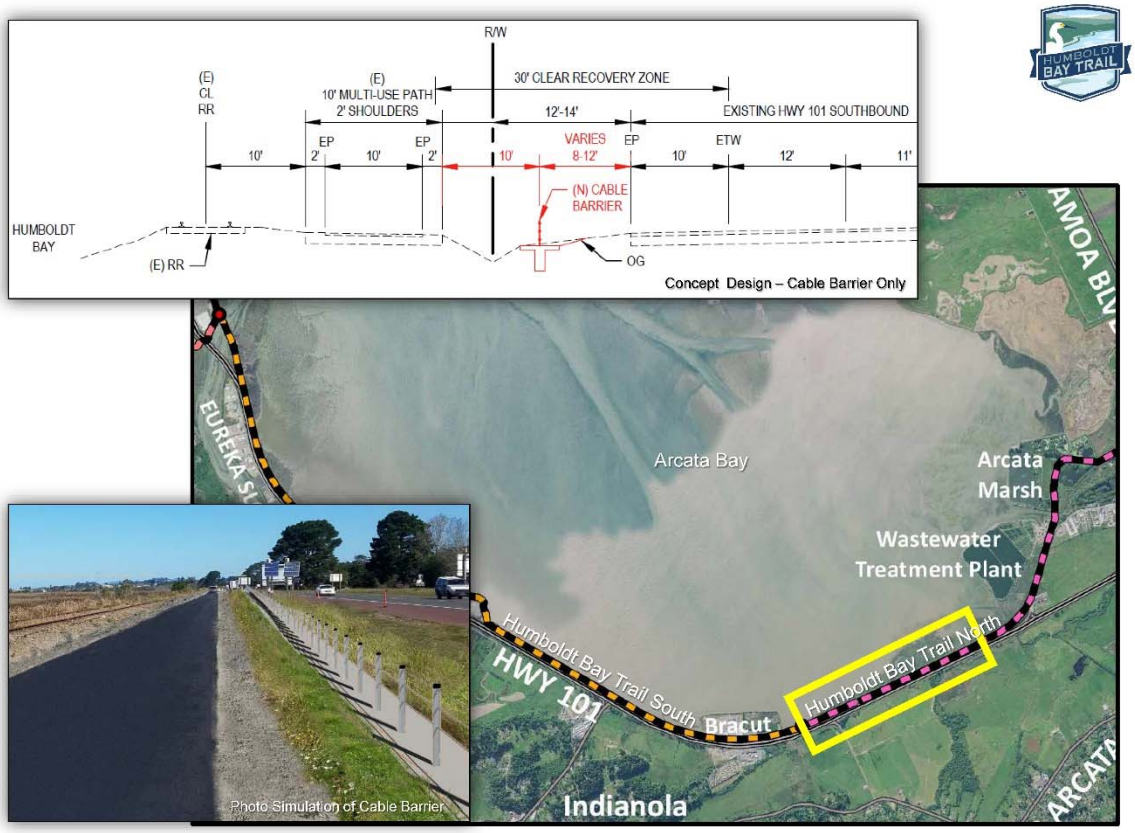
Segment 7 – Eucalyptus North



Segment 8 – Eucalyptus to Bracut



Segment 9 – Bracut



Humboldt Bay Trail North - HBTS

HUMBOLDT BAY TRAIL SOUTH

COUNTY OF HUMBOLDT

FEDERAL PROJECT NUMBER RPSTPL - 5904(143)

July 2018

AREA MAP

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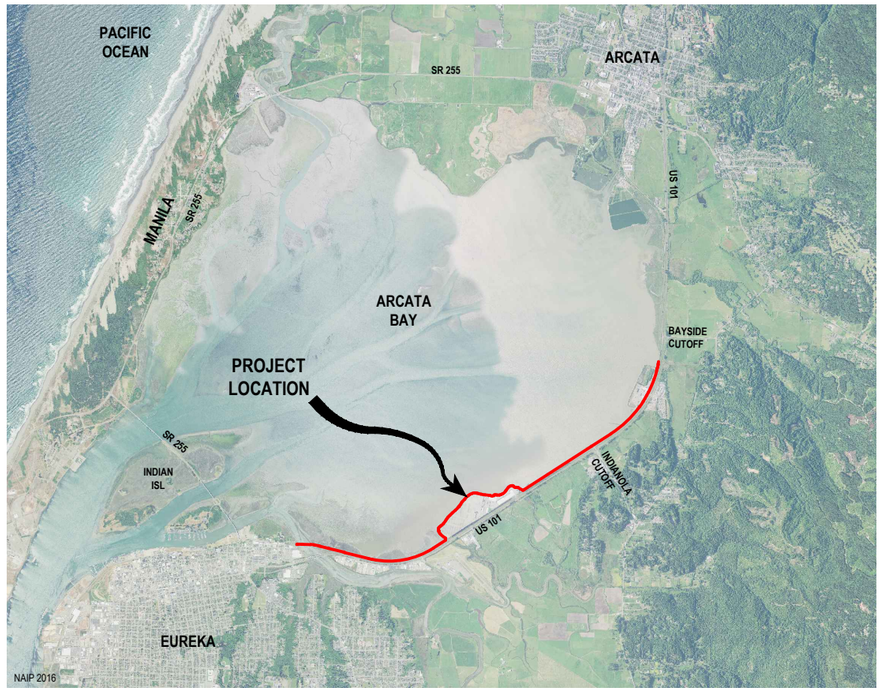
LOCATION MAP



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APPROVALS

TOM MATTSON
DIRECTOR OF PUBLIC WORKS
COUNTY OF HUMBOLDT

APPROVAL: _____ _____
SIGNED DATE

HANK SEEMANN
DEPUTY DIRECTOR OF PUBLIC WORKS
-ENVIRONMENTAL SERVICES
COUNTY OF HUMBOLDT

APPROVAL: _____ _____
SIGNED DATE

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Project No. 11110166
Original Size ANSI D
Sheet No. G-001
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CIVIL IMPROVEMENTS: CRC NORTH TO BRAINARD SLOUGH		
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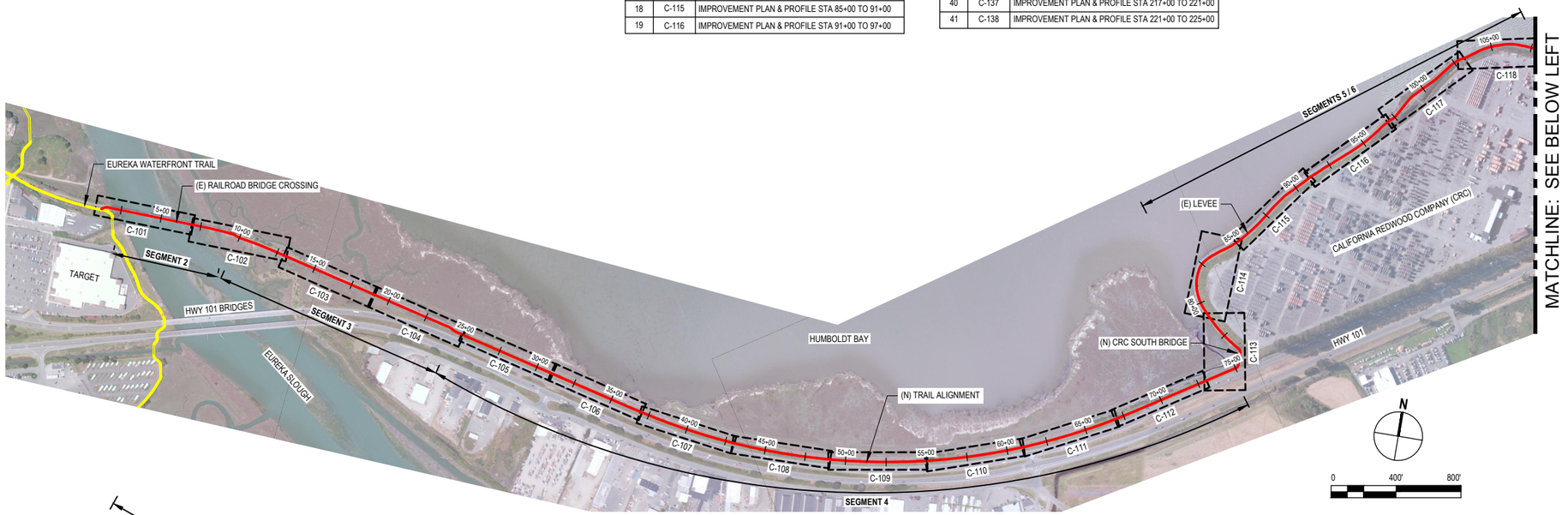
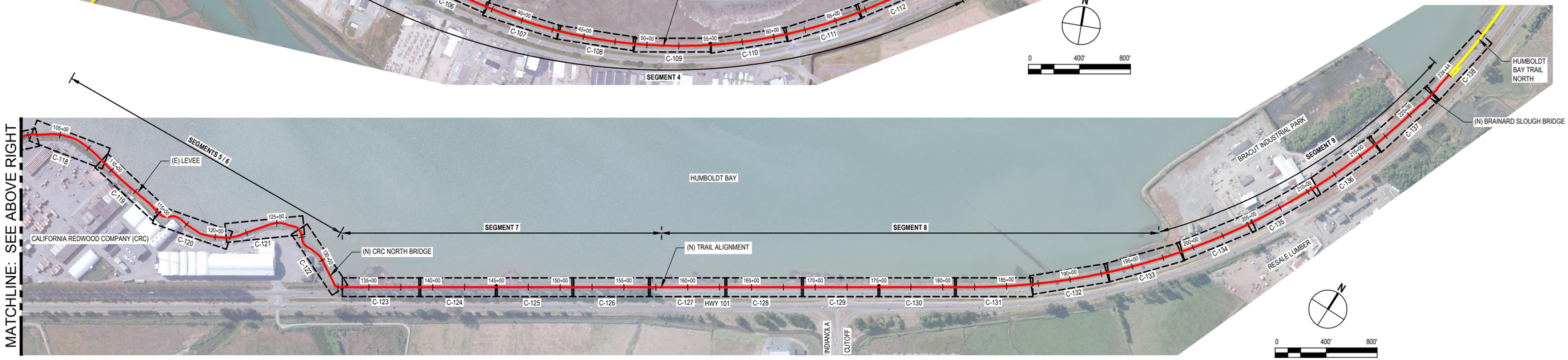
40	C-137	IMPROVEMENT PLAN & PROFILE STA 217+00 TO 221+00
41	C-138	IMPROVEMENT PLAN & PROFILE STA 221+00 TO 225+00

WETLAND LEGEND

- 3 PARAMETER WETLANDS
- 1 PARAMETER WETLANDS





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Sheet No. G-002

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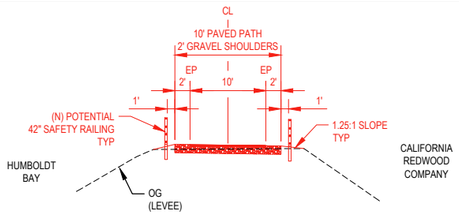
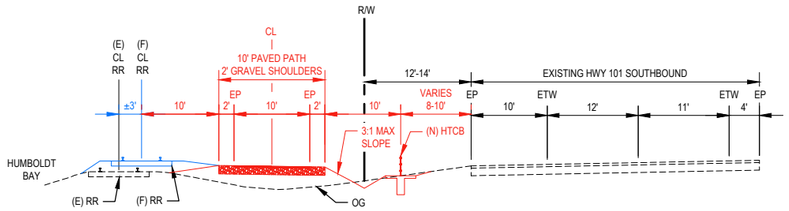
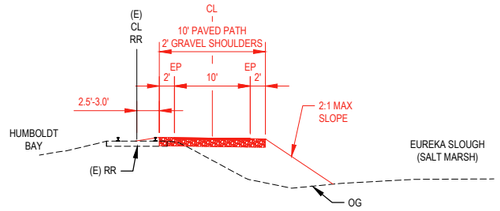


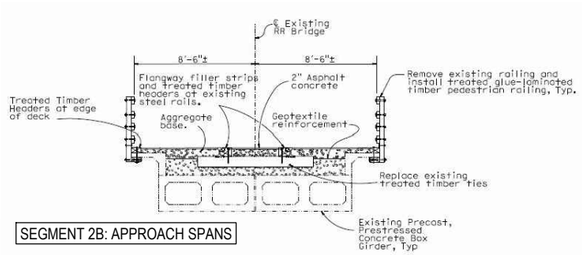
SEGMENT 5 / 6: CRC & SOUTH EUCALYPTUS



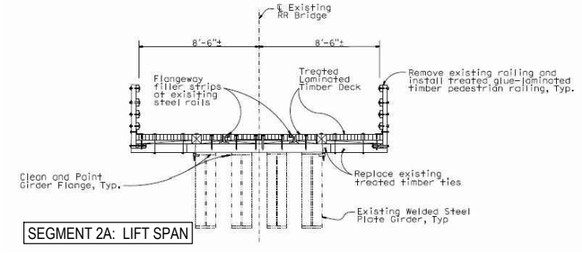
SEGMENT 4: EUREKA SLOUGH TO CRC



SEGMENT 3: TRANSITION FROM RAILROAD BRIDGE TO RAILROAD / HIGHWAY CORRIDOR

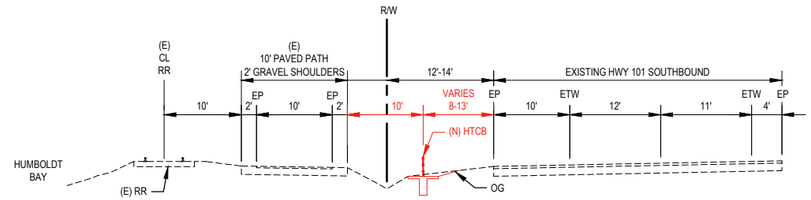


SEGMENT 2B: APPROACH SPANS

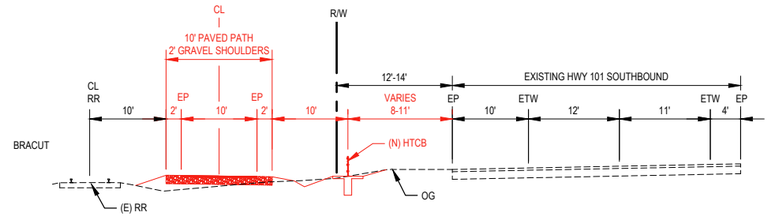


SEGMENT 2A: LIFT SPAN

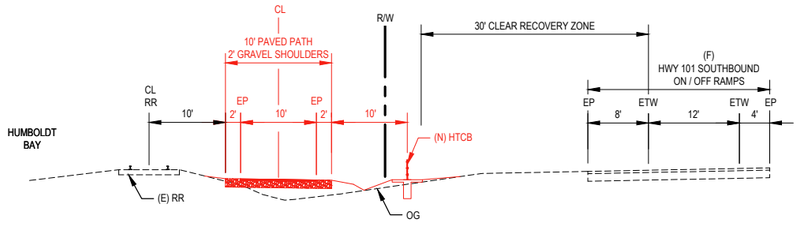
SEGMENT 2A & 2B: CROSSING EUREKA SLOUGH



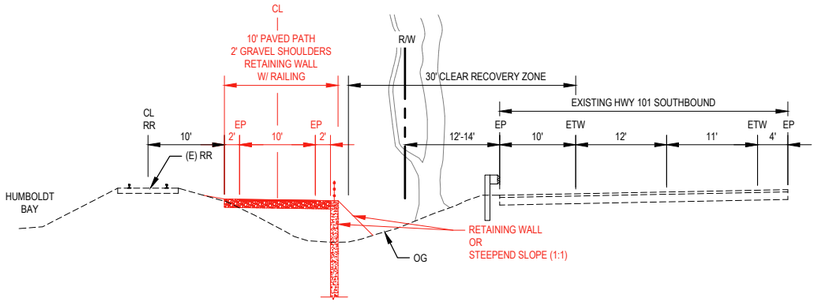
BAY TRAIL NORTH: SAFETY ENHANCEMENT



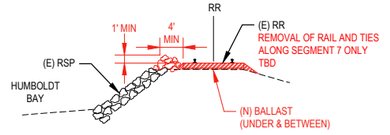
SEGMENT 9: BRACUT



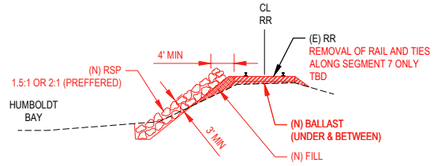
SEGMENT 8: BETWEEN EUCALYPTUS AND BRACUT



SEGMENT 7 OPTION B: NORTH EUCALYPTUS



SHORELINE REVETMENT REHABILITATION OPTION 1



SHORELINE REVETMENT REHABILITATION OPTION 2

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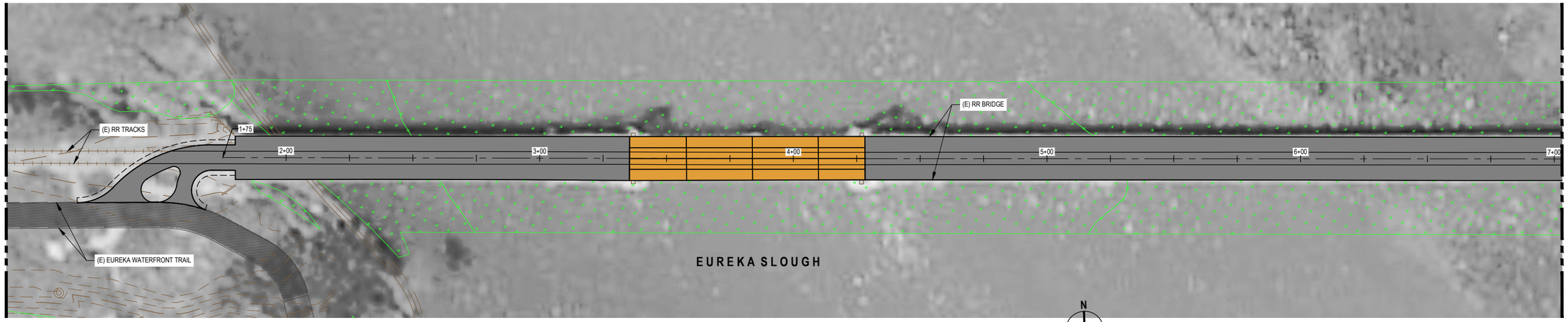
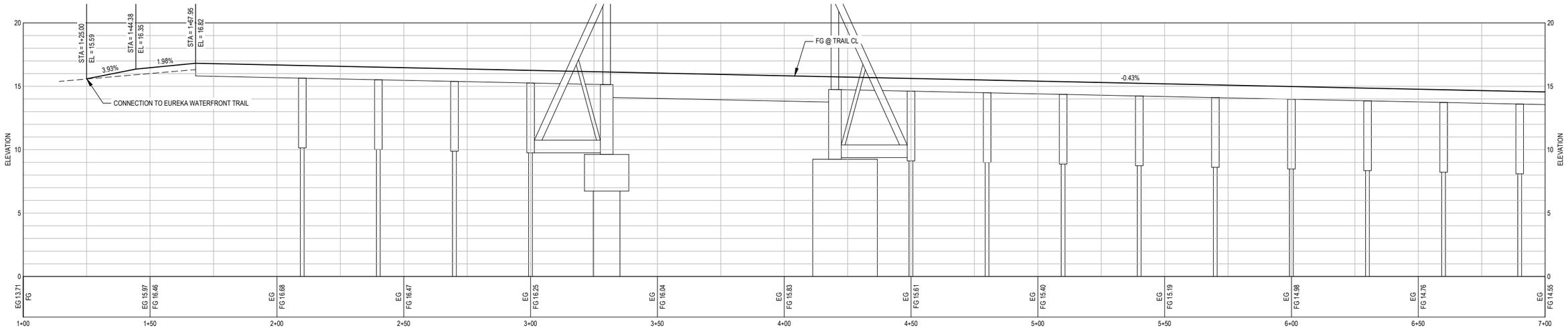


N

0 20' 40'

IMPROVEMENT PLAN & PROFILE STA 1+00 TO 7+00



0 20' 40' HORIZONTAL

0 4' 8' VERTICAL

PROFILE VIEW STA 1+00 TO 7+00

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Project No. 11110166
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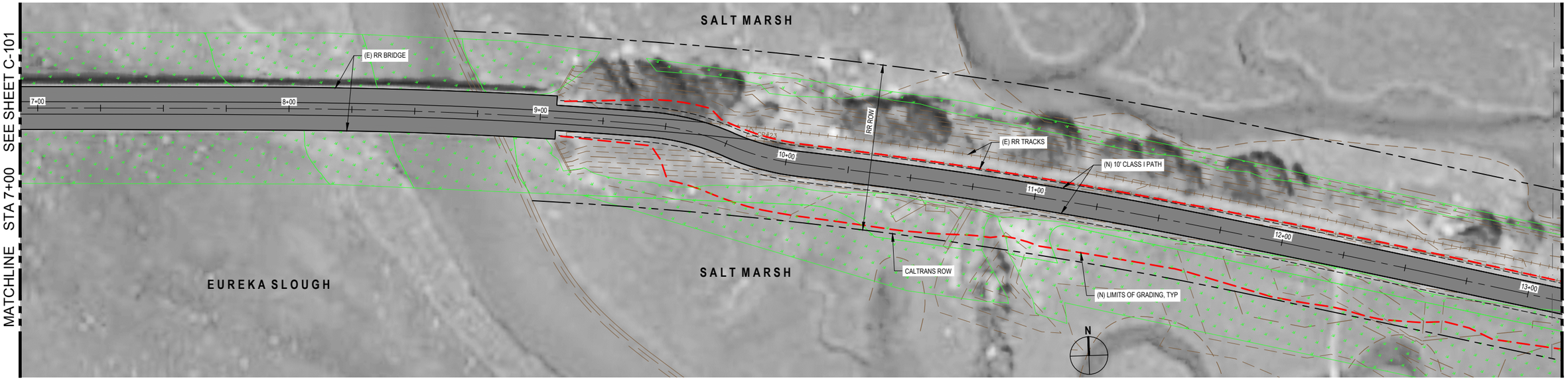

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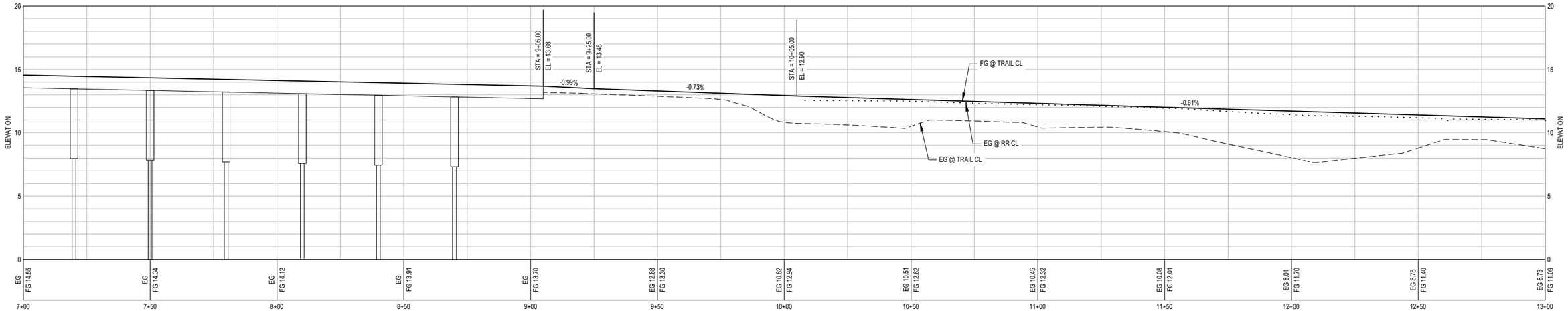

0 20' 40' HORIZONTAL

0 4' 8' VERTICAL

PROFILE VIEW STA 7+00 TO 13+00

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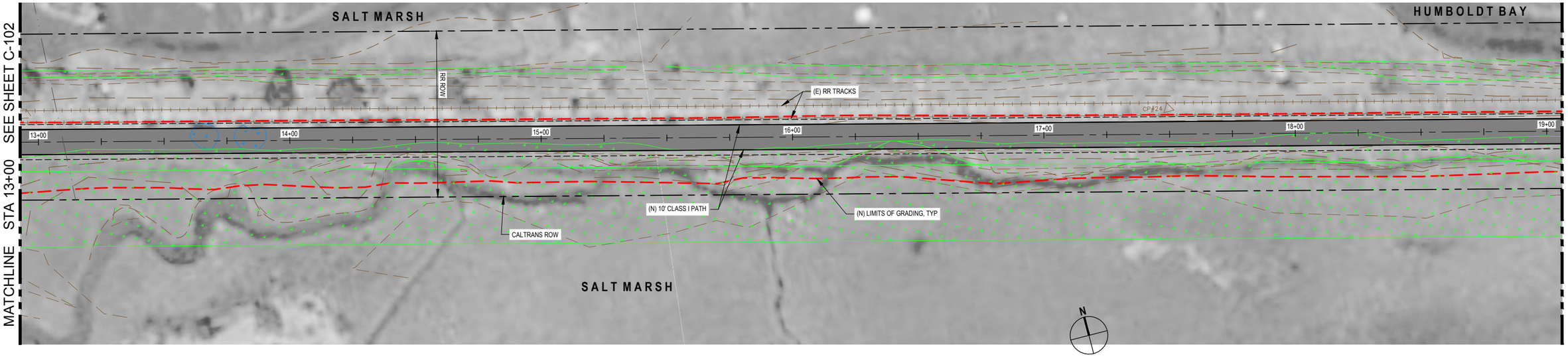

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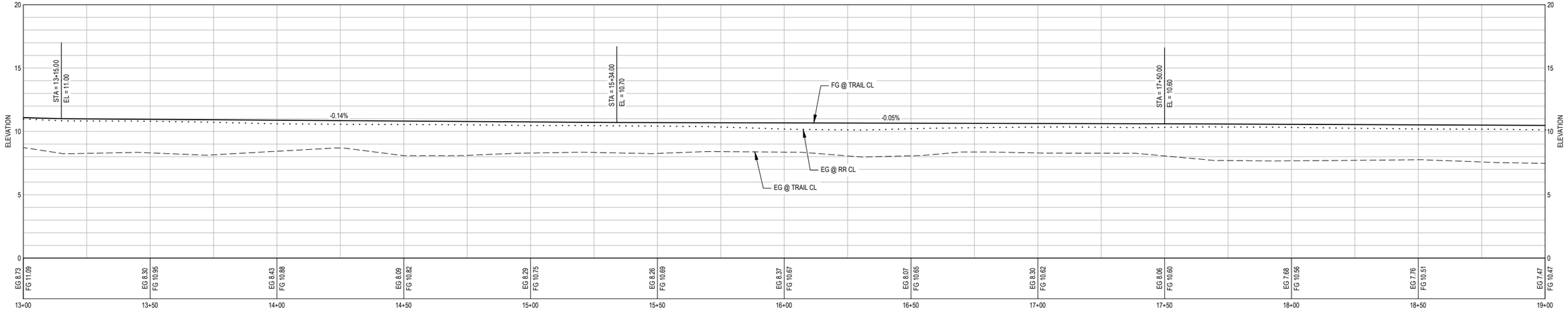

PROFILE VIEW STA 13+00 TO 19+00

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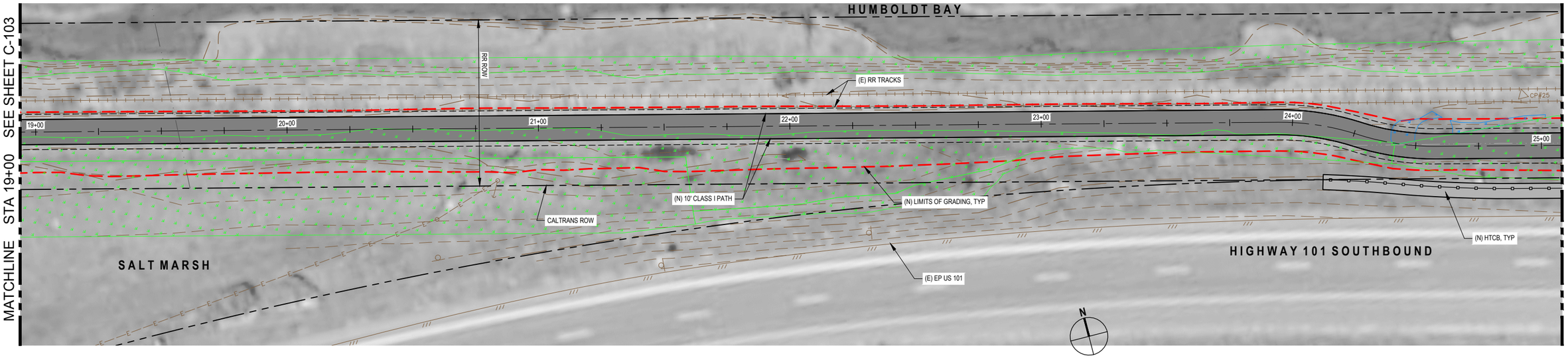

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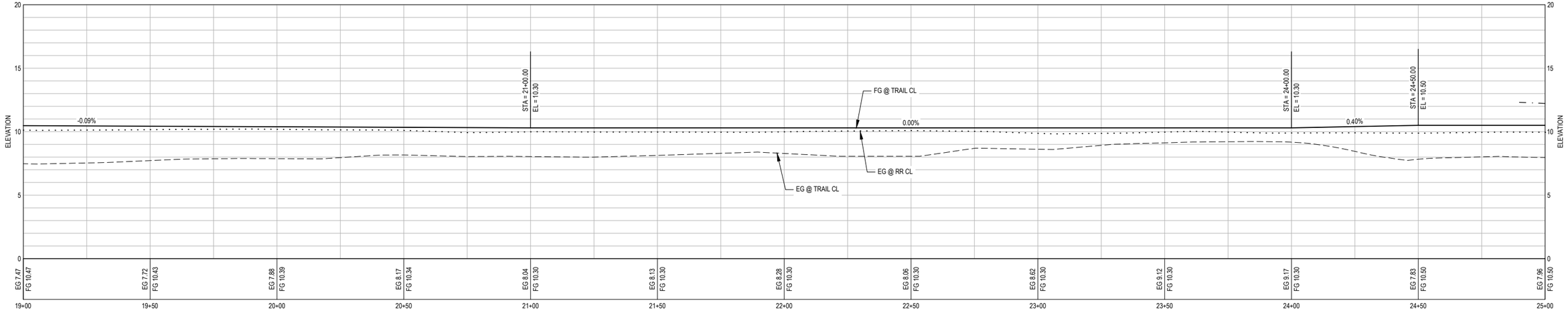

PROFILE VIEW STA 19+00 TO 25+00

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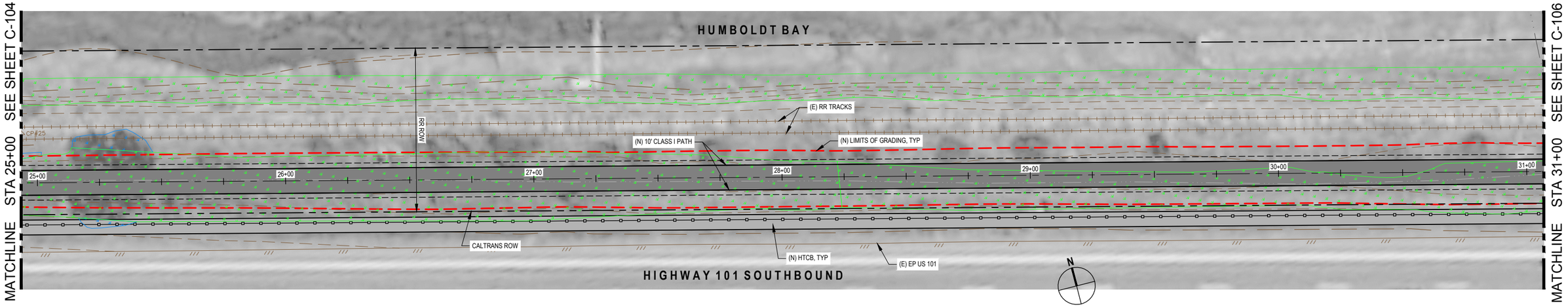
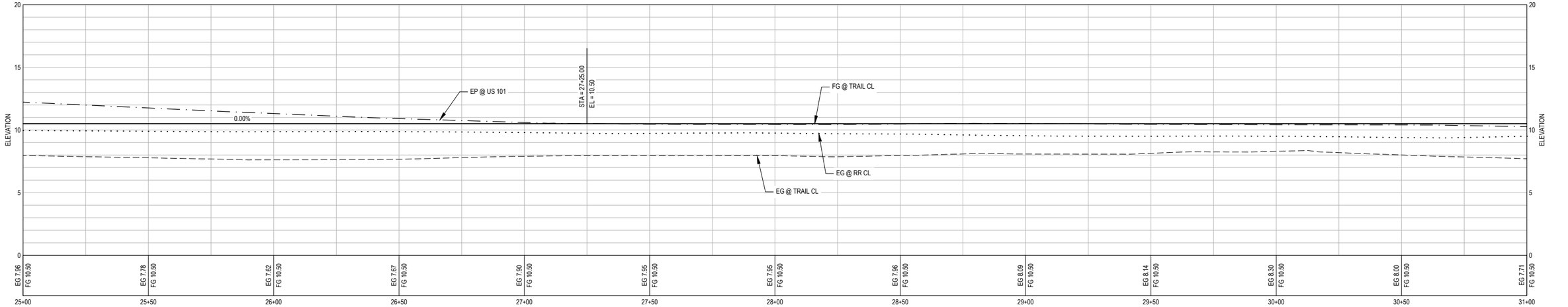


IMPROVEMENT PLAN & PROFILE STA 25+00 TO 31+00



PROFILE VIEW STA 25+00 TO 31+00

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Project Manager	J.WOLF	Date	7/5/2018
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Project No. 11110166
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Sheet No. C-105
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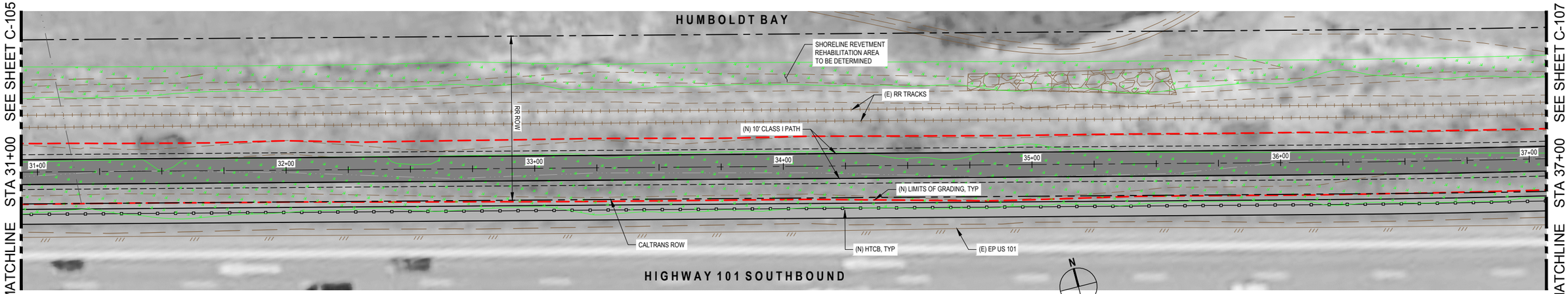
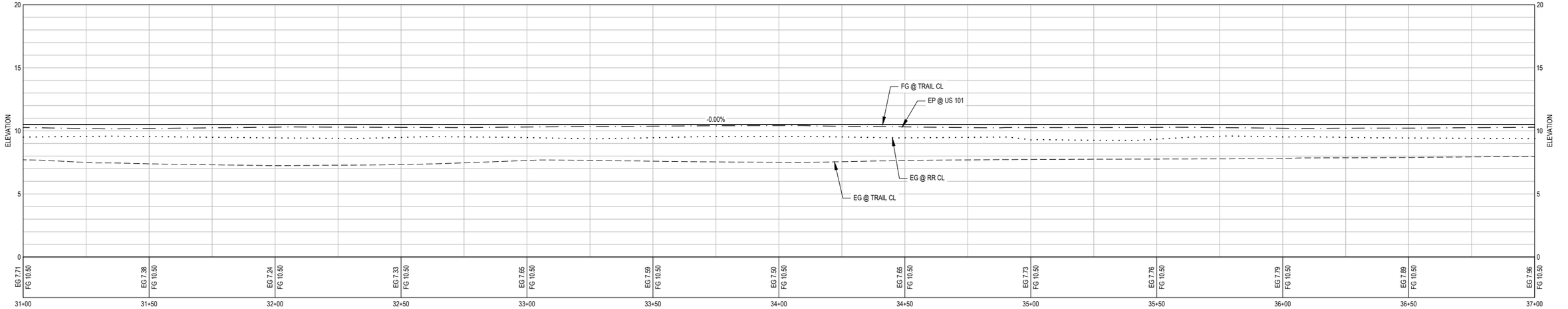


IMPROVEMENT PLAN & PROFILE STA 31+00 TO 37+00



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Project No. 11110166
Original Size ANSI D
Sheet No. C-106
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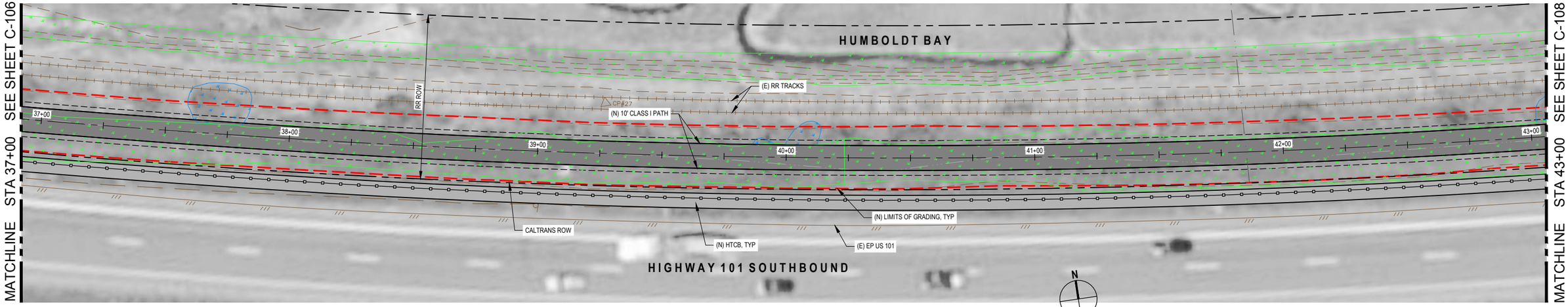
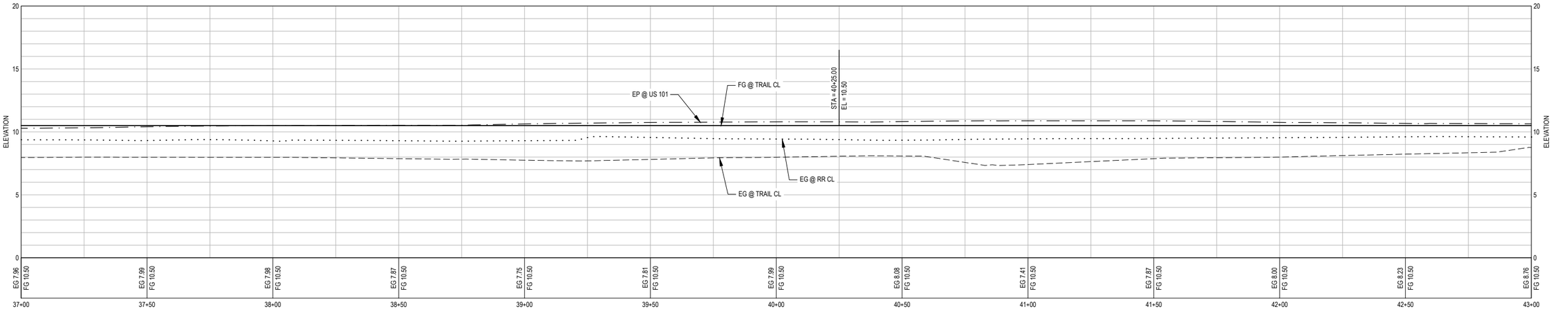


IMPROVEMENT PLAN & PROFILE STA 37+00 TO 43+00



PROFILE VIEW STA 37+00 TO 43+00

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Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 37+00 TO 43+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-107
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Plot Date: 5 July 2018 - 2:40 PM
Plotted By: Owen Goode
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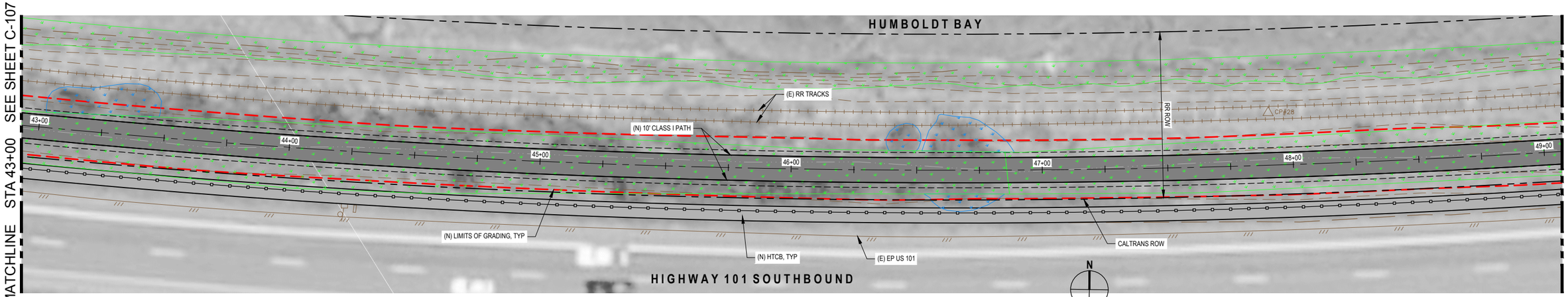

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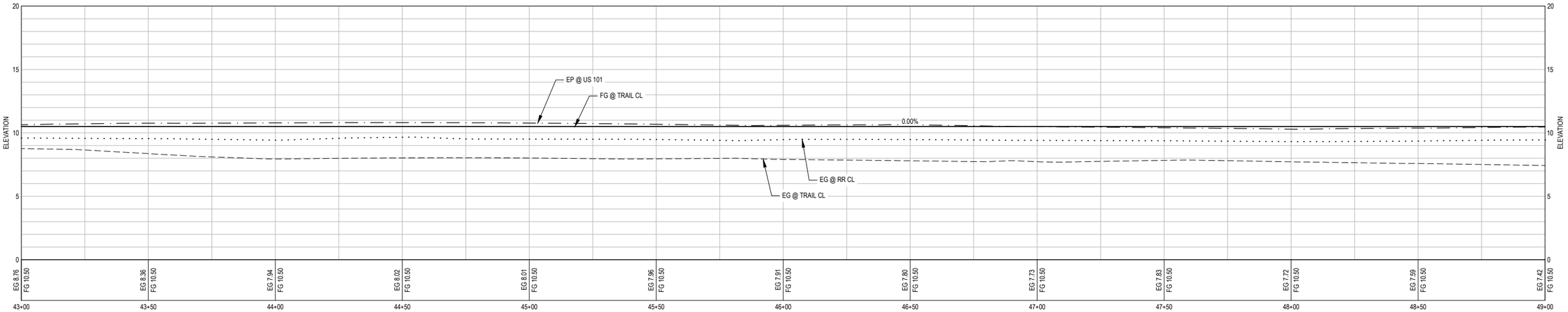

PROFILE VIEW STA 43+00 TO 49+00

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Project No. 11110166
Original Size ANSI D
Sheet No. C-108
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Plot Date: 5 July 2018 - 2:40 PM
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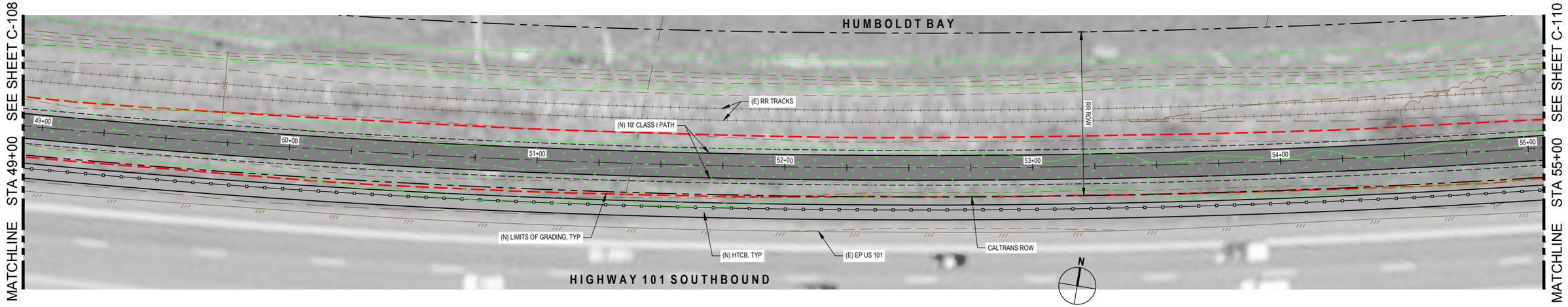

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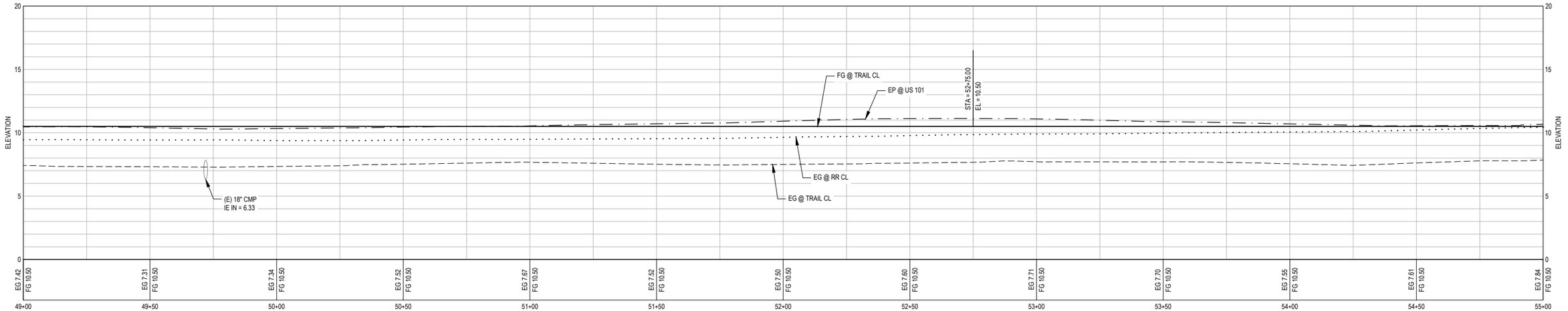

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Project No. 11110166
Original Size ANSI D
Sheet No. C-109
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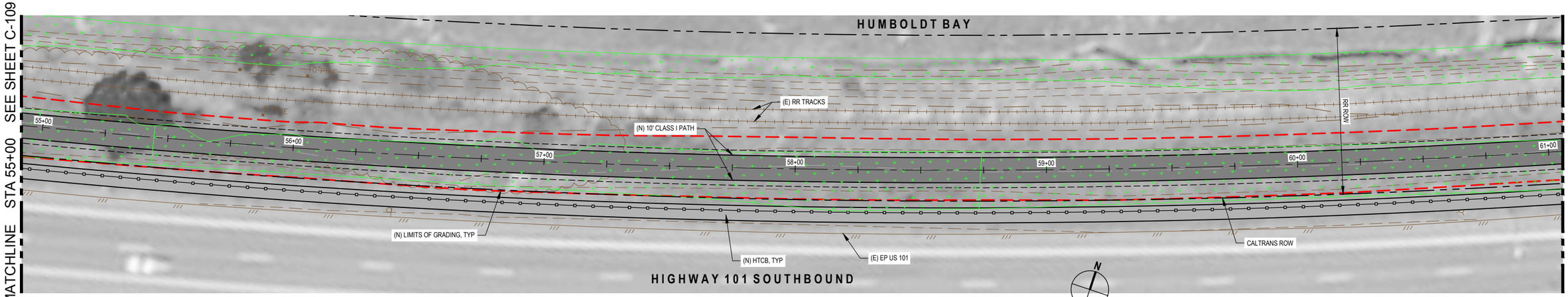

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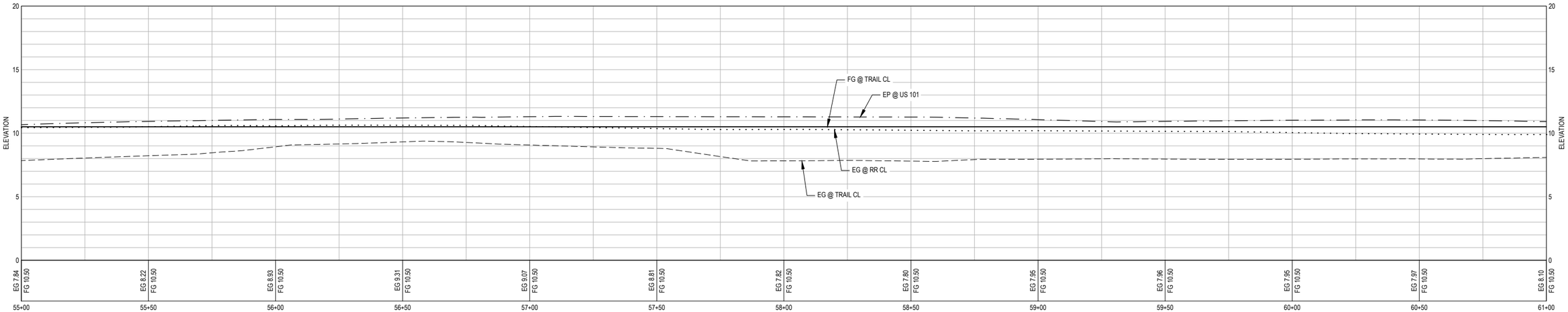

PROFILE VIEW STA 55+00 TO 61+00

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Title IMPROVEMENT PLAN & PROFILE STA 55+00 TO 61+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-110
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Plot Date: 5 July 2018 - 2:41 PM
Plotted By: Owen Goode
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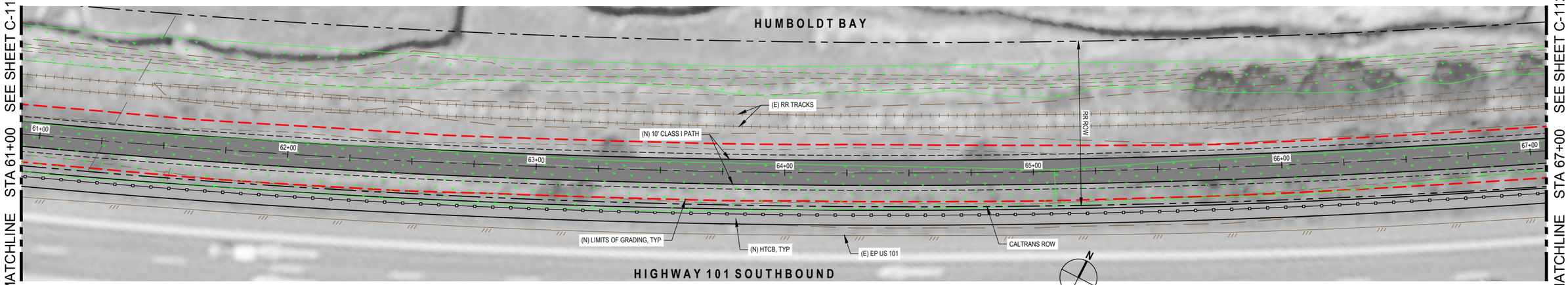

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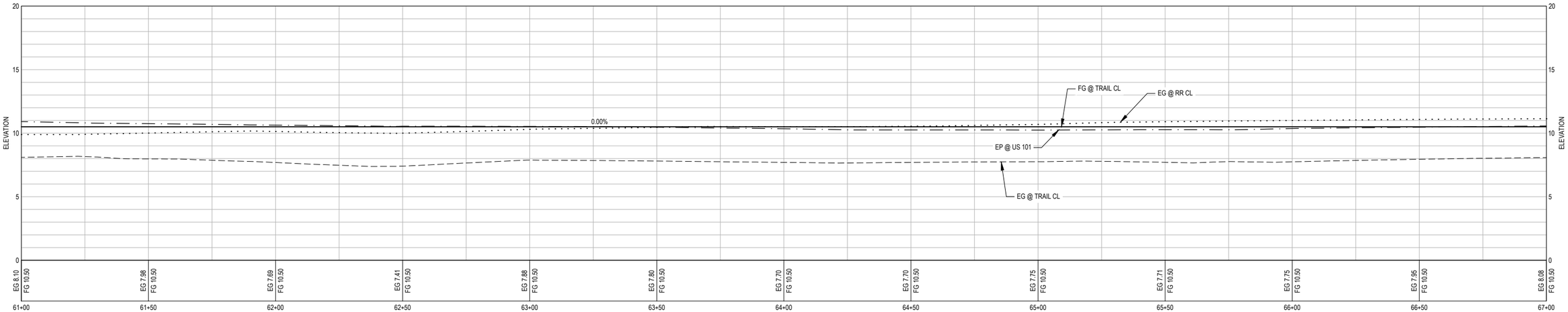

PROFILE VIEW STA 61+00 TO 67+00

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Project No. 11110166
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Sheet No. C-111
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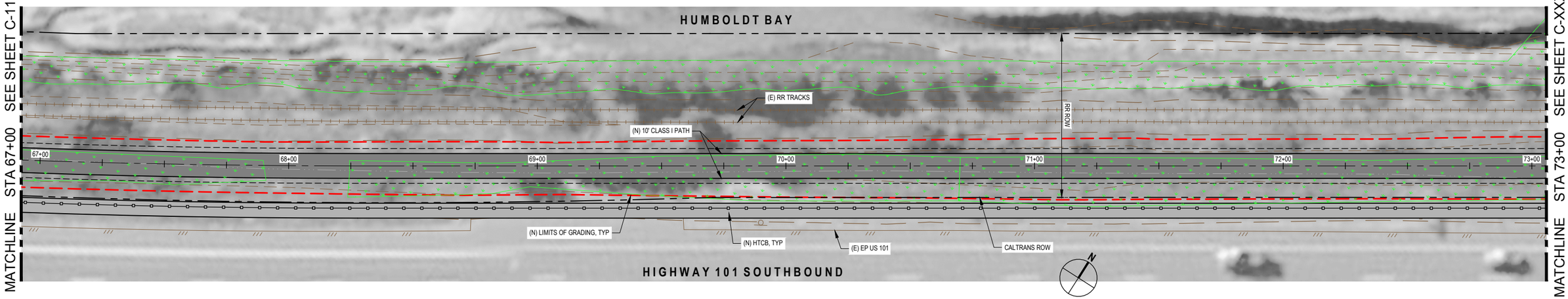
Plot Date: 5 July 2018 - 2:42 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\11\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_12-19_C-109-C-116.dwg



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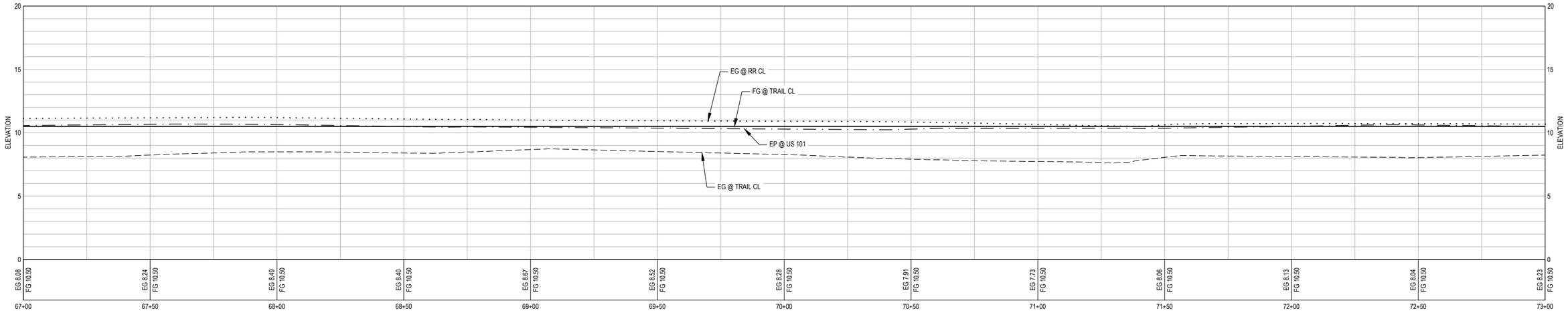

PROFILE VIEW STA 67+00 TO 73+00

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Title IMPROVEMENT PLAN & PROFILE STA 67+00 TO 73+00

Project No. 11110166
Original Size ANSI D
Sheet No. C-112
Sheet 15 of 41

Plot Date: 5 July 2018 - 2:42 PM
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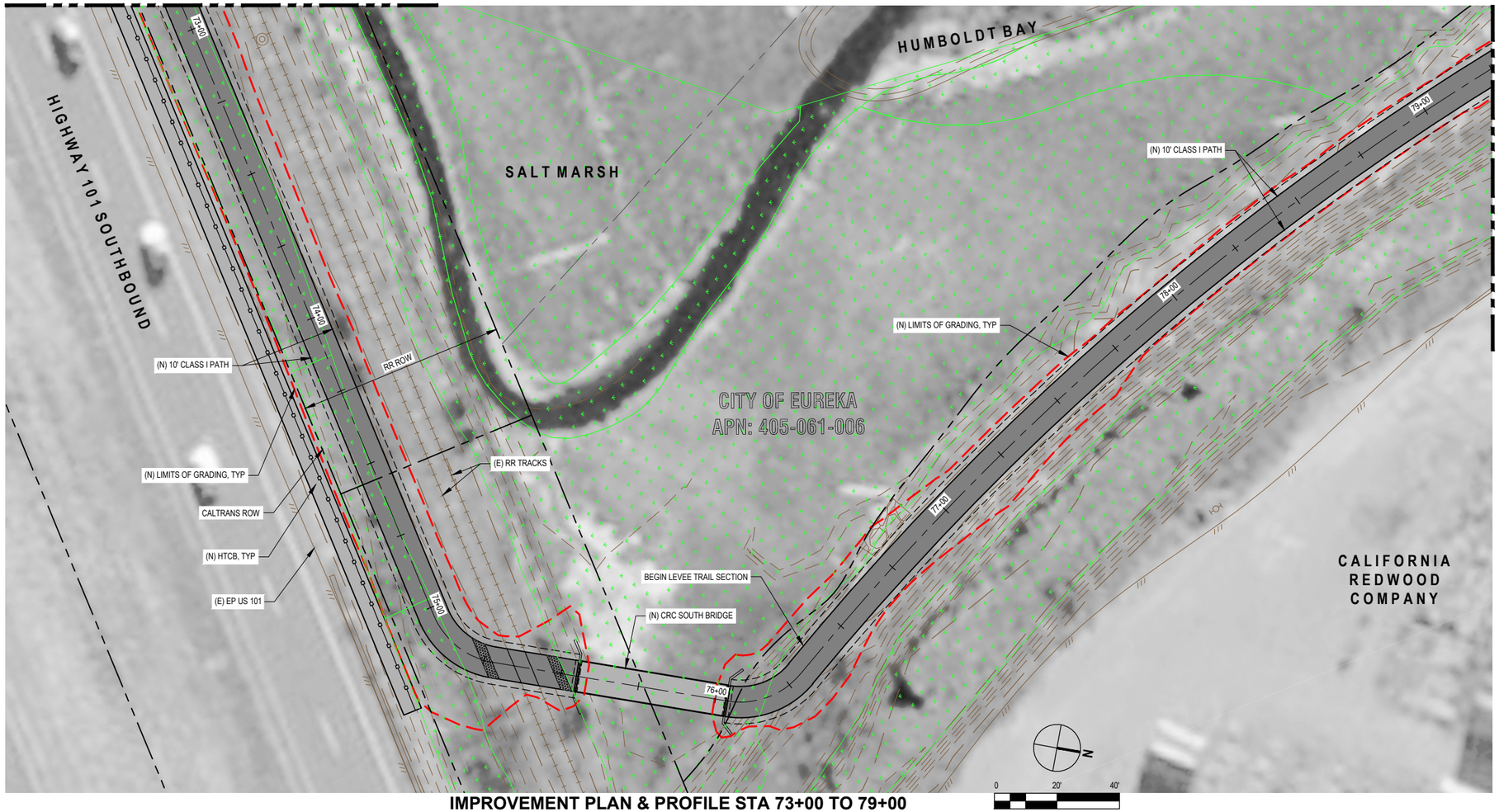
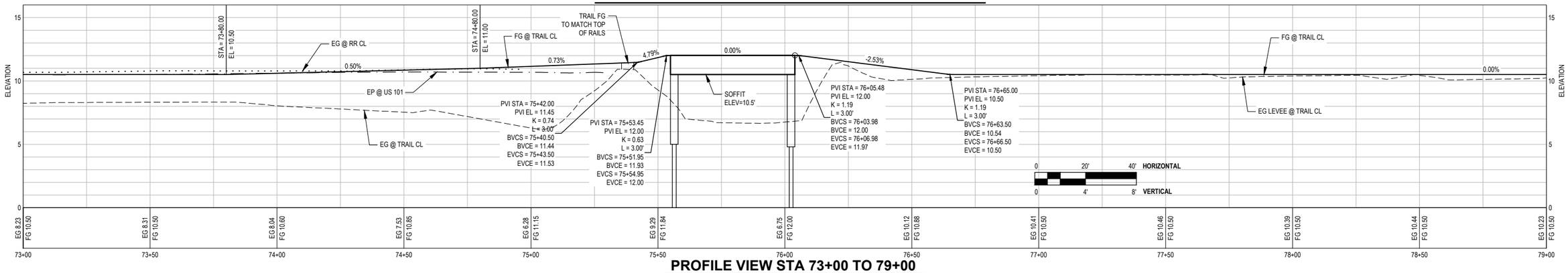
MATCHLINE STA 73+00 SEE SHEET C-112



MATCHLINE STA 79+00 SEE SHEET C-114

IMPROVEMENT PLAN & PROFILE STA 73+00 TO 79+00



PROFILE VIEW STA 73+00 TO 79+00

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Sheet No. C-113
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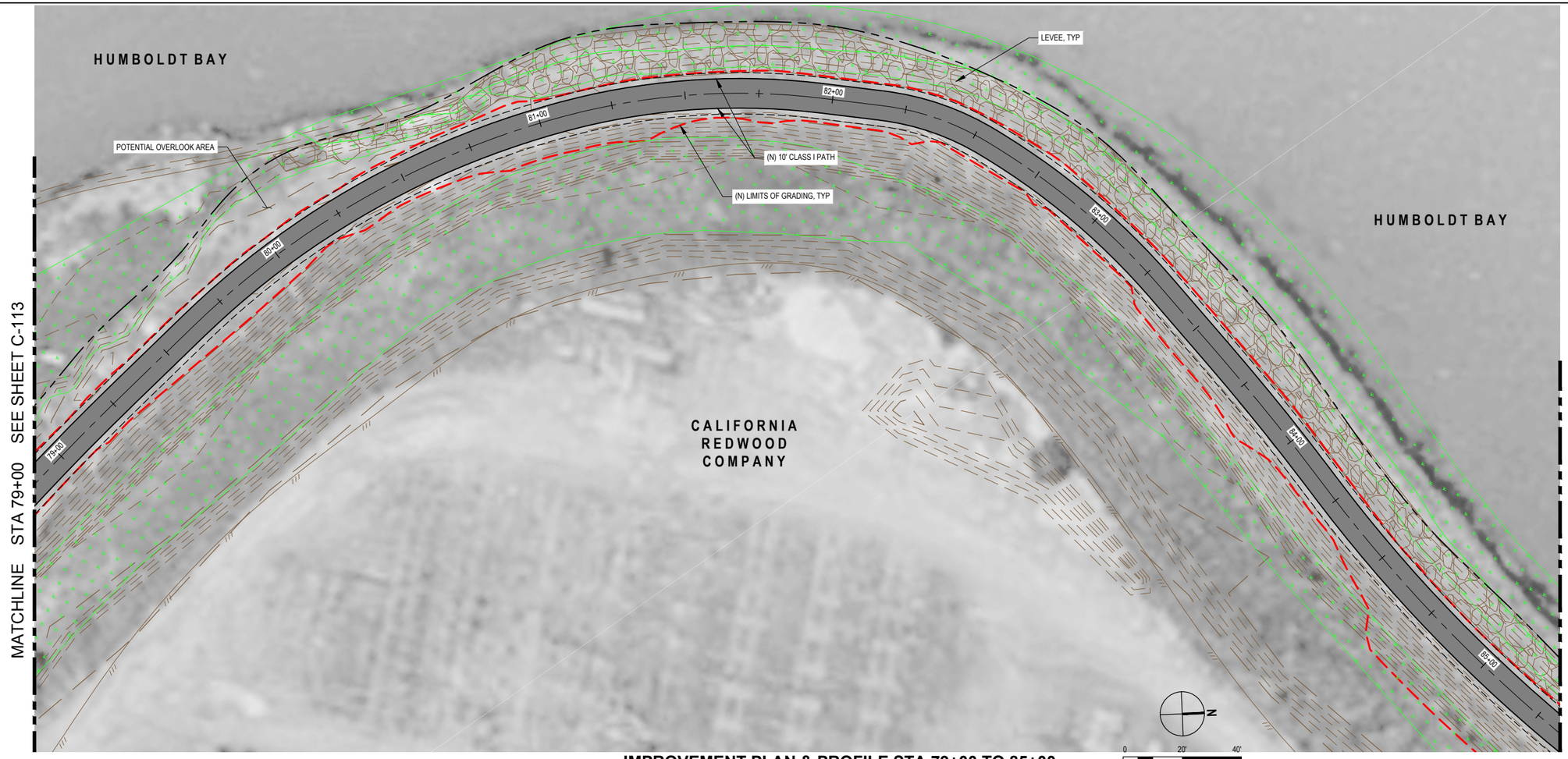
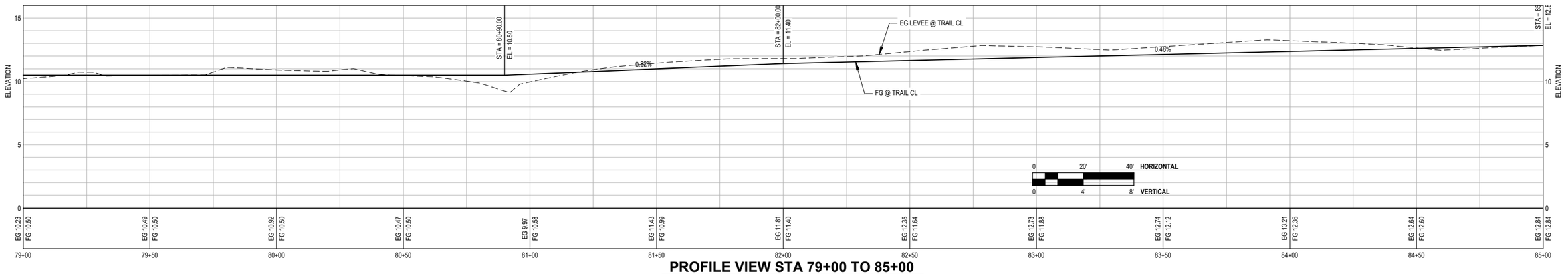
Plot Date: 25 July 2018 - 11:09 AM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&el\06-CAD\Sheets\11110166_12-19_C-109-C-116.dwg



IMPROVEMENT PLAN & PROFILE STA 79+00 TO 85+00



PROFILE VIEW STA 79+00 TO 85+00

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Project No. 11110166
Original Size ANSI D
Sheet No. C-114
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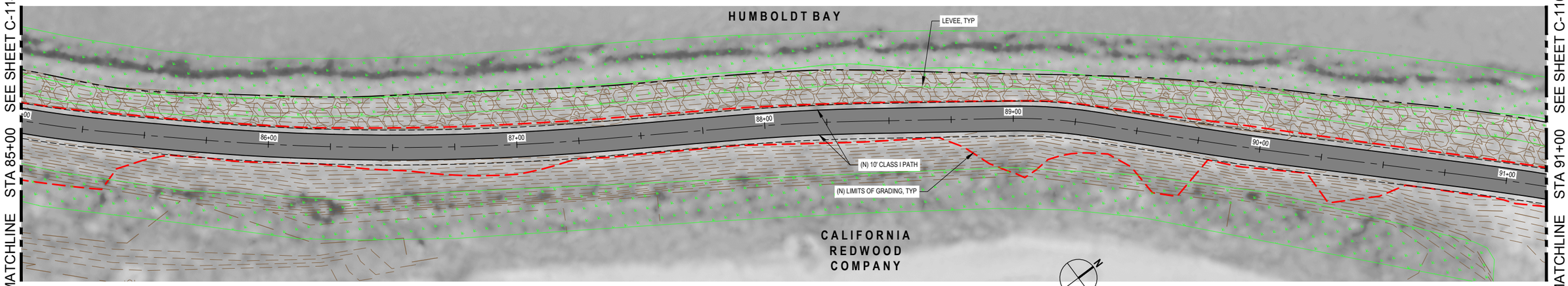
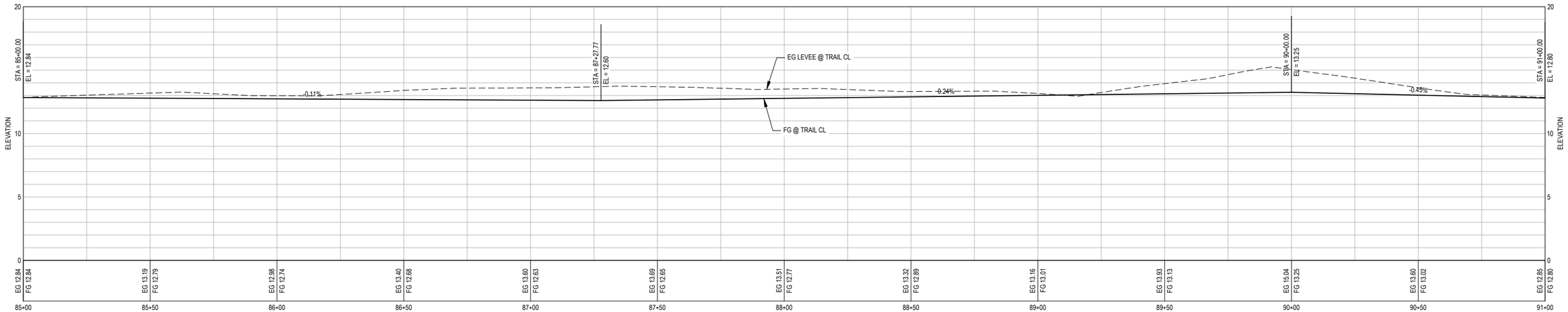


IMPROVEMENT PLAN & PROFILE STA 85+00 TO 91+00



PROFILE VIEW STA 85+00 TO 91+00

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Project No. 11110166
Original Size ANSI D
Sheet No. C-115
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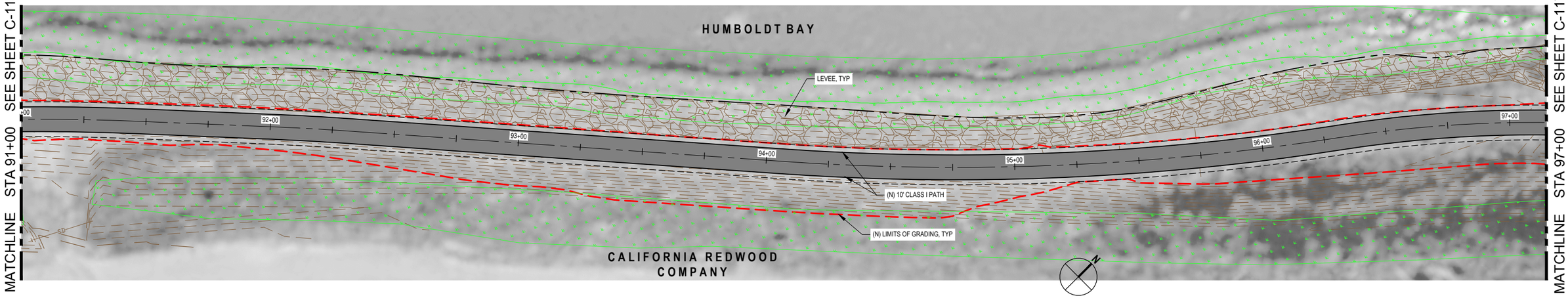
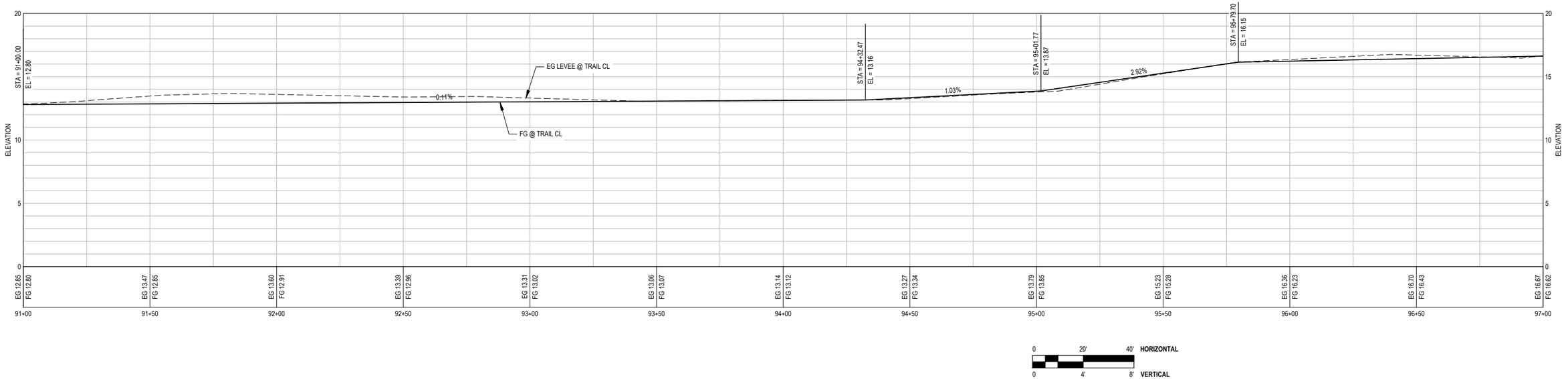


IMPROVEMENT PLAN & PROFILE STA 91+00 TO 97+00



PROFILE VIEW STA 91+00 TO 97+00

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Original Size ANSI D
Sheet No. C-116
Sheet 19 of 41

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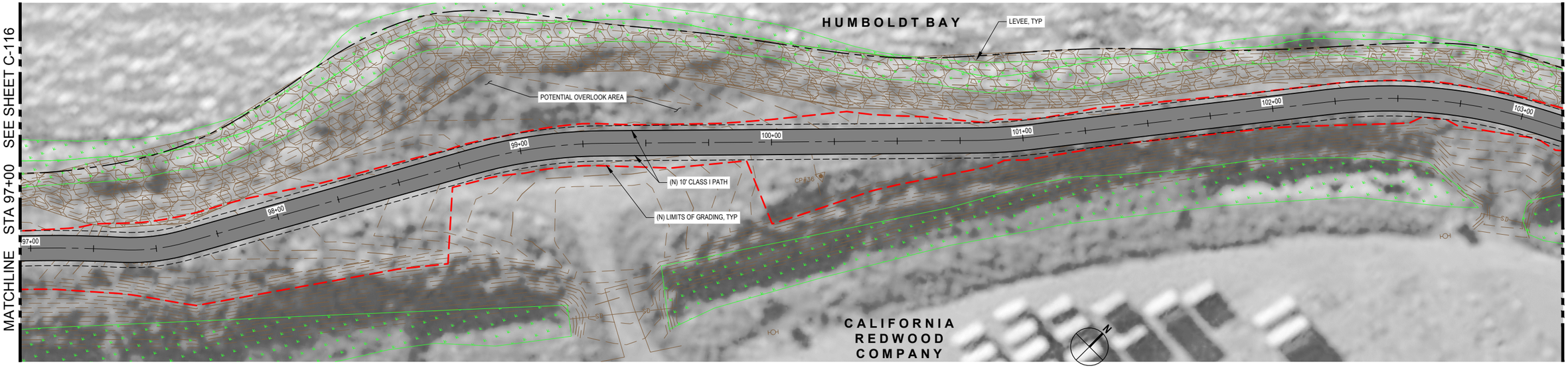
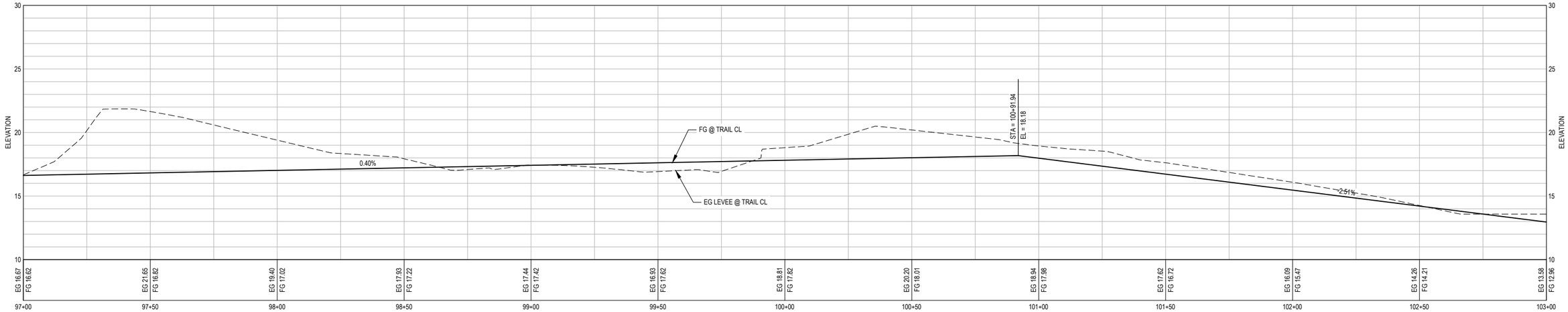


IMPROVEMENT PLAN & PROFILE STA 97+00 TO 103+00



PROFILE VIEW STA 97+00 TO 103+00

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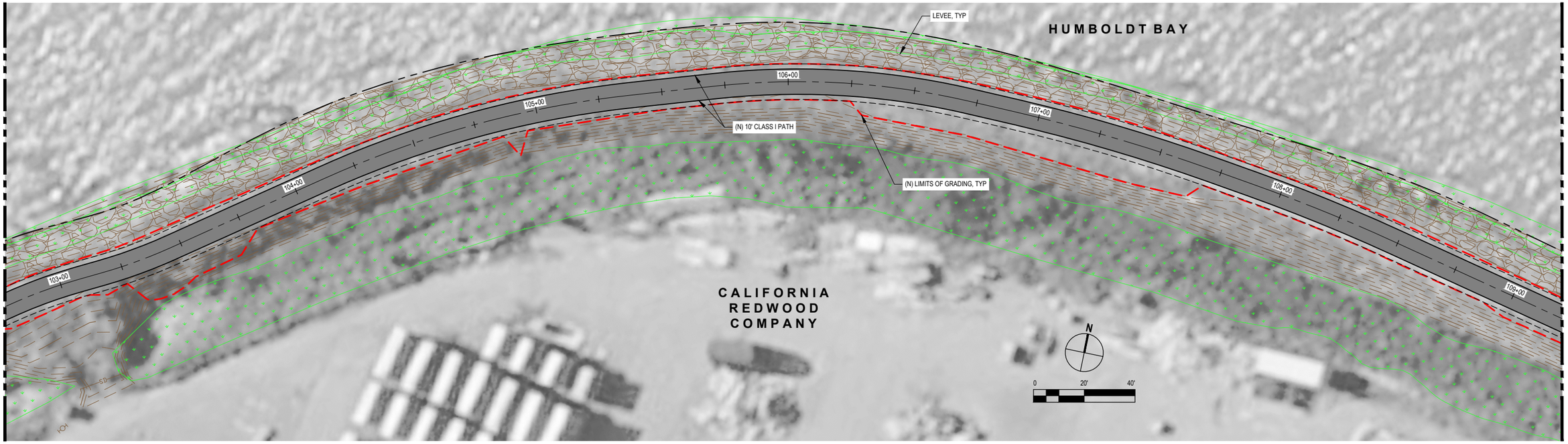
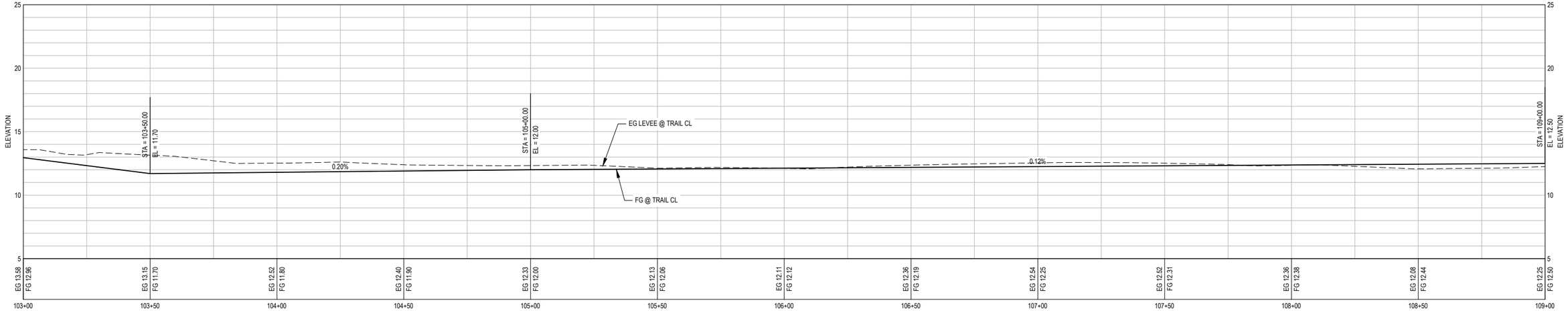
Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 97+00 TO 103+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-117
Sheet 20 of 41

Plot Date: 5 July 2018 - 2:44 PM
Plotted By: Owen Goode
Filename: \\ghdnet\ghd\US\Eureka\Projects\11\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_20-25_C-117-C-122.dwg



IMPROVEMENT PLAN & PROFILE STA 103+00 TO 109+00



PROFILE VIEW STA 103+00 TO 109+00

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Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 103+00 TO 109+00

Project No. 11110166
Original Size ANSI D
Sheet No. C-118
Sheet 21 of 41

Plot Date: 5 July 2018 - 2:44 PM
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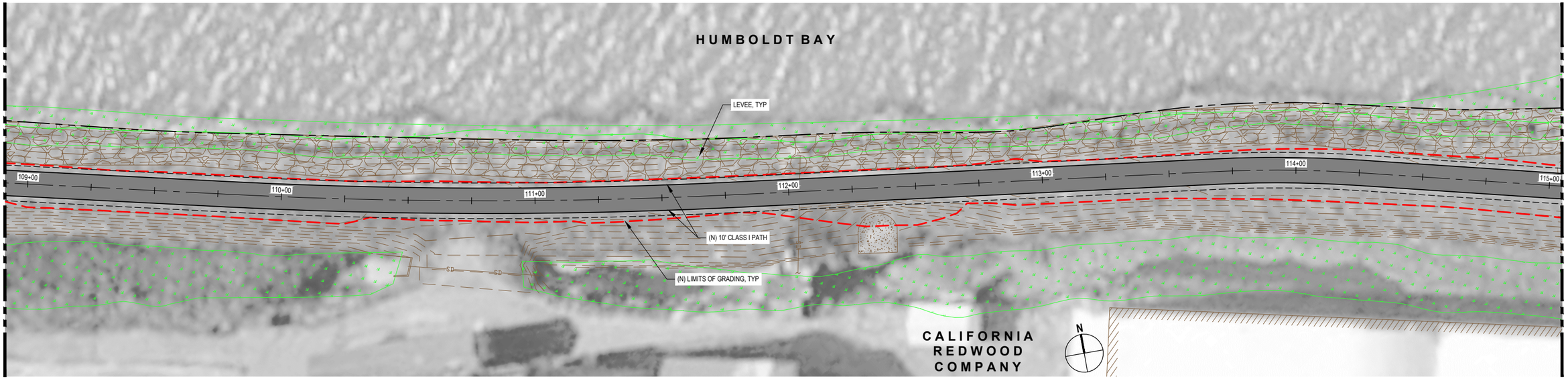
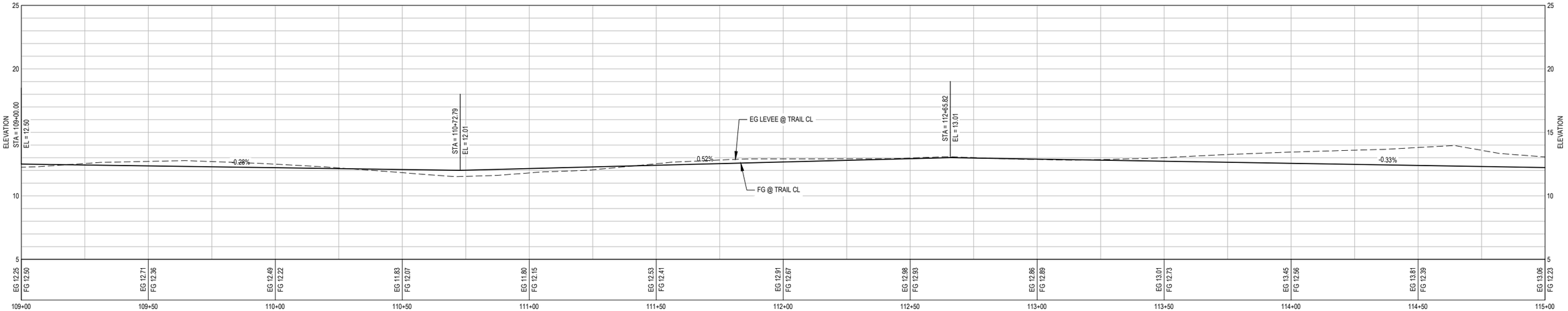


IMPROVEMENT PLAN & PROFILE STA 109+00 TO 115+00



PROFILE VIEW STA 109+00 TO 115+00

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Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 109+00 TO 115+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-119
Sheet 22 of 41

Plot Date: 5 July 2018 - 2:45 PM
Plotted By: Owen Goode
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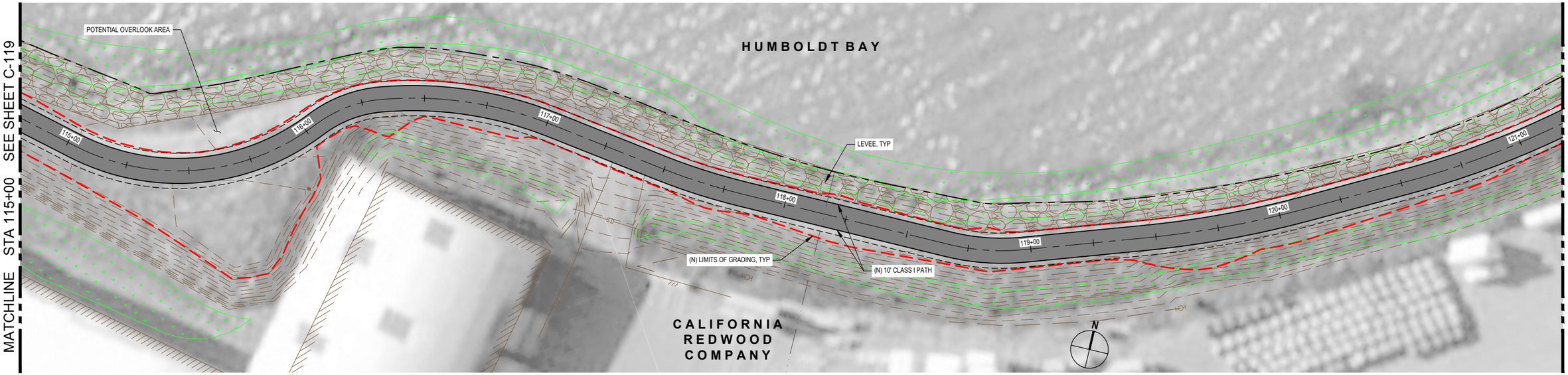
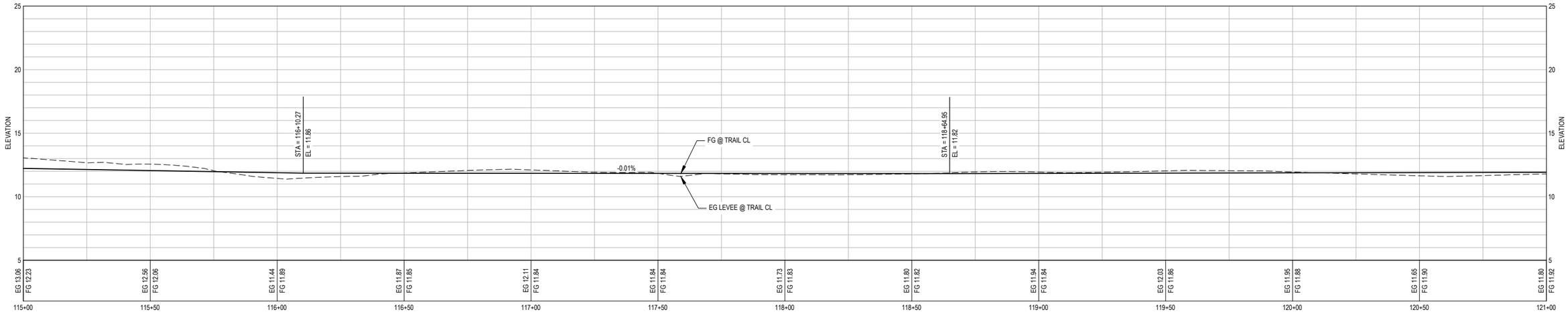


0 20' 40'

IMPROVEMENT PLAN & PROFILE STA 115+00 TO 121+00



0 20' 40' HORIZONTAL

0 4' 8' VERTICAL

PROFILE VIEW STA 115+00 TO 121+00

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Title IMPROVEMENT PLAN & PROFILE STA 115+00 TO 121+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-120
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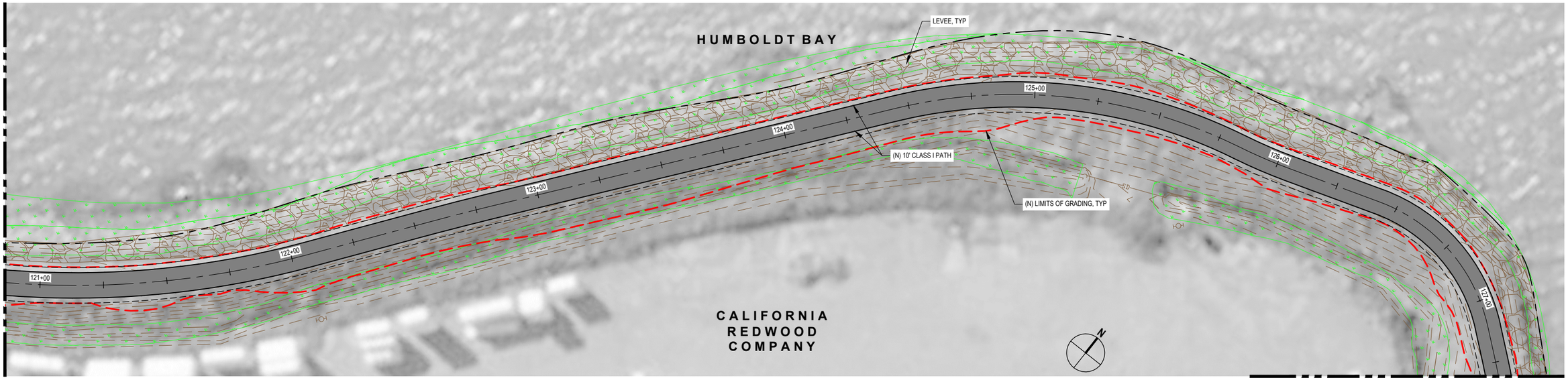
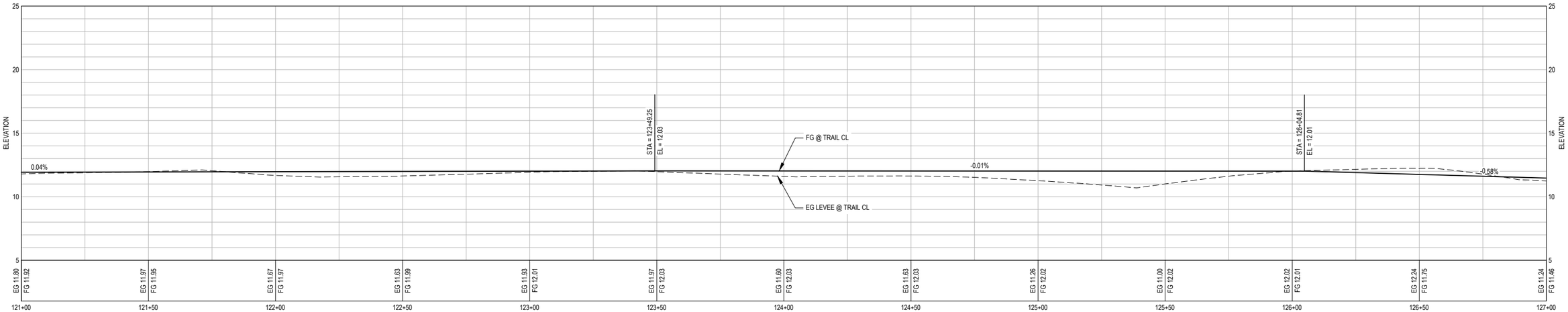
Plot Date: 5 July 2018 - 2:45 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\11\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_20-25_C-117-C-122.dwg



IMPROVEMENT PLAN & PROFILE STA 121+00 TO 127+00



PROFILE VIEW STA 121+00 TO 127+00

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Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 121+00 TO 127+00

Project No. 11110166
Original Size ANSI D
Sheet No. C-121
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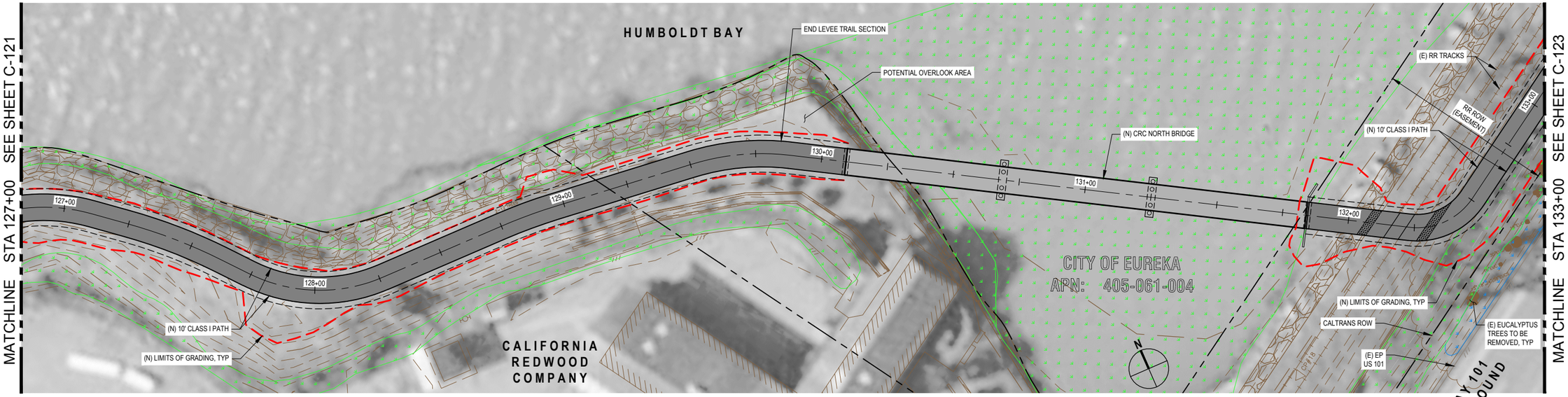
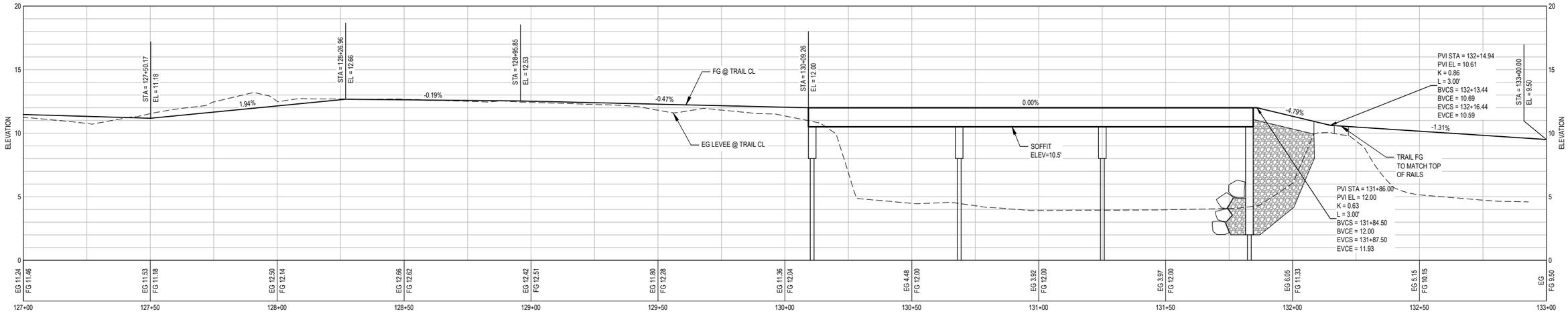
Plot Date: 5 July 2018 - 2:45 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_20-25_C-117-C-122.dwg



IMPROVEMENT PLAN & PROFILE STA 127+00 TO 133+00



PROFILE VIEW STA 127+00 TO 133+00

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Project No. 11110166
Original Size ANSI D
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Plot Date: 26 July 2018 - 1:19 PM
Plotted By: Owen Goode
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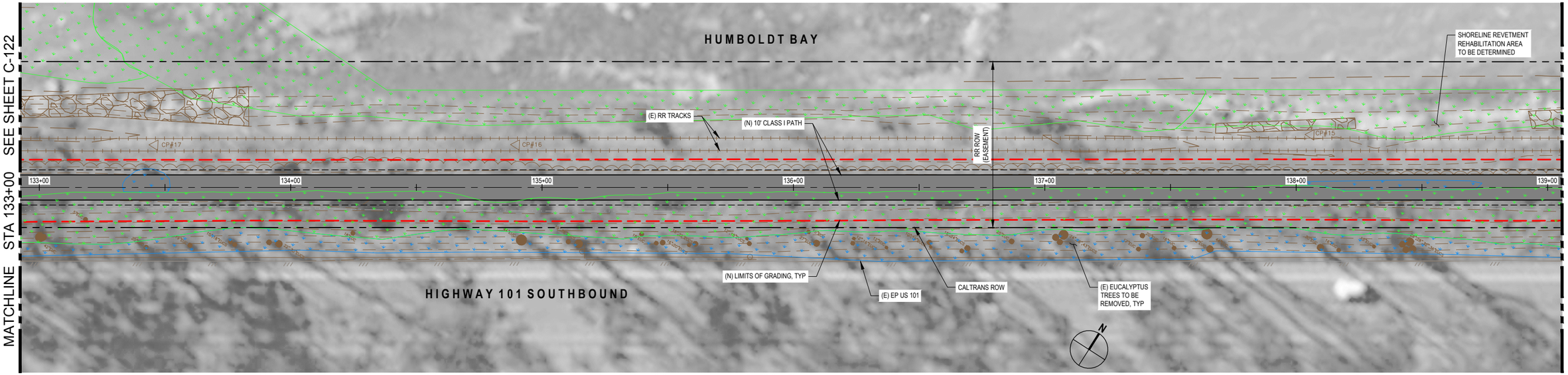
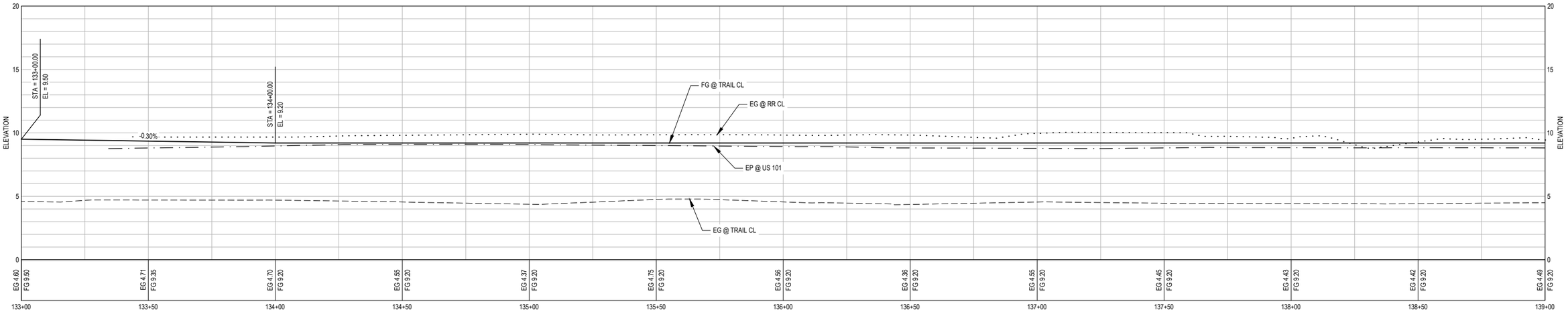


IMPROVEMENT PLAN & PROFILE STA 133+00 TO 139+00



PROFILE VIEW STA 133+00 TO 139+00

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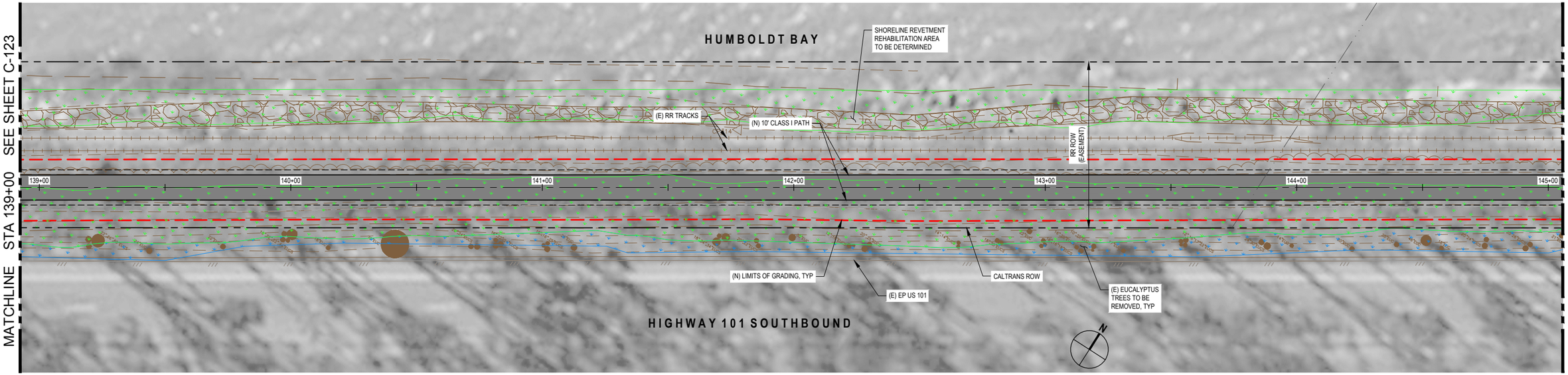
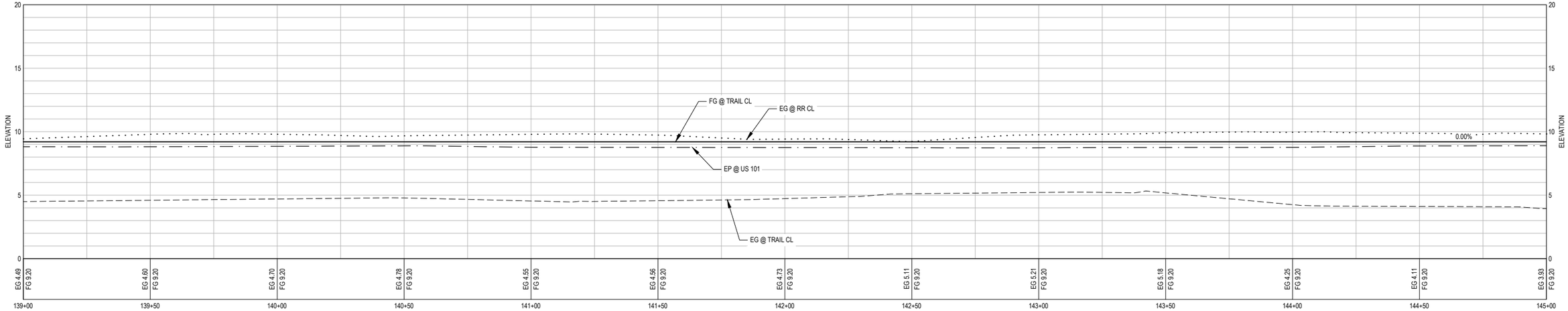
Title IMPROVEMENT PLAN & PROFILE STA 133+00 TO 139+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-123
Sheet 26 of 41

Plot Date: 5 July 2018 - 2:46 PM
Plotted By: Owen Goode
Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



IMPROVEMENT PLAN & PROFILE STA 139+00 TO 145+00



PROFILE VIEW STA 139+00 TO 145+00

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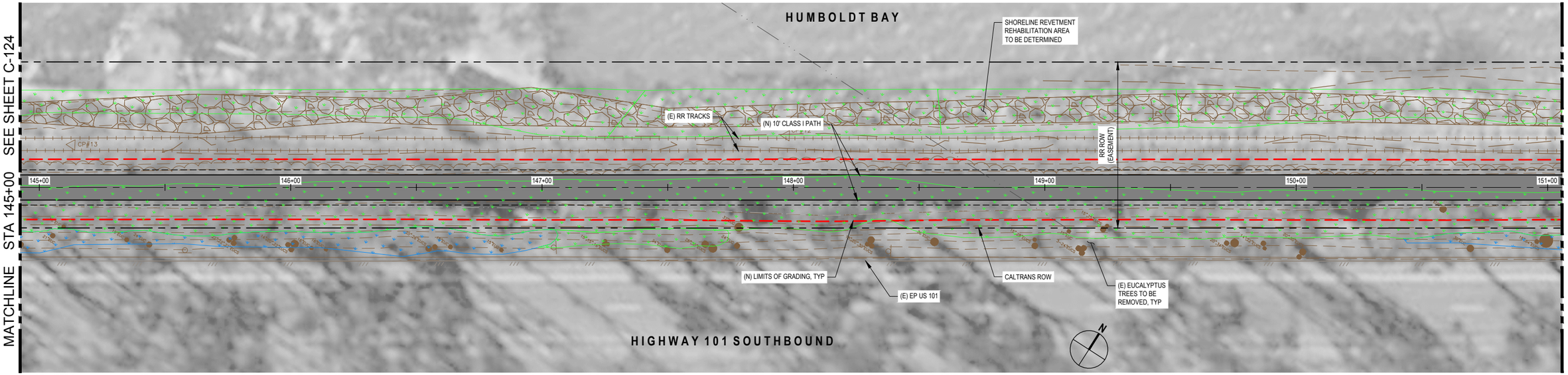
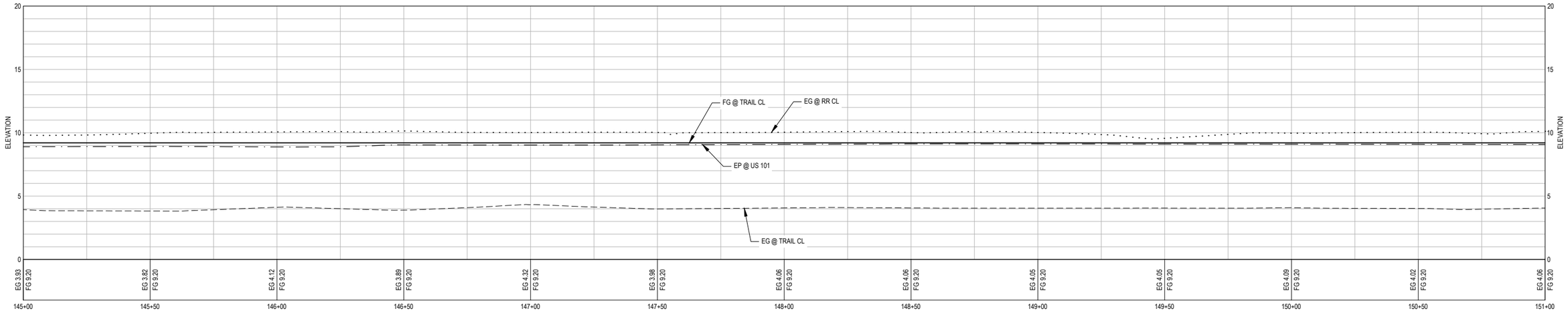
Title IMPROVEMENT PLAN & PROFILE STA 139+00 TO 145+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-124
Sheet 27 of 41

Plot Date: 5 July 2018 - 2:47 PM
Plotted By: Owen Goode
Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



IMPROVEMENT PLAN & PROFILE STA 145+00 TO 151+00



PROFILE VIEW STA 145+00 TO 151+00

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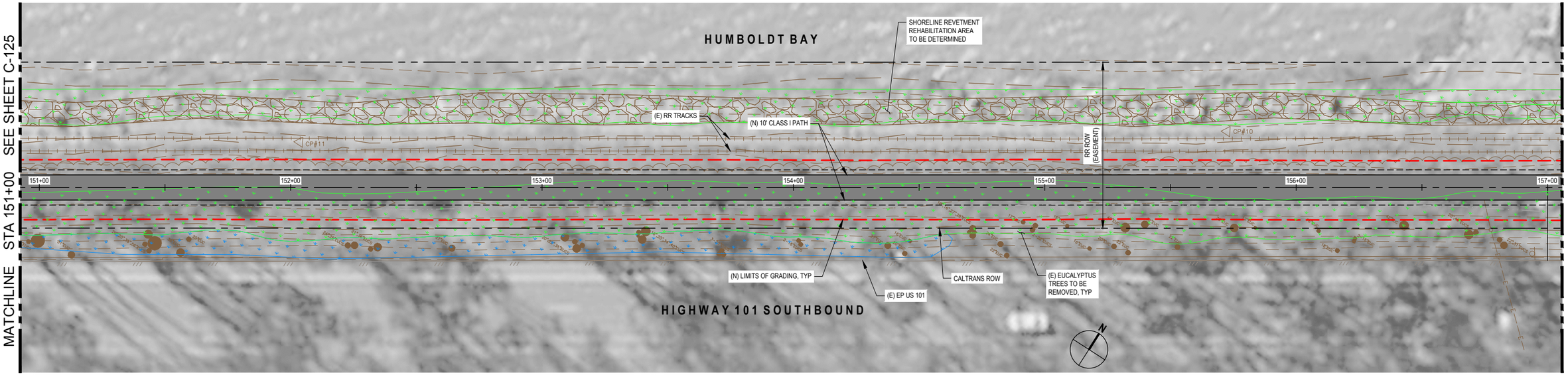
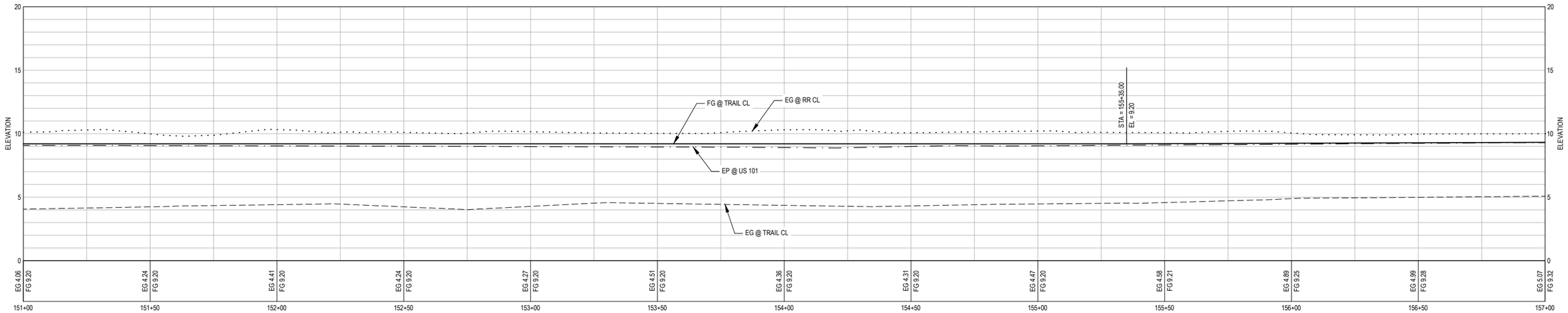
Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 145+00 TO 151+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-125
Sheet 28 of 41

Plot Date: 5 July 2018 - 2:47 PM
Plotted By: Owen Goode
Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



IMPROVEMENT PLAN & PROFILE STA 151+00 TO 157+00



PROFILE VIEW STA 151+00 TO 157+00

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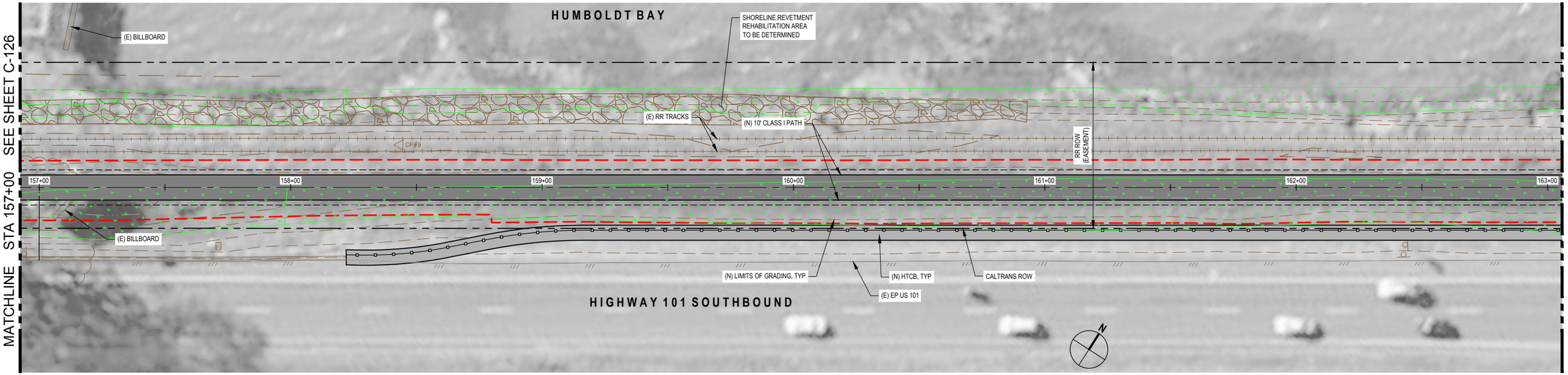
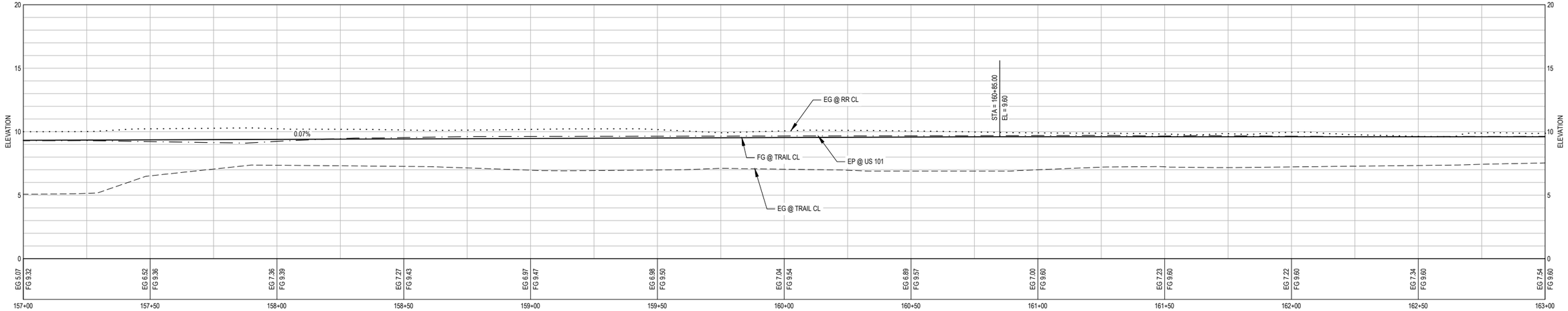
Title IMPROVEMENT PLAN & PROFILE STA 151+00 TO 157+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-126
Sheet 29 of 41

Plot Date: 5 July 2018 - 2:47 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



IMPROVEMENT PLAN & PROFILE STA 157+00 TO 163+00



PROFILE VIEW STA 157+00 TO 163+00

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Title IMPROVEMENT PLAN & PROFILE STA 157+00 TO 163+00

Project No. 11110166
Original Size ANSI D
Sheet No. C-127
Sheet 30 of 41

Plot Date: 5 July 2018 - 2:47 PM
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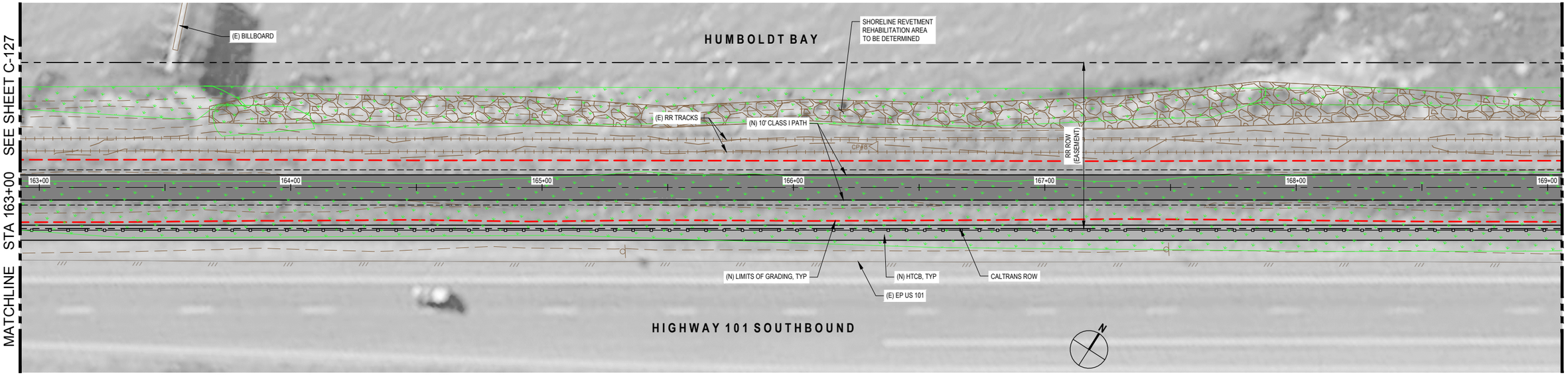
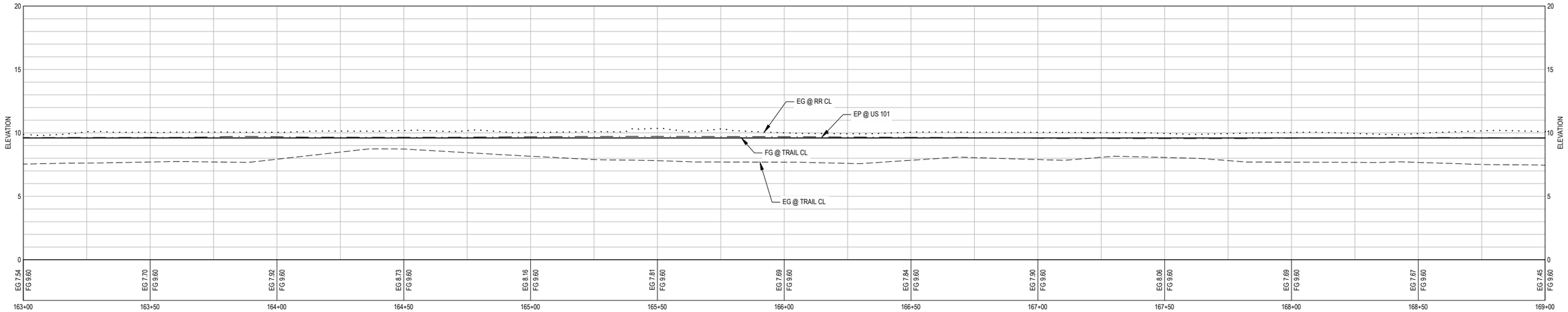


IMPROVEMENT PLAN & PROFILE STA 163+00 TO 169+00



PROFILE VIEW STA 163+00 TO 169+00

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Title IMPROVEMENT PLAN & PROFILE STA 163+00 TO 169+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-128
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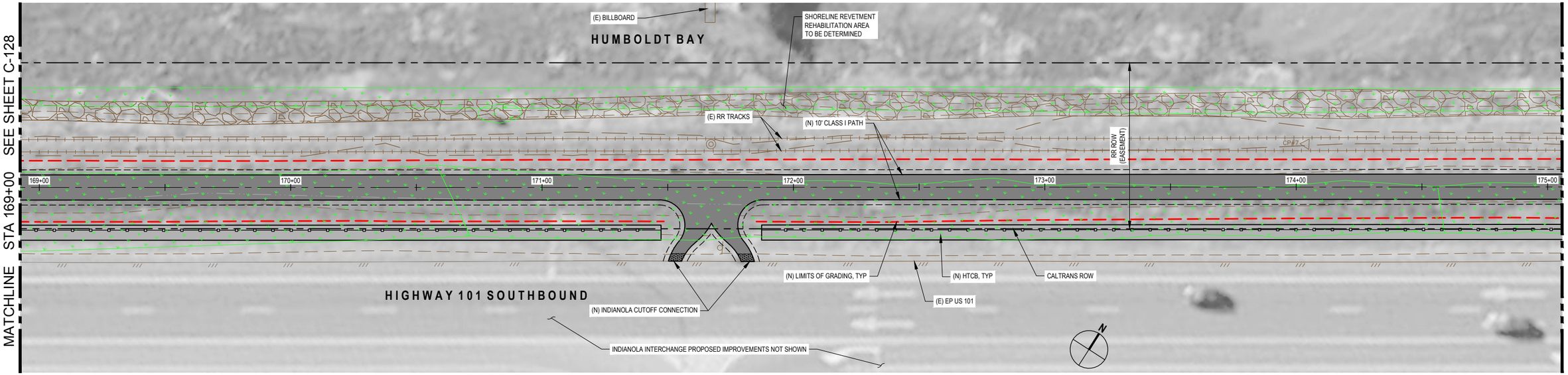
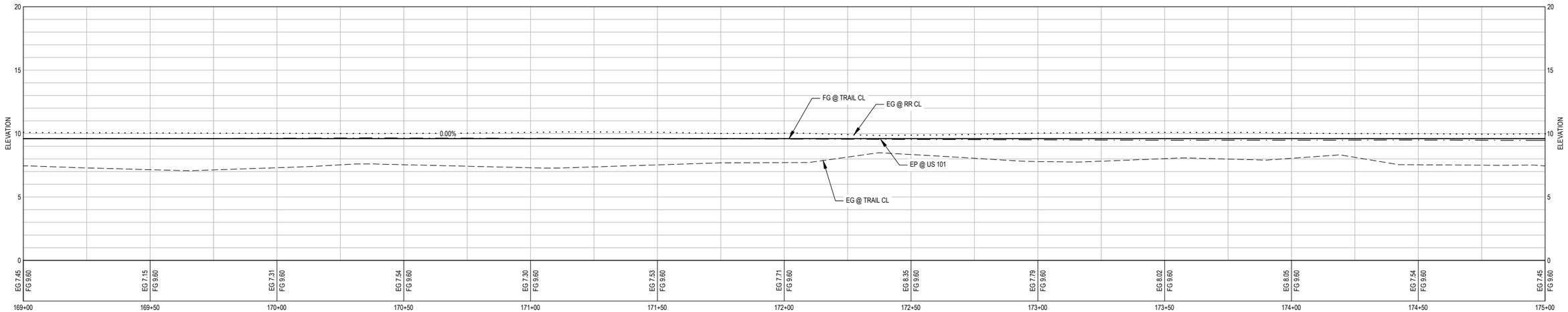
Plot Date: 5 July 2018 - 2:48 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



IMPROVEMENT PLAN & PROFILE STA 169+00 TO 175+00



PROFILE VIEW STA 169+00 TO 175+00

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Title IMPROVEMENT PLAN & PROFILE STA 169+00 TO 175+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-129
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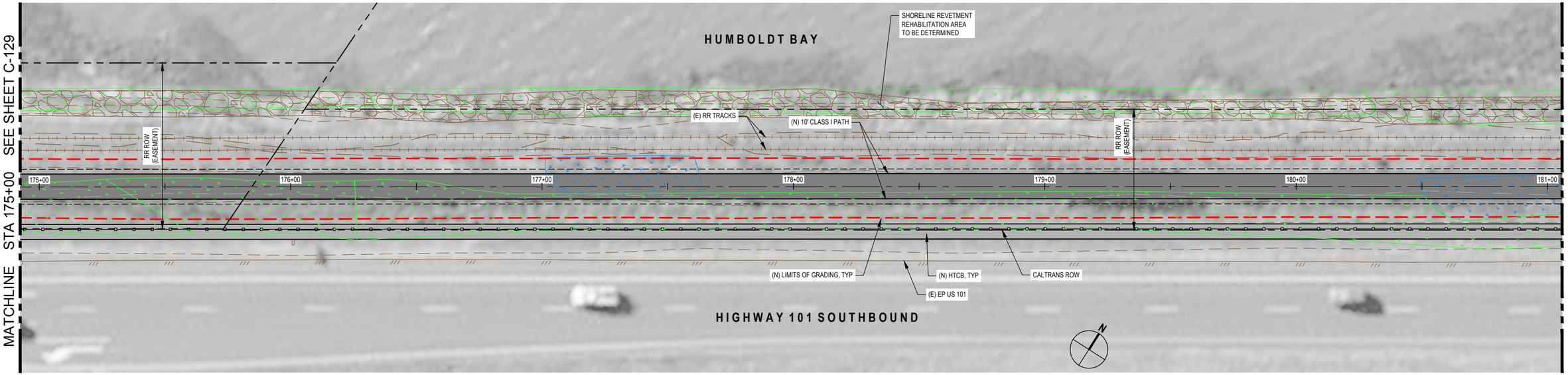
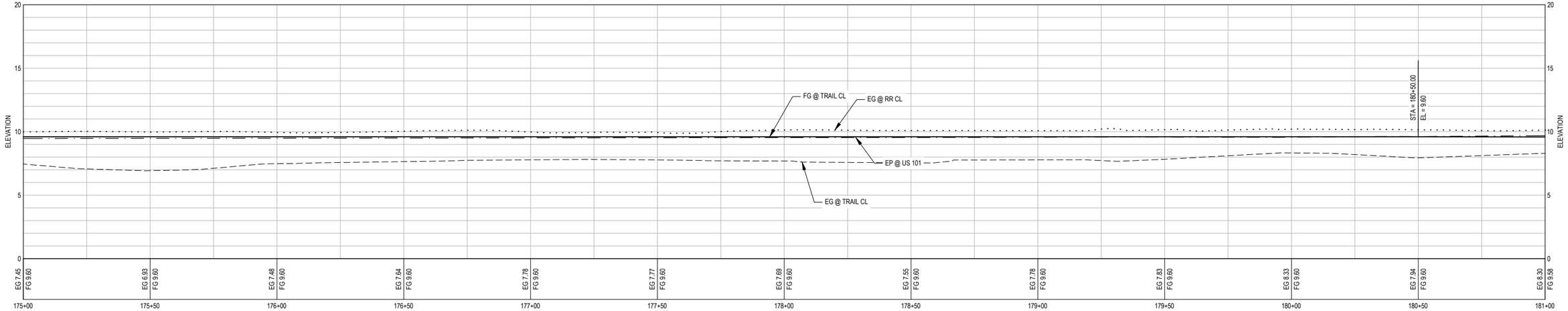


IMPROVEMENT PLAN & PROFILE STA 175+00 TO 181+00



PROFILE VIEW STA 175+00 TO 181+00

15% PLANS
NOT FOR CONSTRUCTION

Bar is one inch on original size sheet
0 1"

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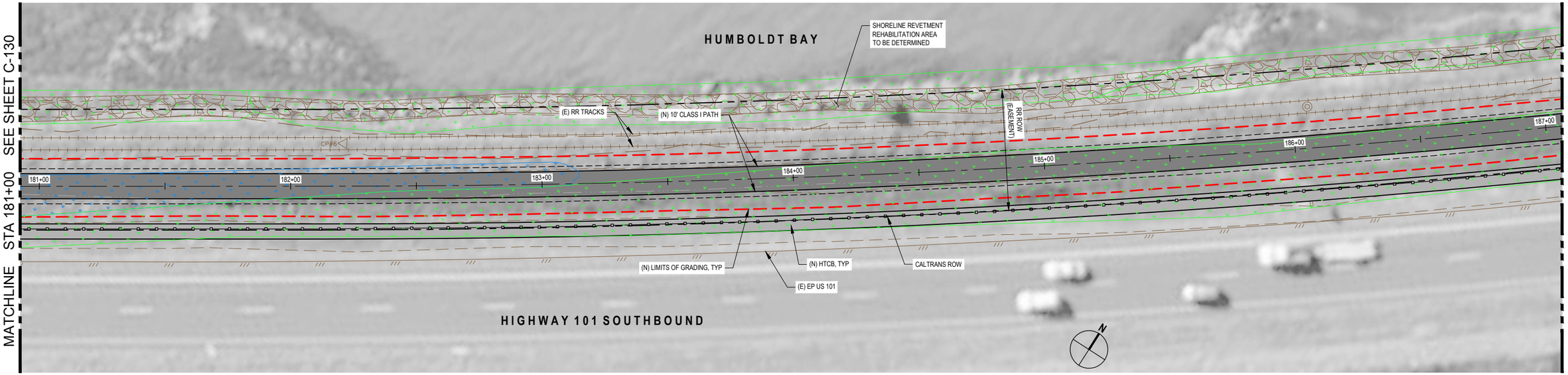
Project Manager	J.WOLF	Date	7/5/2018
		Scale	AS SHOWN

Client COUNTY OF HUMBOLDT
Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 175+00 TO 181+00

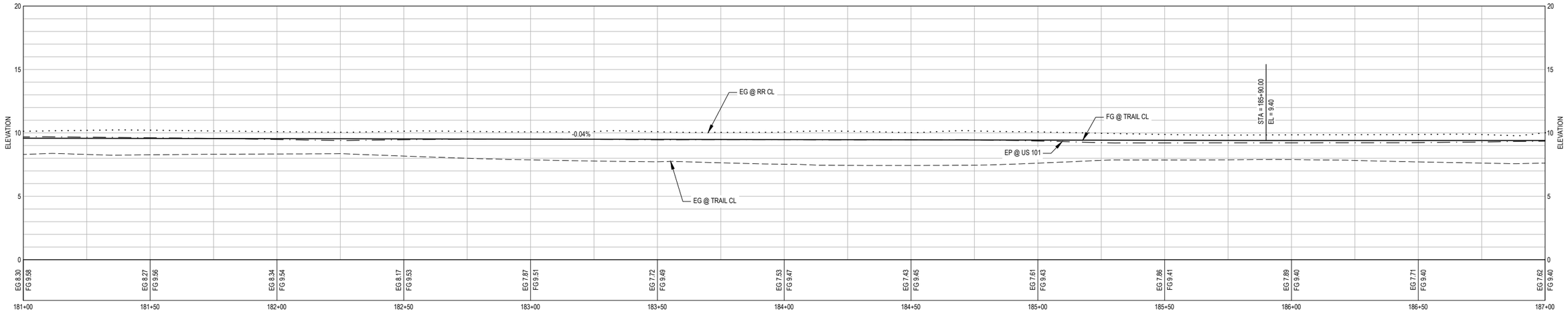
Project No. 11110166
Original Size ANSI D
Sheet No. C-130
Sheet 33 of 41

Plot Date: 5 July 2018 - 2:48 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_26-33_C-123-C-130.dwg



0 20' 40'

IMPROVEMENT PLAN & PROFILE STA 181+00 TO 187+00



0 20' 40' HORIZONTAL

0 4' 8' VERTICAL

PROFILE VIEW STA 181+00 TO 187+00

15% PLANS
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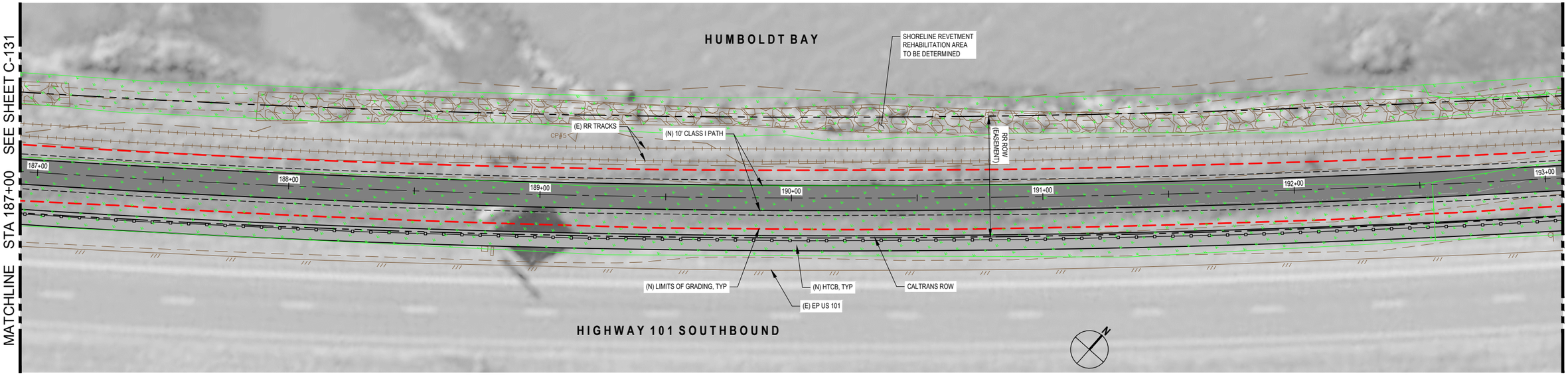
Project No. 11110166
Original Size ANSI D
Sheet No. C-131
Sheet 34 of 41

Plot Date: 5 July 2018 - 2:49 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed pa&e\06-CAD\Sheets\11110166_34-41_C-131-C-138.dwg



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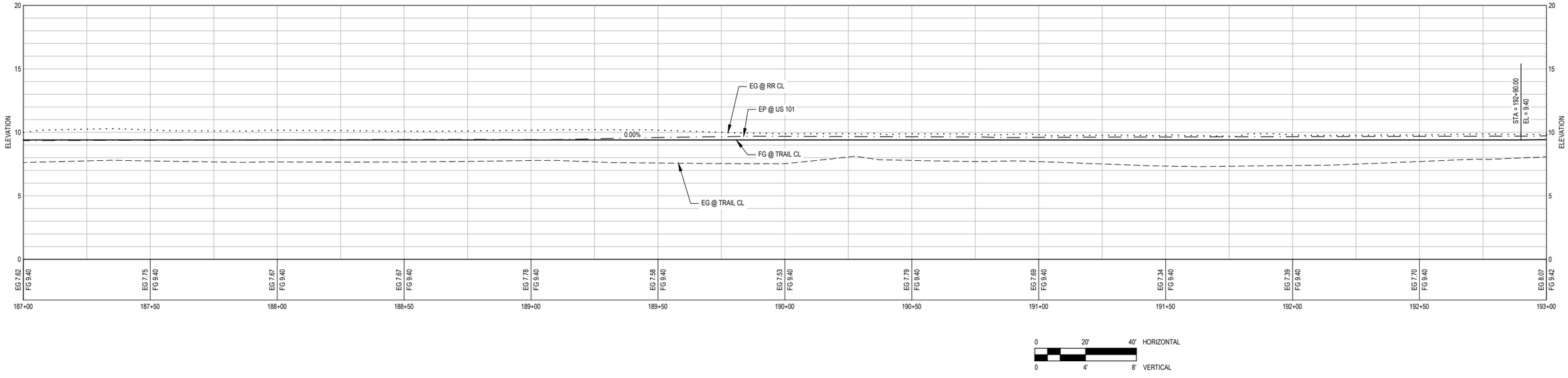

PROFILE VIEW STA 187+00 TO 193+00

15% PLANS
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0 1"

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Project HUMBOLDT BAY TRAIL SOUTH
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Project No. 11110166
Original Size ANSI D
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Plot Date: 5 July 2018 - 2:49 PM
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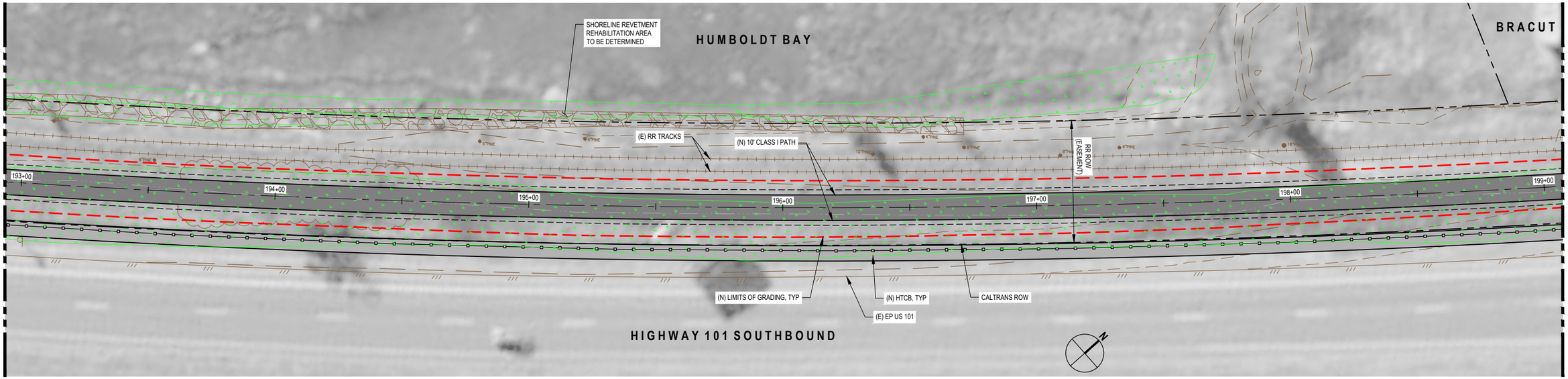
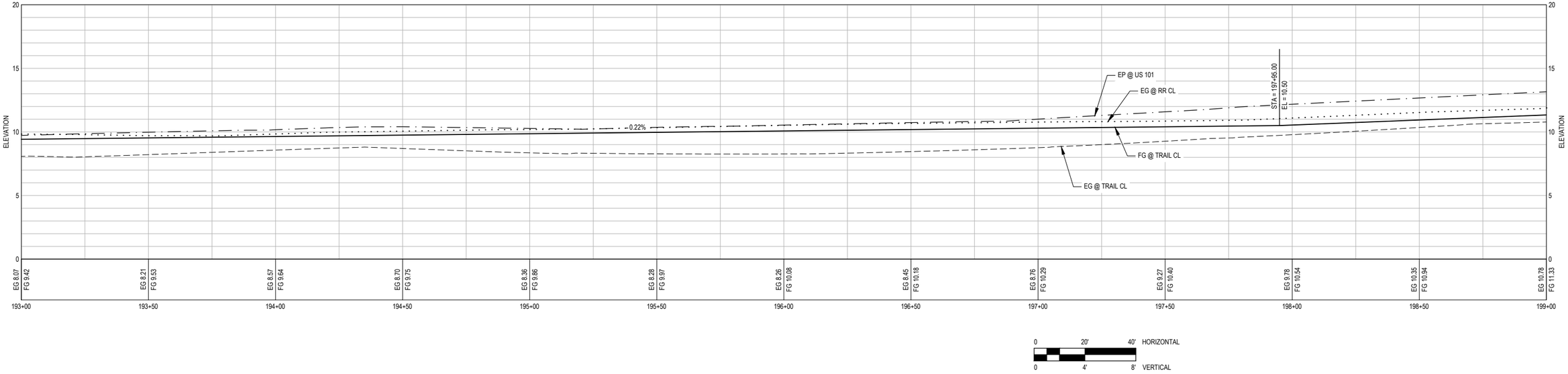


IMPROVEMENT PLAN & PROFILE STA 193+00 TO 199+00



PROFILE VIEW STA 193+00 TO 199+00

15% PLANS
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0 1"

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Project No. 11110166
Original Size ANSI D
Sheet No. C-133
Sheet 36 of 41

Plot Date: 5 July 2018 - 2:50 PM
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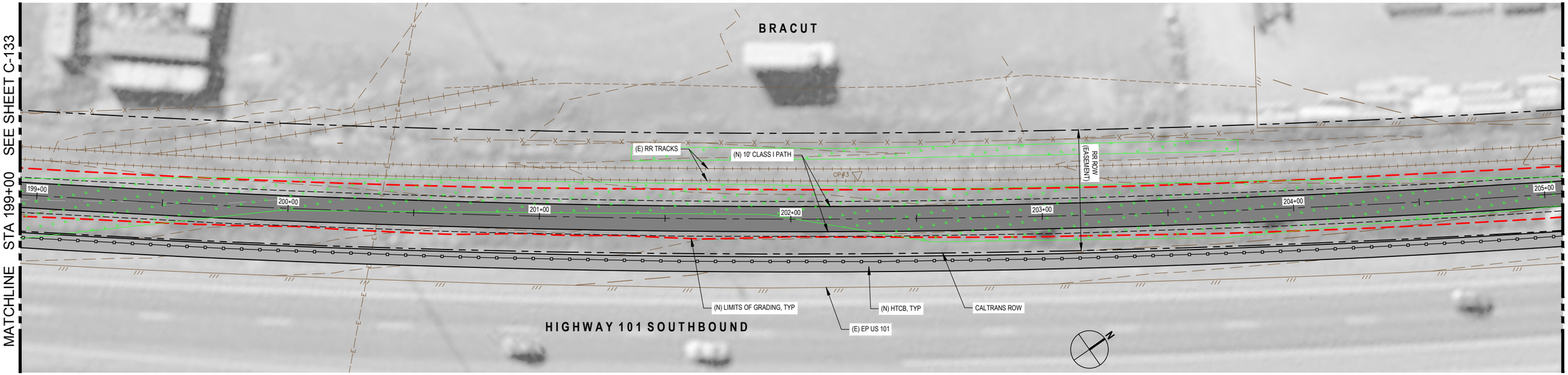
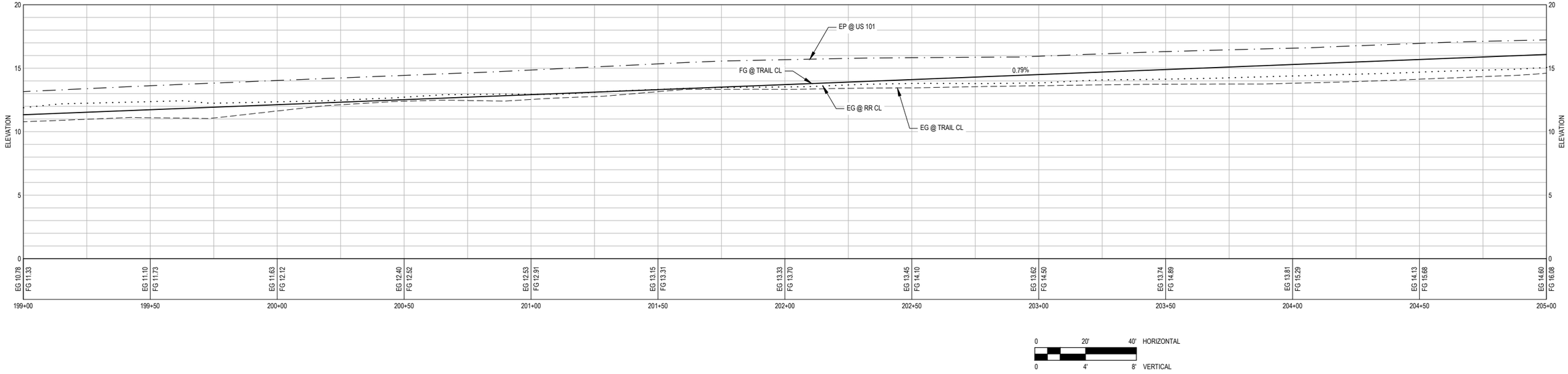
Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_34-41_C-131-C-136.dwg



IMPROVEMENT PLAN & PROFILE STA 199+00 TO 205+00



PROFILE VIEW STA 199+00 TO 205+00

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NOT FOR CONSTRUCTION

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0 1"

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Project HUMBOLDT BAY TRAIL SOUTH
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Project No. 11110166
Original Size ANSI D
Sheet No. C-134
Sheet 37 of 41

Plot Date: 5 July 2018 - 2:50 PM
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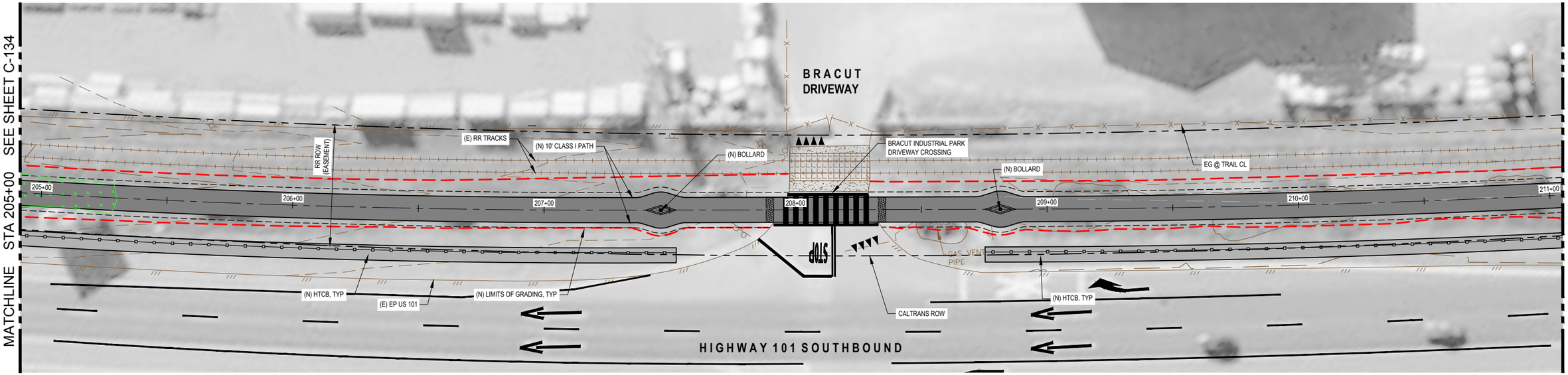

IMPROVEMENT PLAN & PROFILE STA 205+00 TO 211+00

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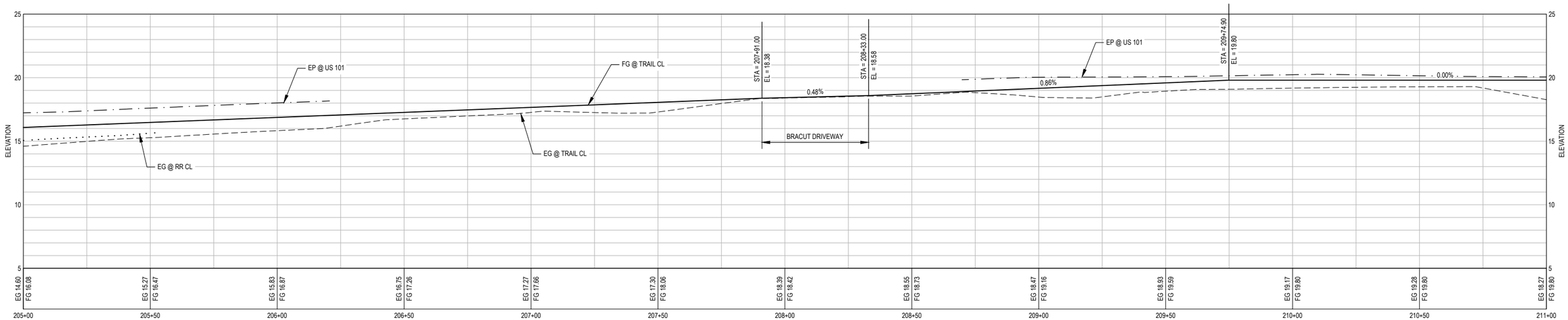

0 20' 40' HORIZONTAL

0 4' 8' VERTICAL

PROFILE VIEW STA 205+00 TO 211+00

15% PLANS

NOT FOR CONSTRUCTION

Bar is one inch on original size sheet

0 1"

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Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 205+00 TO 211+00

Project No. 11110166

Original Size ANSI D

Sheet No. C-135

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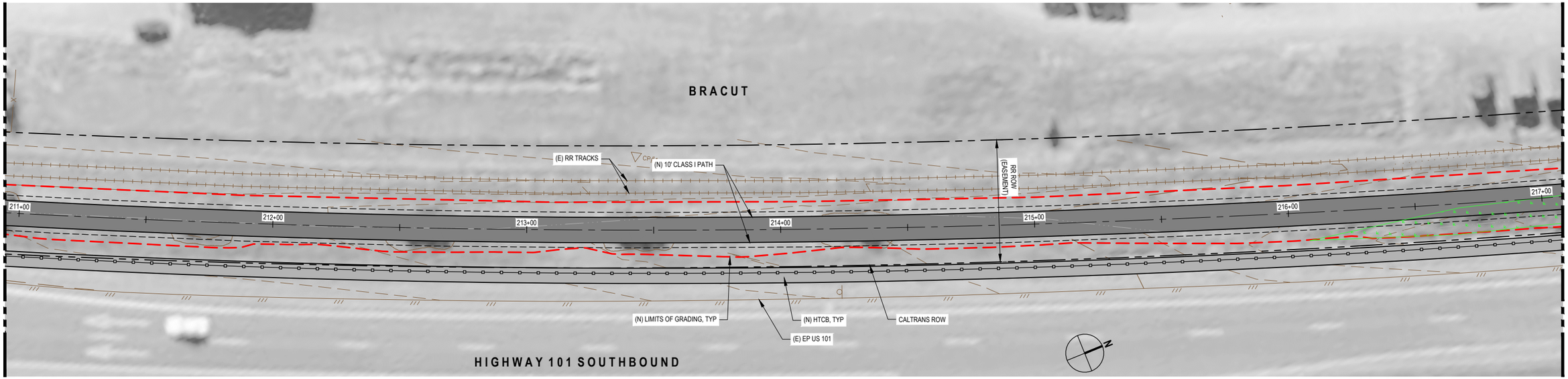
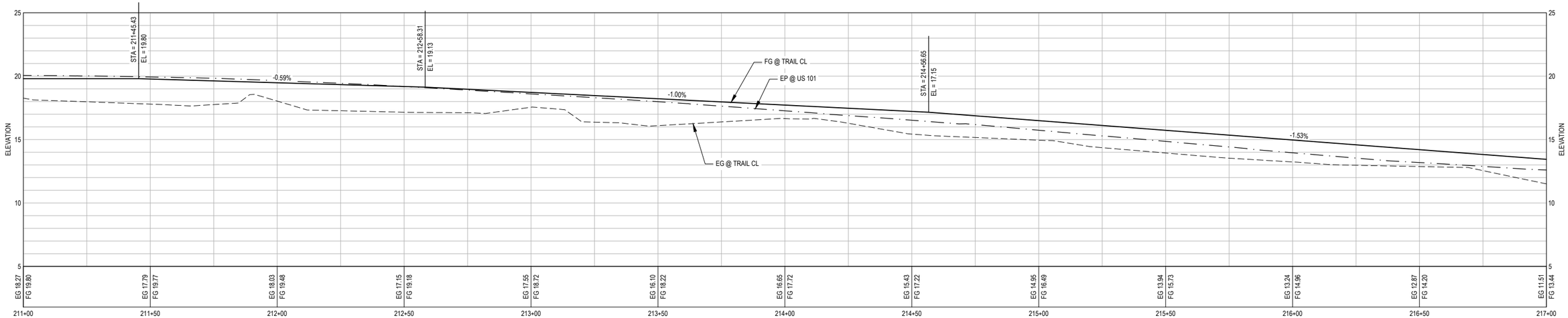
Plot Date: 5 July 2018 - 2:50 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\11\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_34-41_C-131-C-138.dwg



IMPROVEMENT PLAN & PROFILE STA 211+00 TO 217+00



PROFILE VIEW STA 211+00 TO 217+00

15% PLANS
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0 1"

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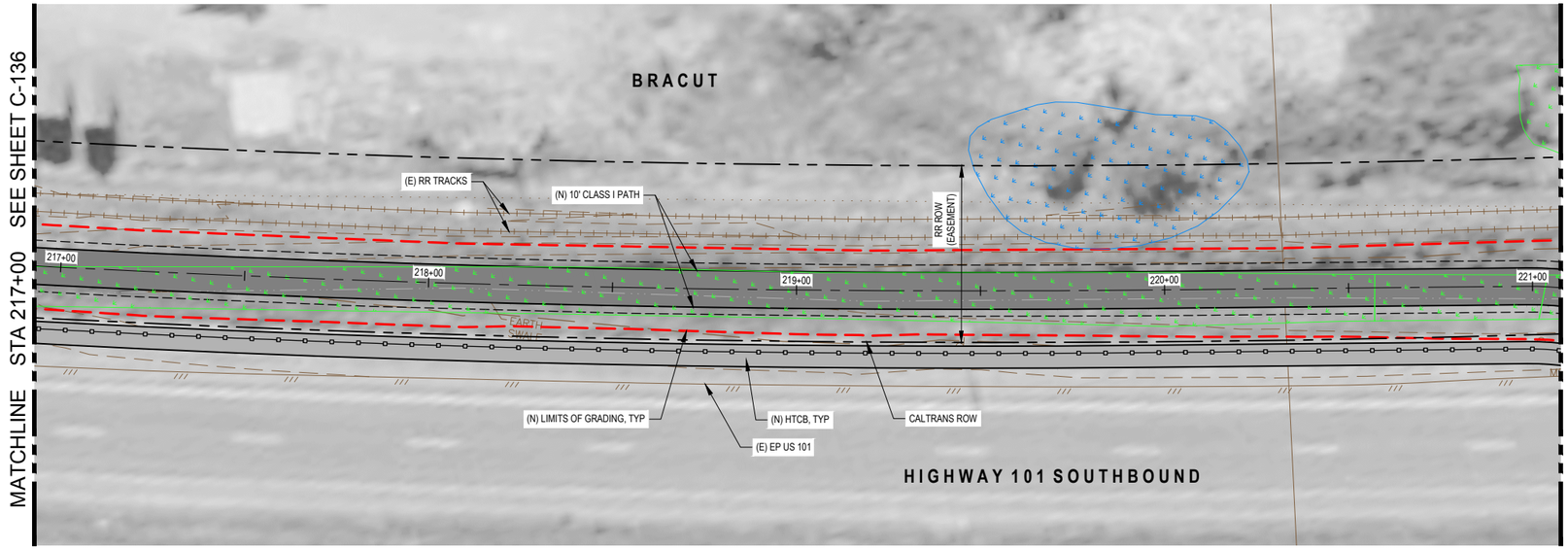
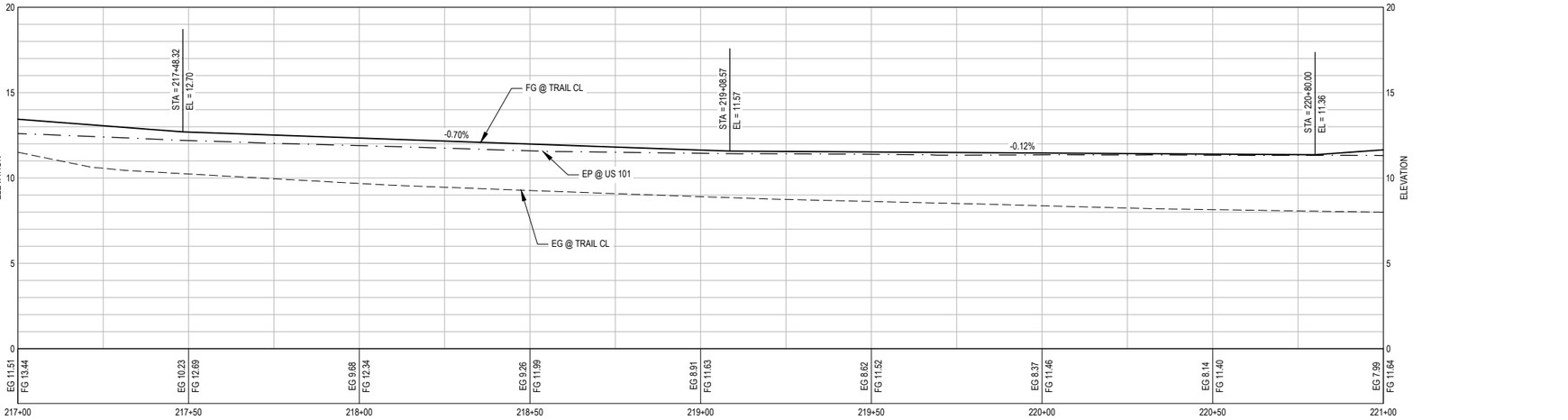
Project No. 11110166
Original Size ANSI D
Sheet No. C-136
Sheet 39 of 41

Plot Date: 5 July 2018 - 2:50 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\11\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_34-41_C-131-C-138.dwg



IMPROVEMENT PLAN & PROFILE STA 217+00 TO 221+00



PROFILE VIEW STA 217+00 TO 221+00

15% PLANS
NOT FOR CONSTRUCTION

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0 1"

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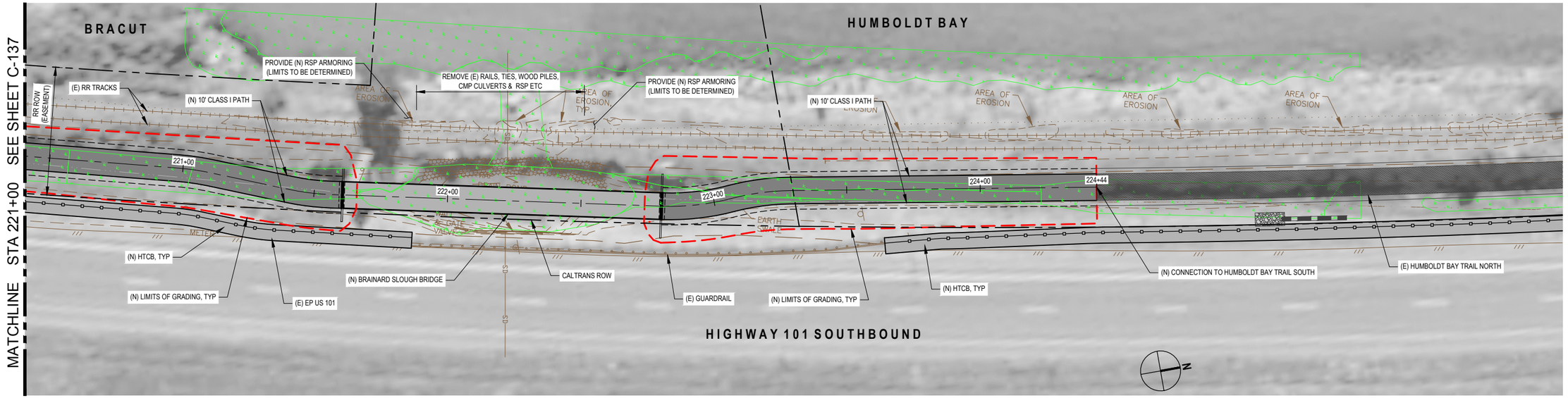
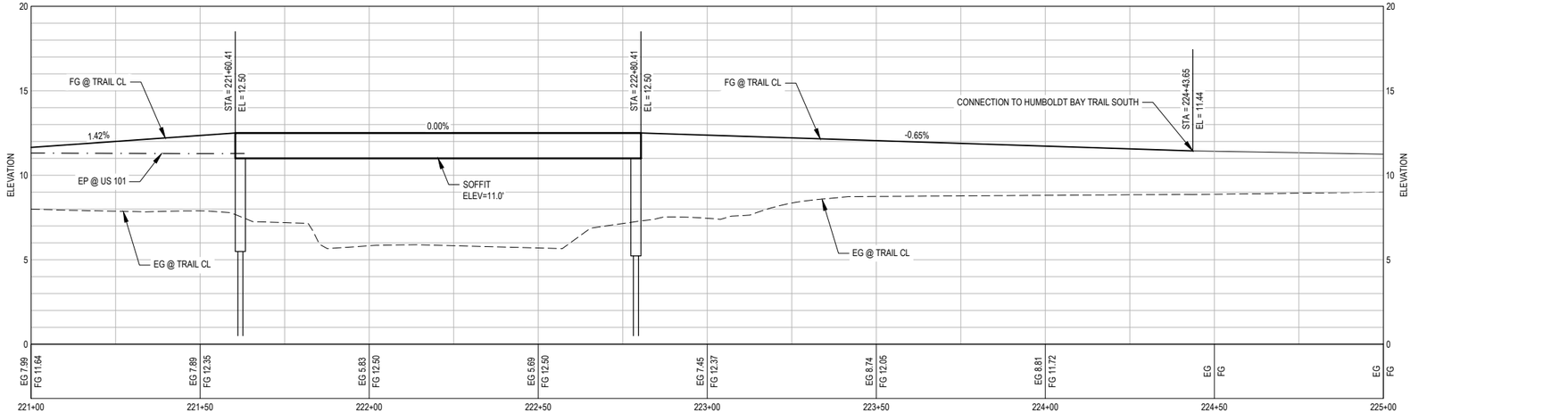
Client COUNTY OF HUMBOLDT
Project HUMBOLDT BAY TRAIL SOUTH
Title IMPROVEMENT PLAN & PROFILE STA 217+00 TO 221+00
Project No. 11110166
Original Size ANSI D
Sheet No. C-137
Sheet 40 of 41

Plot Date: 5 July 2018 - 2:51 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_34-41_C-131-C-138.dwg



IMPROVEMENT PLAN & PROFILE STA 221+00 TO 225+00



0 20' 40' HORIZONTAL
0 4' 8' VERTICAL

PROFILE VIEW STA 221+00 TO 225+00

15% PLANS
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Bar is one inch on original size sheet
0 1"

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Project No. 11110166
Original Size ANSI D
Sheet No. C-138
Sheet 41 of 41

Plot Date: 5 July 2018 - 2:51 PM Plotted By: Owen Goode Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110166 humboldt bay trail south pa&ed ps&e\06-CAD\Sheets\11110166_34-41_C-131-C-138.dwg

Existing Conditions Photos – Eureka to Arcata Highway 101 Corridor and the proposed Humboldt Bay Trail South

The southern terminus of the existing Humboldt Bay Trail North and future access point to Humboldt Bay Trail South, which would continue south past the "End of Trail" sign.

Transition of Humboldt Bay Trail North onto the southbound shoulder of the Highway 101 Safety Corridor.

Bicyclist traveling the wrong direction in the southbound roadway shoulder to access the existing Humboldt Bay Trail North just north of the Bracut Industrial Park.

Traveling southbound along the Highway 101 Safety Corridor south of Bracut. The roadway shoulder is colorized red, and the NCRA rail line and future right-of-way for Humboldt Bay Trail South is adjacent to the right (west) of highway. The highway shoulder is the only area available for non-motorized travel along Highway 101 between Eureka and Arcata.

Frequently emergency vehicles must park in the highway shoulder to assist stranded vehicles, blocking travel for non-motorized users and forcing them to choose between crossing the rumble strips and riding in the fast-moving highway travel lane or walking around through the grass.

Southbound 101 roadway shoulder approaching the existing line of eucalyptus with the rail corridor between the highway and Humboldt Bay.

Former lumber mill along the corridor at which Humboldt Bay Trail South will leave the rail corridor and traverse the existing levee west of 101. The red colorized highway shoulder ends at each intersection (and potential conflict point) along the Safety Corridor.

The Highway 101 shoulder is often filled with debris from logging trucks and fallen eucalyptus branches and nuts, creating a safety hazard for people biking the Safety Corridor.

The narrow rail prism west of the highway just north of Eureka North.

The approach to the Highway 101 bridges over Eureka Slough with the rail corridor just west.

Non-motorized users must currently traverse the narrow Highway 101 Eureka Slough bridges adjacent to fast moving motor vehicles.

The future connection between the existing Eureka Waterfront Trail and the Humboldt Bay Trail South, proposed to cooperatively utilize the existing rail bridge over Eureka Slough (left side of photo). The Highway 101 Eureka Slough bridges are seen in the right of the photo.

NCRA rail bridge over Eureka Slough proposed for innovative cooperative use serving both the Humboldt Bay Trail South and excursion rail/speeder rail cars.

A pedestrian walks northbound (wrong direction for pedestrian travel) along the Highway 101 shoulder. Highway 101 currently has no pedestrian or bicycle facilities though it connects the two largest population areas in Humboldt County.

A bicyclist navigates northbound in the highway shoulder immediately adjacent to a speeding lumber truck and other vehicles. The safety hazard of traveling adjacent to highway-speed vehicles is a barrier to most people considering active transportation between Eureka and Arcata.

A northbound bicyclist approaches and navigates the on/off ramps at Indianola Cutoff. Non-motorized users are forced to cross the on/off ramps with highway-speed vehicles in order to continue north. There are six intersections (with on/off lanes) along Highway 101 between Eureka and Arcata that non-motorized users must traverse.

The photos below detail the existing use of the Eureka Waterfront Trail and Humboldt Bay Trail North. The Humboldt Bay Trail South will complete the 4 mile gap between these two heavily utilized trails.

People of all ages enjoy the recently completed Eureka Waterfront Trail that stretches 6.5 miles from south Eureka to the future terminus of Humboldt Bay Trail South, then under Highway 101 to connect to neighborhoods in east Eureka.

A bicyclist travels on the Humboldt Bay Trail North recently completed by the City of Arcata. The cable barrier proposed in the Humboldt Bay Trail South project will extend along a portion of Humboldt Bay Trail North, between the trail and highway in the above right photo.

For photos from **two decades of public outreach about the Humboldt Bay Trail** including the recent February 2018 Humboldt Bay Trail South workshop, please see the Additional Attachment to Support Public Participation under Part B Narrative Question 4.

The photos below show an aerial view of the Humboldt Bay Trail South project area and the two access points from Humboldt Bay Trail North (in the north) and the Eureka Waterfront Trail (in the south).

Aerial view of Highway 101, the current end point of the Humboldt Bay Trail North north of Bracut, and the proposed alignment of Humboldt Bay Trail South shown by the orange line.

Aerial view of Humboldt Bay looking southwest with orange line representing the proposed alignment of Bay Trail South along Highway 101 and then around the former lumber mill. Eureka is barely visible on the far right.

Aerial view of Humboldt Bay, Highway 101 and the NCRA rail corridor looking east with orange line representing the proposed alignment of Bay Trail South.

A view of Eureka Slough with the NCRA rail bridge in the foreground and the Highway 101 bridges behind. The southernmost stretch of the Humboldt Bay Trail South will traverse the rail bridge, utilizing an innovative design to enable both trail and occasional tourist rail use, to connect Humboldt Bay Trail South to the City of Eureka and the Eureka Waterfront Trail.

Detailed Engineer's Estimate and Total Project Costs- Cycle 4

Important: Read the Instructions in the first sheet (tab) before entering data. Do not enter data in shaded fields (with formulas).

Project Information:

Agency:	County of Humboldt	**Date:**	7/25/2018
Project Description:	Humboldt Bay Trail South		
Project Location:	Humboldt County, Ca		
Licensed Engineer in responsible charge of preparing or reviewing this PSR-Equivalent Cost Estimate:	Josh Wolf	**License #:**	C70358

Engineer's Estimate and Cost Breakdown:

Engineer's Estimate (for Construction Items Only)

Item No.	Item	Quantity	Units	Unit Cost	Total Item Cost	Cost Breakdown: ATP Eligible Costs/Items %	ATP Eligible Costs/Items $	ATP Ineligible Costs/Items %	ATP Ineligible Costs/Items $	Corps/CCC to construct %	Corps/CCC to construct $
General Overhead-Related Construction Items											
1	Mobilization/Demobilization	1	LS	$1,200,000.00	$1,200,000	100%	$1,200,000				
2	Construction Area Signs	1	LS	$11,000.00	$11,000	100%	$11,000				
3	Temporary Traffic Control	1	LS	$400,000.00	$400,000	100%	$400,000				
4	Construction Staking	1	LS	$75,000.00	$75,000	100%	$75,000				
5	Water Pollution Control	1	LS	$240,000.00	$240,000	100%	$240,000				
6	Controll of Water	1	LS	$250,000.00	$250,000	100%	$250,000				
7	Minor Items	1	LS	$150,000.00	$150,000	100%	$150,000				
General Construction Items (non-decorative only)											
8	Clearing and Grubbing	54000	SY	$5.00	$270,000	100%	$270,000			100%	$270,000
9	Eucalyptus Tree & Stump Removal	1	LS	$380,000.00	$380,000	100%	$380,000				
10	Remove Asphalt Pavement	80	SY	$25.00	$2,000	100%	$2,000				
11	Excavation	3100	CY	$40.00	$124,000	100%	$124,000				
12	Imported Borrow	19000	CY	$30.00	$570,000	100%	$570,000				
13	Subgrade Replacement	310	CY	$100.00	$31,000	100%	$31,000				
14	Class II Aggregate Base	11000	CY	$70.00	$770,000	100%	$770,000				
15	18-Inch Storm Drain	100	LF	$150.00	$15,000	100%	$15,000				
16	Hot Mix Asphalt	3500	TON	$170.00	$595,000	100%	$595,000				
17	Eureka Slough Bridge Improvements	1	LS	$920,000.00	$920,000	100%	$920,000				
18	CRC South Bridge (60')	1	LS	$385,000.00	$385,000	100%	$385,000				
19	CRC North Bridge (195')	1	LS	$750,000.00	$750,000	100%	$750,000				
20	Brainard Slough Bridge (120')	1	LS	$580,000.00	$580,000	100%	$580,000				
21	Retaining Wall	1	LS	$1,230,000.00	$1,230,000	100%	$1,230,000				
22	Overlook Area (benches and railing)	4	EA	$25,000.00	$100,000	100%	$100,000				
23	Rock Slope Protection (No. 1)	400	TON	$100.00	$40,000	100%	$40,000				
24	Rock Slope Protection (1/4 Ton)	800	TON	$125.00	$100,000	100%	$100,000				
25	Rock Slope Protection (1/2 Ton)	4800	TON	$130.00	$624,000	100%	$624,000				
26	Rock Slope Protection (2 Ton)	1700	TON	$130.00	$221,000	100%	$221,000				
27	Boulders (2 Ton)	16	EA	$500.00	$8,000	100%	$8,000				
28	Ballast Rock	1300	CY	$70.00	$91,000	100%	$91,000				
29	Detectable Warning Surface	210	SF	$70.00	$14,700	100%	$14,700				
30	Trail Fencing	5600	LF	$40.00	$224,000	100%	$224,000				
31	Vegetation Control, 4' Wide, Minor	11355	SY	$60.00	$681,300	100%	$681,300				
32	High Tension Cable Barrier	17030	LF	$35.00	$596,050	100%	$596,050				
33	High Tension Cable Barrier Terminal	14	EA	$5,000.00	$70,000	100%	$70,000				
34	Bollard	8	EA	$1,800.00	$14,400	100%	$14,400				
35	Thermoplastic Pavement Markings	600	SF	$15.00	$9,000	100%	$9,000				
36	Thermoplastic Traffic Stripe (4-inch)	23000	LF	$2.00	$46,000	100%	$46,000				
37	Roadside Sign, 1-Post	40	EA	$500.00	$20,000	100%	$20,000				
38	Way-Finding Sign	5	EA	$500.00	$2,500	100%	$2,500				
39	Interpretative Sign	5	EA	$1,000.00	$5,000	100%	$5,000				
40	Trail Intersection Lighting	1	LS	$25,000.00	$25,000	100%	$25,000				
41	Rolled Erosion Control Product (Blanket)	150000	SF	$1.00	$150,000	100%	$150,000				
42	Hydroseed	4.25	AC	$10,000.00	$42,500	100%	$42,500				
43	Environmental Mitigation	6	AC	$350,000.00	$2,100,000	100%	$2,100,000				
	Subtotal of Construction Items:				**$14,132,450**		**$14,132,450**				**$270,000**
	Construction Item Contingencies (% of Construction Items)**:**			**21.00%**	$2,967,815		$2,967,815				
	Total (Construction Items & Contingencies) cost:				**$17,100,265**		**$17,100,265**				

Project Delivery Costs:

Type of Project Cost	Cost $	ATP Eligible Costs	Non-participating Costs	
Preliminary Engineering (PE)				
Environmental Studies and Permits(PA&ED):	$ 1,450,000	$1,450,000		
Plans, Specifications and Estimates (PS&E):	$ 550,000	$550,000		"PE" costs / "CON" costs
Total PE:	$ **2,000,000**	**$2,000,000**		12% **25% Max**
Right of Way (RW)				
Right of Way Engineering:	$ 500,000	$500,000		
Acquisitions and Utilities:	$ 1,500,000	$1,500,000		
Total RW:	$ **2,000,000**	**$2,000,000**		
Construction Engineering (CE)				"CE" costs / "CON" costs
Construction Engineering (CE):	$ 1,500,000	$1,500,000		9% **15% Max**

Detailed Engineer's Estimate and Total Project Costs- Cycle 4

Important: Read the Instructions in the first sheet (tab) before entering data. Do not enter data in shaded fields (with formulas).

Project Information:

Agency:	County of Humboldt	**Date:**	7/25/2018
Project Description:	Humboldt Bay Trail South		
Project Location:	Humboldt County, Ca		
Licensed Engineer in responsible charge of preparing or reviewing this PSR-Equivalent Cost Estimate:	Josh Wolf	**License #:**	C70358

Total Project Delivery:	$5,500,000	**$5,500,000**	
Total Construction Costs:	$18,600,265	**$18,600,265**	
		ATP Eligible Costs	Non-participating Costs
Total Project Cost:	$22,600,265	**$22,600,265**	

Documentation of Ineligible (Non-Participating) Costs:

The Engineer's logic and/or calculations for splitting costs between ATP-Eligible and Non-participating costs must be documented in this section of the Estimate form.
Separate logic is required for each construction item listed above which is partly ineligible for ATP funding or is required for the construction of an ineligible item/element of the project.

Item Number(s):	Description of Engineer's Logic: (See examples shown in the Instructions)

Humboldt Trails Council
1385 8th Street
Arcata, CA 95521
www.humtrails.org

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

June 13, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

The Humboldt Trails Council (HTC) is writing this letter with enthusiastic support for the County of Humboldt's Humboldt Bay Trail South Project. The Humboldt Trails Council serves as a unified voice to support trail development and use of trails for transportation and recreation throughout Humboldt County. The completion of the Humboldt Bay Trail has been the top priority of our organization.

The Humboldt Bay Trail South project will close a 4 mile gap in this trail network and provide the first safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, the Highway 101 corridor between Eureka and Arcata. Once completed, the Humboldt Bay Trail South project will transform local opportunities for non-motorized transportation for students, workers, and families – providing a safe, separated facility for commuting and healthy exercise that has been sought after for over two decades.

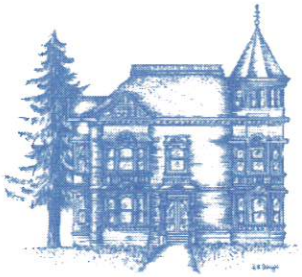
For 14 years the HTC has helped cultivate community involvement in the shaping of the Humboldt Bay Trail project by providing community outreach and education, advocating for the trail with local and state decision-making bodies, co-hosting well-attended Regional Trail Summits in 2016 & 2017, and operating the Volunteer Trail Stewards program. Since 2010 the Volunteer Trail Stewards have provided community maintenance assistance on existing multi-use trail segments managed by the County of Humboldt and other local jurisdictions – reducing trail maintenance costs and providing local jurisdictions additional capacity for maintaining our expanding regional trail network. In 2017 alone, 665 community volunteers provided 2,646 stewardship hours along our region's existing multi-use trails through the VTS program. This participation has an incredible impact in our rural community.

HTC strongly supports the Humboldt Bay Trail South project which promises to transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits.

Sincerely,

Karen Underwood

Karen Underwood, Vice-President
Humboldt Trails Council Board of Directors



Simpson-Vance House 1892

Redwood Community Action Agency

ADMINISTRATION
Information & Referral
(707) 269-2001

AMERICORPS PROGRAMS
AFACTR
(707) 269-2020
STRAIGHT UP AMERICORPS
(707) 269-2024
AMERICORPS VISTA
(707) 269-2052

ENERGY SERVICES
(707) 444-3831
Consumer Education, **Ext 201**
Weatherization, **Ext. 204**
Lead Based Paint Hazard
Reduction & Inspection, **Ext 201**
Home Energy Assistance Program
(HEAP) - (707) 444-3834

FAMILY SERVICES
(707) 269-9590
Family Shelter Program
Ext 209
Multiple Assistance Center
269-9592
Emergency Shelter Office
(707) 269-2075

HOUSING REHABILITATION LOAN PROGRAM
(707) 269-2034

NATURAL RESOURCES SERVICES
(707) 269-2070
Landscape Contractor
License #518874

NORTHCOAST MENTOR PROGRAM
(707) 269-2052

PROPERTY MANAGEMENT
Affordable Rentals (707) 269-2011

YOUTH SERVICE BUREAU
24-Hour Youth & Family Hotline
(707) 444-CARE
YSB Administration
Launch Pad TLP
Our House Emergency Shelter
(707) 443-8322
Raven Street Outreach Program
(707) 443-7099

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

June 8, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South

Dear Application Review Committee,

On behalf of Redwood Community Action Agency (RCAA), I wholeheartedly support the County of Humboldt's Humboldt Bay Trail South project. The Humboldt Bay Trail South project will close a 4 mile gap in walking and biking facilities between Eureka and Arcata and provide the first safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101.

RCAA is a non-profit 501(c)3 organization based in Eureka which focuses on improving community self-sufficiency and serving disadvantaged families in Humboldt County. The RCAA Board of Directors has recognized that affordable, safe transportation options between Eureka and Arcata to access jobs and schools is imperative for families to be self-sufficient, and as such made the completion of a trail network between Humboldt Bay communities as one of RCAA's top two priorities. The Humboldt Bay Trail will remove a major barrier to mobility and healthy exercise for disadvantaged families in Humboldt County.

RCAA has led community outreach and planning for the Humboldt Bay Trail since the 1997 Humboldt Bay Bicycle Facilities Feasibility Study and the 2001 Humboldt Bay Trails Feasibility Study, which analyzed hundreds of comments from community members and local, regional and state agencies to determine the most feasible trail alignment between Eureka and Arcata to be within the NCRA rail corridor and along the west side of Highway 101. RCAA has continued to facilitate creative public participation opportunities to shape the Humboldt Bay Trail project through Regional Trail Summits in 2016 & 2017, the Best of Humboldt Fair in 2014, the Humboldt County Coastal Trail Implementation Strategy project in 2011, and a weekly radio show focused on trails on our local KHUM station that has been on the air for over a decade.

We are grateful to the County of Humboldt for steadfast dedication to completing the Humboldt Bay Trail, and we respectfully encourage you to support this important project for a myriad of transportation and quality of life benefits for local families, workers and students in disadvantaged Humboldt County.

Sincerely,

Val Martinez
Executive Director

HUMBOLDT AREA
FOUNDATION

July 27, 2018

CALTRANS
Division of Local Assistance
1120 N Street MS1
Attn: Office of State Programs
Sacramento CA 95814

Subject: County of Humboldt's Humboldt Bay Trail South Project

Dear Applicant Review Committee:

This letter is to express Humboldt Area Foundation's strong and enthusiastic support for the County of Humboldt's Humboldt Bay Trail South Project. This project represents the culmination of a decades-long community effort to connect the two largest cities in the county, Arcata and Eureka. It would fund the final four-mile connection and provide the first safe corridor for non-motorized transportation along the most heavily-traveled highway in the county.

This project has long held broad and deep community support. The Humboldt Bay Trail Fund, established by community members here at the foundation, has already raised over $240,000 in just over one year from a wide range of donors, despite the fact that Humboldt is a disadvantaged rural community with a median household income that is two-thirds the California average. This fund was developed as a way for private donors to assist the effort to build the trail by focusing on the critical need for maintenance funds.

Humboldt Area Foundation's offices are physically located along this unbuilt gap in the trail, halfway between Arcata and Eureka. We host many community meetings and trainings here, and this project will provide a safer non-motorized access option for the thousands of residents who use our facility, not to mention our employees (including myself), who would commute via bicycle with type of safe access this project will create.

The community has worked together for over two decades to address the many challenges that this project has overcome, including coordinating with the North Coast Railroad Authority to develop a "rails-with-trails" design.

363 Indianola Rd, Bayside, CA 95524 707.442.2993 info@hafoundation.org hafoundation.org

This project will beckon local and visiting walkers, joggers, bicyclists and more to enjoy the beautiful Humboldt Bay in their travels. The Bay Trail enjoys the strong support of the California Coastal Commission, the County of Humboldt and the Cities of Arcata and Eureka. The most recent portion of this trail completed by the City of Arcata enjoys public popularity and use in its first months of being open.

Humboldt Area Foundation strongly supports this project, which will transform transportation for the Humboldt Bay region, promote healthy living, and tourism while greatly enhancing the quality of life for our community. Thank you for your careful consideration of the most important transportation project for the county.

Sincerely,

Patrick Cleary
Executive Director

HUMBOLDT BAY BICYCLE COMMUTERS ASSOCIATION

Our goal: To improve and encourage bicycle commuting

P.O. Box 9054, Eureka, California 95502-9054

June 19, 2018

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

The Humboldt Bay Bicycle Commuters Association (HBBCA) enthusiastically supports the County of Humboldt's Humboldt Bay Trail South project. This remaining section of trail will connect the Humboldt Bay Trail North from Arcata to the Eureka Waterfront Trail. We've already seen the effects of these recently-constructed trails—more people than ever before participated in Bike Month Humboldt this May, and the trails are busy every day with families and less-experienced riders. Completion of the Humboldt Bay Trail is the region's top active transportation priority for a good reason: this final segment promises to be a transformational project that will inspire a significant mode shift to bicycling between Humboldt County's two largest population centers. As a Class I trail, physically separated from Route 101, cyclists not comfortable riding either the freeway or Old Arcata Road will be better served. In addition, new riders will be encouraged to try cycling for their transportation-related trips.

HBBCA's goal is to improve and encourage bicycle commuting throughout the Humboldt Bay region. HBBCA has helped cultivate community involvement in the shaping of the Humboldt Bay Trail by informing our members and website/Facebook followers of outreach opportunities, comment solicitations for proposed plans and designs, and educating local jurisdictions about bikeway design best practices. We have provided comments to Humboldt County on the design concepts for the Humboldt Bay Trail South, and look forward to working with them through final design to create a safe and effective facility for bicyclists to use.

HBBCA strongly supports funding the Humboldt Bay Trail South project through the Active Transportation Program. This project will have an enormous impact on bicycling in the Humboldt Bay area, and we eagerly await its completion.

Sincerely,

Rick Knapp

Rick Knapp, President

Coastal Conservancy

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

July 12, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

State Coastal Conservancy staff enthusiastically support the County of Humboldt's Humboldt Bay Trail South Project. This regional transportation priority not only fills the gap in walking and biking facilities between Eureka and Arcata, the two largest population centers in Humboldt County, but it also fulfills state-wide goals of completing the California Coastal Trail, improving the Pacific Coast Bike Route, and enhancing safety and mobility for non-motorized users particularly disadvantaged residents in the Humboldt Bay area. Further, and additionally important for Conservancy goals, the Humboldt Bay Trail will provide a vast array of recreational opportunities for residents and tourists and expand opportunities to enjoy Humboldt Bay and its natural resources.

The State Coastal Conservancy has been invested in the completion of this important section of the California Coastal Trail since 2001 when our Board provided funding for development of the *Humboldt Bay Trail Feasibility Study*. The Conservancy subsequently provided additional funding over several phases for the City of Eureka's Waterfront Trail and the City of Arcata's Humboldt Bay Trail North. Humboldt County's proposal to construct the Humboldt Bay Trail South Project provides the critical link tying the City of Eureka and City of Arcata Bay Trail segments together, completing one contiguous trail system. This is a very high priority not only for Coastal Conservancy staff but for the thousands of community members, local organizations and businesses that have contributed ideas, comments, time, and financial resources towards realizing a completed Humboldt Bay Trail.

Conservancy staff strongly support the Humboldt Bay Trail South project which will transform the opportunities for active commuting and appreciation of Humboldt Bay. Conservancy staff expect to recommend the Conservancy Board approve up to $2,000,000 for the Humboldt Bay Trail South project at a future meeting.

Sincerely,

Karyn Gear
North Coast Regional Manager

1515 Clay Street, 10th Floor
Oakland, California 94612-1401
510·286·1015 Fax: 510·286·0470

HCAOG
Regional Transportation Planning Agency

611 I Street, Suite B
Eureka, CA 95501
707.444.8208
Fax: 707.444.8319
www.hcaog.net

July 20, 2018

Chief, Office of Active Transportation & Special Programs
Division of Local Assistance
California Department of Transportation
Post Office Box 942874, MS-1
Sacramento, CA 94274-0001

RE: Humboldt Bay Trail South Project - Letter of Support

Dear Application Review Committee,

On behalf of the Humboldt County Association of Governments (HCAOG), we appreciate the opportunity to extend our full support for the County of Humboldt's Humboldt Bay Trail South Project. HCAOG is the regional transportation planning agency for the Humboldt County region and presents a rural county with seven incorporated cities and eight federally recognized tribes.

The Humboldt Bay Trail South project is an exceptional project that will fill a 4-mile gap in the partially complete Humboldt Bay Trail between Eureka and Arcata, also a key link in the California Coastal Trail system. The project will greatly improve safety for non-motorized users by providing the only safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101. After many years of intensive planning, incremental progress in completing trail segments in Arcata and Eureka, and significant state and local investment, one of the most popular and long-awaited transportation projects on the north coast of California is poised to be realized.

Funding for the Humboldt Bay Trail is a California Coastal Commission (Commission) Federal Consistency Condition of Approval issued in 2013 for HCAOG's 101 Corridor Improvement Project. At that time, Commission staff recommended that the highway project be required to the develop a separated barrier on the highway, mere feet away from our long-planned Humboldt Bay Trail. Although the $66 million highway project is fully funded, it will not be permitted by the Coastal Commission unless funding for the Humboldt Bay Trail secured.

The Humboldt Bay Trail has been identified as a regional priority in the Humboldt Regional Transportation Plan, VROOM (2017), Regional Bicycle Plan (2018), Humboldt County Coastal Trail Implementation Strategy (2011), Regional Trails Master Plan (2010), Regional Pedestrian Plan (2008) and the Humboldt Bay Trail Feasibility Study (2007).

The County of Humboldt has worked cooperatively and diligently on this project with community members, HCAOG, Caltrans, the North Coast Railroad Authority, and regulatory agencies to develop a trail design that is feasible, fits the context of the surrounding community, and limits impacts to Humboldt Bay resources.

HCAOG strongly supports the Humboldt Bay Trail South project, which promises to transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits. Thank you for your careful consideration of this vital project.

Sincerely,

Marcella Clem
Executive Director

City of ARCATA

736 F Street
Arcata, CA 95521

City Manager	Police	Recreation
(707) 822-5953	822-2428	822-7091
Community Development	*Finance*	*Transportation*
822-5955	822-5951	822-3775
Environmental Services Streets/Utilities	*Environmental Services Community Services*	*Engineering & Building*
822-5957	822-8184	825-2128

June 20, 2018

California Department of Transportation (Caltrans)
Division of Local Assistance
Attn: Office of State Programs
1120 N Street, MS 1
Sacramento, CA 95814

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

On behalf of the City of Arcata, we appreciate the opportunity to extend our full support for the County of Humboldt's Humboldt Bay Trail South Project. The City of Arcata has collaborated with the County for nearly two decades to complete the Humboldt Bay Trail to provide our residents and visitors alike a safe, separated corridor for active commuting to work, college, school and destinations. The County of Humboldt has worked cooperatively and diligently on this project to gather ideas and input from community members, Caltrans, the NCRA, and regulatory agencies to develop a trail design that is feasible, fits the context of the surrounding community, and limits impacts to Humboldt Bay resources.

The Humboldt Bay Trail South project is an exceptional project that will fill the final gap in the 14-mile long Humboldt Bay Trail between Eureka and Arcata, also a key link in the California Coastal Trail system. The Humboldt Bay Trail North, to which the County's project will connect, was recently completed by the City of Arcata in November 2017, and already we have seen trail use upwards of 190 pedestrians and cyclists a day. Completing the 4-mile gap in the Humboldt Bay Trail promises to increase trail use even further and transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits.

The City of Arcata is home to Humboldt State University, where many students do not have access to a car and must travel between Arcata and Eureka to get to work or home. The completion of the Humboldt Bay Trail will greatly improve safety for non-motorized users by providing the only safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101. After many years of intensive planning, incremental progress in completing trail segments in Arcata and Eureka, and significant state and local investment, one of the most popular and long-awaited transportation projects on the north coast of California is poised to be realized.

The City of Arcata strongly supports the Humboldt Bay Trail South project for our residents and visitors alike. Thank you for your careful consideration of this vital project.

Sincerely,

Sofia Pereira
Mayor
Arcata, CA

EUREKA
COMMUNITY SERVICES

COMMUNITY SERVICES DEPARTMENT
1011 Waterfront Drive • Eureka, California 95501-1146 • (707) 441-4241

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

July 27, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

Please accept the City of Eureka's full support for the County of Humboldt's Humboldt Bay Trail South Project. For over two decades, the communities of the Humboldt Bay region have worked toward the goal of a connected regional multi-use trail system to provide residents and visitors alike a safe, separated corridor for active commuting to work, college, school and destinations. The County of Humboldt has worked diligently to provide creative outlets for community feedback and collaborate with the City, Caltrans and the North Coast Railroad Authority to design a comfortable, welcoming trail within a constrained corridor.

The Humboldt Bay Trail South project is an exceptional project that will fill the final gap in the 14-mile long Humboldt Bay Trail between Eureka and Arcata, also a key link in the California Coastal Trail system. The Eureka Waterfront Trail, to which the County's project will connect, was recently completed by the City of Eureka in February 2018, and already we have seen a significant increase in visitors to our waterfront and rave reviews from all the various users of the trail. Completing the 4-mile gap in the Humboldt Bay Trail promises to increase trail use even further and transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits.

The Class I Eureka Waterfront Trail, to which the County's trail will connect, provides disadvantaged neighborhoods in north and west Eureka direct access to the Humboldt Bay Trail and also for residents in east and central Eureka a safe, undercrossing of Highway 101. The completion of the Humboldt Bay Trail will greatly improve safety and mobility for many Eureka residents providing the only safe, separated corridor for walking, biking and waterfront recreation along the most traveled transportation corridor in Humboldt County, Highway 101. After many years of intensive planning, incremental progress in completing trail segments in Arcata and Eureka, and significant state and local investment, one of the most popular and long-awaited transportation projects on the north coast of California is poised to be realized.

A segment of Bay Trail South will traverse a city-owned parcel, and the City of Eureka is in full support of this alignment. The City of Eureka anticipates working with the County to secure an agreement or encroachment permit for this aspect of the project.

The City of Eureka strongly supports the Humboldt Bay Trail South project for our residents and visitors alike. Thank you for your careful consideration of this project which promises to transform opportunities for non-motorized transportation between communities on Humboldt Bay.

Sincerely,

Miles Slattery
Community Services Director

Eureka Main Street • 525 Second Street, Suite 105 • Eureka, CA 95501
(707) 442-9054 • (FAX) 442-9154 • charlotte@eurekamainstreet.org

Eureka's Cultural Arts District with arts, entertainment, lodging, restaurants, & shops
A to I and Waterfront to Eighth Streets

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

July 19, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

On behalf of Eureka Main Street, we appreciate the opportunity to extend our full support for the County of Humboldt's Humboldt Bay Trail South Project. The Humboldt Bay Trail South project is an exceptional project that will fill the final gap in the 14-mile long Humboldt Bay Trail between Eureka and Arcata – providing safe, non-motorized travel opportunities for visitors to explore our Humboldt Bay communities. Already we have seen the numerous economic and mobility benefits that existing sections of the Humboldt Bay Trail such as the Eureka Waterfront Trail have provided for residents, visitors and local businesses. Completing the 4-mile gap in the Humboldt Bay Trail promises to increase trail use even further and transform the landscape in Humboldt County for a myriad of transportation, healthy living, tourism and quality of life benefits.

Eureka Main Street promotes the unique character of Eureka's core business district, a vibrant downtown area that draws both locals and visitors. Eureka Main Street sponsors special events along and adjacent to the existing Eureka Waterfront Trail such as the Thursday evening summer concert series, the Friday Night Market, first Saturday Arts Alive, and the 4th of July Festival and Fireworks. Over the past six months many more visitors have utilized the existing trails in Eureka while visiting the area. Completing the final four miles of the Humboldt Bay Trail with this project will open up opportunities for active transportation and greater economic vitality in downtown Eureka and throughout the Humboldt Bay area.

The following are just a few of the important components that this project will bring to our community: safe walking and biking routes to key destinations, services, employment and schools; accessible opportunities for physical activity; transportation equity – providing access to goods and services using any mode of transport; a magnet for travelers who seek outdoor experiences; economic development; community vitality; reduced traffic congestion and greenhouse gas impacts; quality of life benefits for residents.

Eureka Main Street strongly supports the completion of the Humboldt Bay Trail for visitors and residents alike and which promises to transform opportunities for non-motorized transportation between communities on Humboldt Bay. Thank you for your careful consideration of this project.

Sincerely,

Charlotte McDonald

Charlotte McDonald, Executive Director
Eureka Main Street
California Main Street Demonstration City 199
Main Street Demonstration City 1992
Main Street American Accredited Program 2005
California Arts Council Designated Cultural Arts District

CALTRANS
Division of Local Assistance
1120 N Street, MS 1
Attn: Office of State Programs
Sacramento, CA 95814

July 2, 2018

Re: Support for the County of Humboldt's Humboldt Bay Trail South Project

Dear Application Review Committee,

I am writing on behalf of Humboldt Baykeeper with enthusiastic support for the County of Humboldt's Humboldt Bay Trail South project for the Active Transportation Program. This project will complete the final gap in the 14-mile long Humboldt Bay Trail and provide safe coastal access for commuting, recreational, and touring cyclists along a designed section of the Pacific Coast Bike Route. The completed segments of the Humboldt Bay Trail already experience high use for hiking and nature study, and this final connecting trail segment will provide access to a spectacular section of Humboldt Bay long cut off from public access.

Humboldt Baykeeper works to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community, and is a member of the California Coastkeeper Alliance and the international Waterkeeper Alliance. We have a longstanding interest in protecting and expanding coastal access for all users, particularly the completion of the California Coastal Trail.

After many years of intensive planning, incremental progress in completing trail segments in Arcata and Eureka, and significant state and local investment, one of the most popular and long-awaited transportation projects on the north coast of California is poised to be realized. For over two decades, the communities of the Humboldt Bay region have worked toward the goal of a connected regional multi-use trail system. The County of Humboldt has worked diligently to provide creative outlets for community feedback and stakeholder engagement to design a comfortable, welcoming trail within a constrained corridor.

Mailing Address: 600 F Street, Suite 3 #810
Office: 415 I Street, Arcata, CA 95521
(707) 499-3678
www.humboldtbaykeeper.org

WATERKEEPER® ALLIANCE MEMBER

Humboldt Baykeeper strongly supports the Humboldt Bay Trail South project, which will connect the completed Eureka Waterfront Trail with the Humboldt Bay Trail North in Arcata and the Hammond Coastal Trail in McKinleyville, connecting the major population centers and numerous coastal access points and recreation areas, benefiting residents and visitors alike. Thank you for your careful consideration of this region's most important and publicly supported transportation project.

Sincerely,

__s/_____
Jennifer Kalt, Director
jkalt@humboldtbaykeeper.org

Attachment K

Additional Attachments

- Letter of Intent from Caltrans to maintain portion of Humboldt Bay Trail South project within Caltrans right-of-way
- Humboldt Bay Trail South Film
- Humboldt Bay Trail: Travel and Trail Use Survey Results from May-June 2018
- Humboldt Bay Trail Public Participation Opportunities and Humboldt Bay Trail in local, regional, and state plans
- Basis of Design Report for Trail Width (2016)

DEPARTMENT OF TRANSPORTATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 445-6377
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TTY 711

Making Conservation a California Way of Life.

July 19, 2018

Hank Seemann
Deputy Director, Environmental Services
Humboldt County Public Works Department
1106 Second Street
Eureka, CA 95501

Dear Mr. Seemann

Caltrans District 1 Maintenance Engineering Office grants Conceptual Approval for the Humboldt Bay Trail South project that Humboldt County is submitting for Active Transportation Program (ATP) funding. Based upon the information provided to our office, the project proposes to construct a new multi-use path adjacent to US 101 between Arcata and Eureka. Caltrans District 1 conditionally agrees to cooperate on a maintenance agreement for the project elements within Caltrans' right-of-way.

This approval is conceptual only for funding application purposes. Final design approval by Caltrans will be required prior to construction for all work to be performed within Caltrans right-of-way. All work within Caltrans right-of-way will require an encroachment permit from the District 1 Office of Permits and will be required to be done in accordance with the Caltrans Highway Design Manual, and State of California Standard Plans and Specifications.

Sincerely,

Curtis D. Coburn

CURTIS D. COBURN, P.E.
Acting District 1 Maintenance Engineer

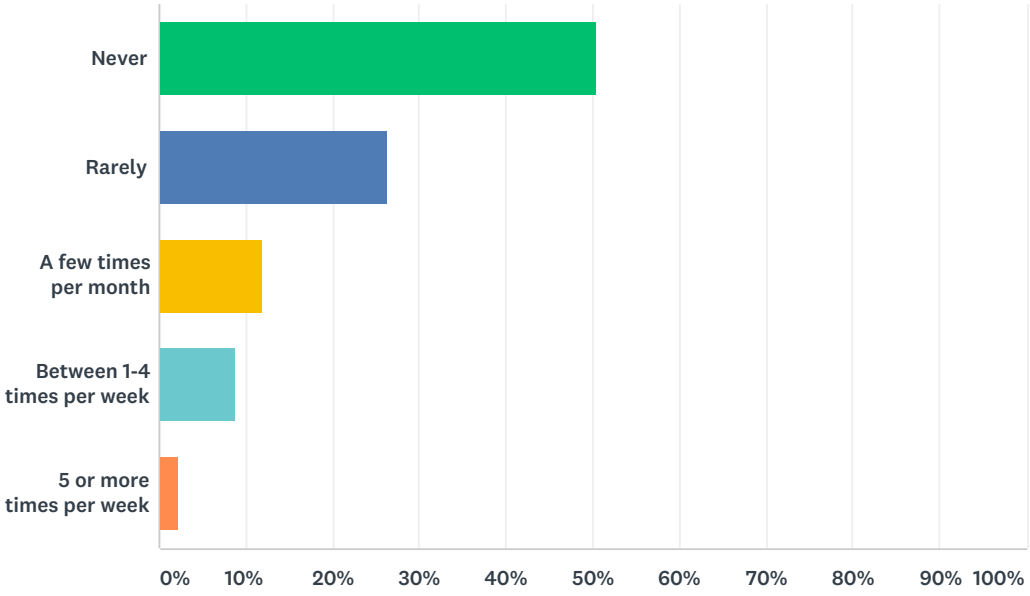
Humboldt Bay Trail South Film

This locally produced film showcases how a completed Humboldt Bay Trail promises to transform the landscape in Humboldt County for a myriad of transportation, tourism, and quality of life benefits. The film includes interviews with local residents and business owners about the transformational nature of this important non-motorized transportation project, and aerial imagery of the Humboldt Bay Trail South project area.

The film can be viewed at the following link: https://youtu.be/uYdViZD6gg0

Q1 Currently, how often do you bike, walk or roll along the Highway 101 Safety Corridor between Eureka and Arcata?

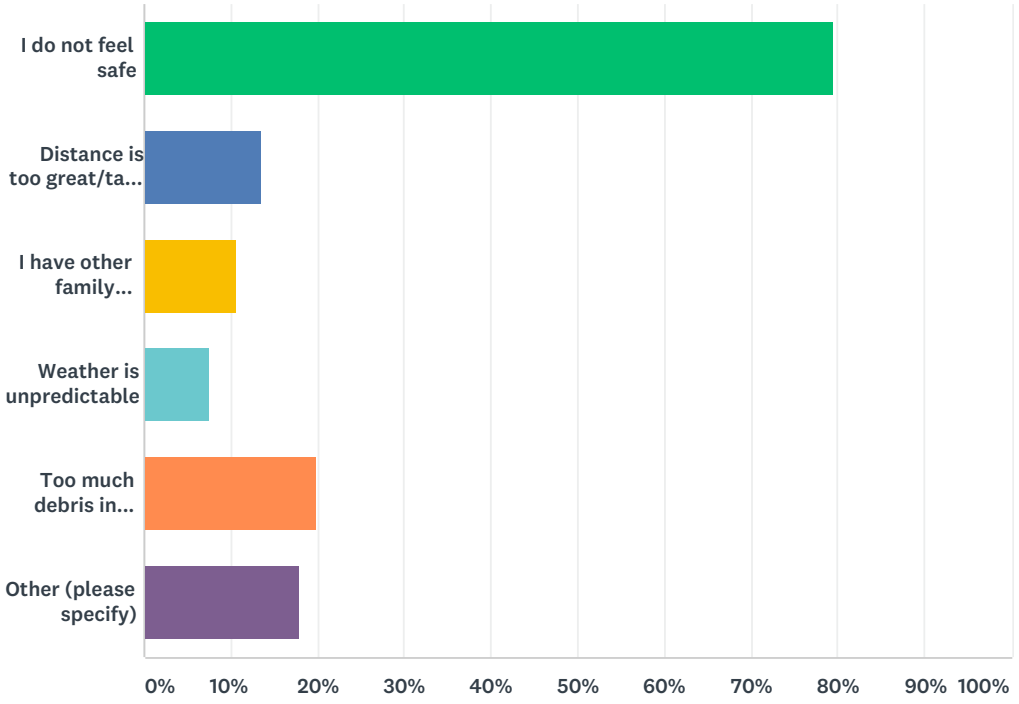
Answered: 719 Skipped: 0



ANSWER CHOICES	RESPONSES	
Never	50.49%	363
Rarely	26.43%	190
A few times per month	11.96%	86
Between 1-4 times per week	8.76%	63
5 or more times per week	2.36%	17
TOTAL		719

Q2 If you rarely or never bike, walk or roll on the Safety Corridor, what deters you from doing so? (Choose all that apply.)

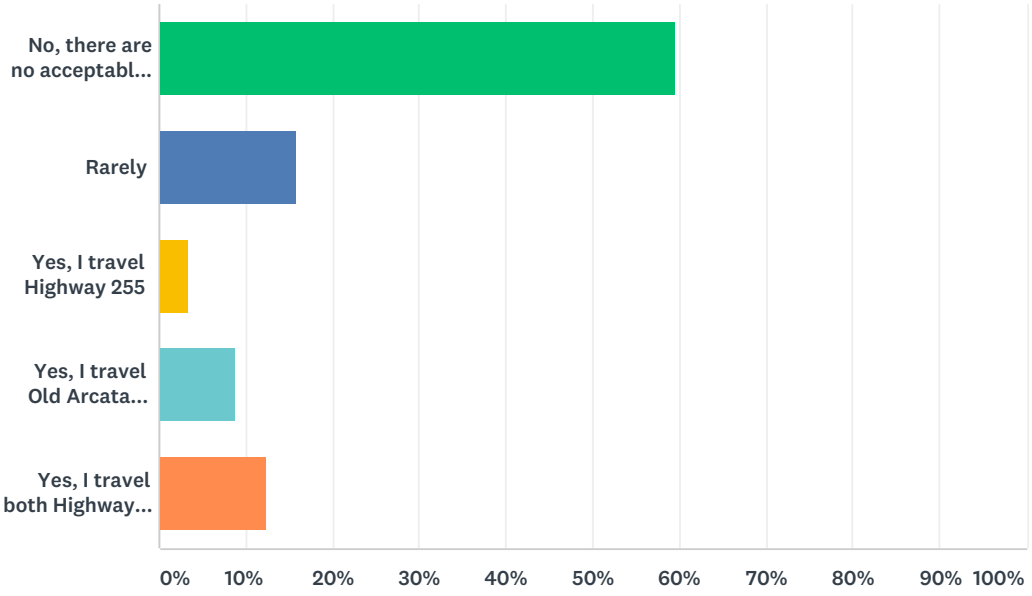
Answered: 633 Skipped: 86



ANSWER CHOICES	RESPONSES	
I do not feel safe	79.46%	503
Distance is too great/takes too long	13.59%	86
I have other family transportation needs	10.58%	67
Weather is unpredictable	7.58%	48
Too much debris in roadway shoulder	19.91%	126
Other (please specify)	18.01%	114
Total Respondents: 633		

Q3 Do you currently bike, walk or roll along an alternative route to the 101 Safety Corridor?

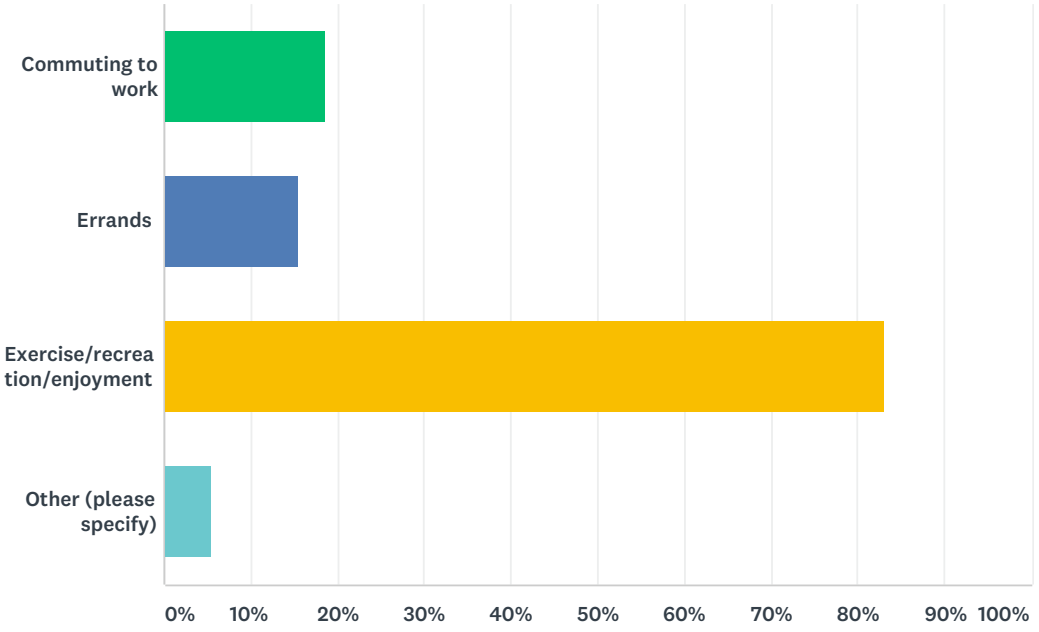
Answered: 699 Skipped: 20



ANSWER CHOICES	RESPONSES	
No, there are no acceptable alternative routes	59.66%	417
Rarely	15.88%	111
Yes, I travel Highway 255	3.29%	23
Yes, I travel Old Arcata Road/Myrtle Avenue	8.87%	62
Yes, I travel both Highway 255 and Old Arcata Road/Myrtle Avenue	12.30%	86
TOTAL		699

Q4 If you currently bike, walk or roll between Eureka and Arcata what is the most common purpose of your trips? (Choose all that apply.)

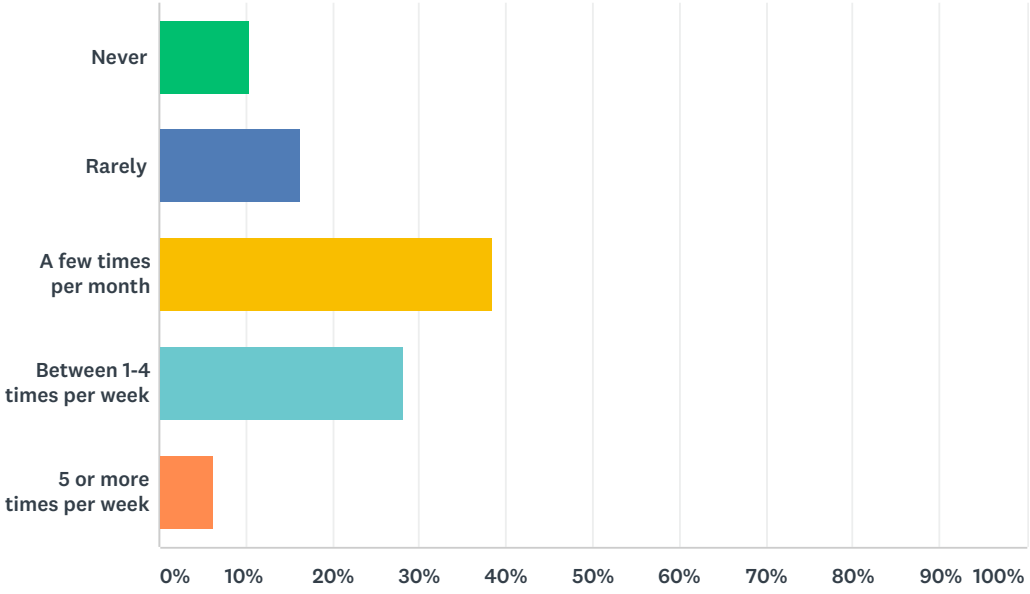
Answered: 437 Skipped: 282



ANSWER CHOICES	RESPONSES	
Commuting to work	18.54%	81
Errands	15.56%	68
Exercise/recreation/enjoyment	83.07%	363
Other (please specify)	5.49%	24
Total Respondents: 437		

Q5 How often do you currently walk, bike or roll along the existing segment of the Humboldt Bay Trail through Arcata or the Eureka Waterfront Trail?

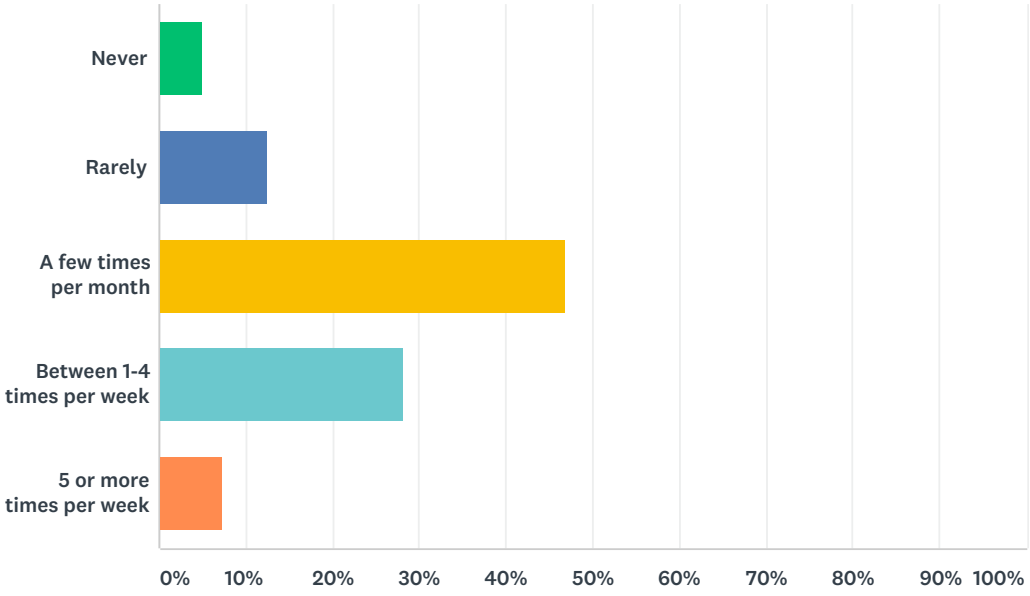
Answered: 710 Skipped: 9



ANSWER CHOICES	RESPONSES	
Never	10.56%	75
Rarely	16.34%	116
A few times per month	38.45%	273
Between 1-4 times per week	28.31%	201
5 or more times per week	6.34%	45
TOTAL		710

Q6 If the Humboldt Bay Trail is completed, how often would you bike, walk or roll between Eureka and Arcata for transportation or recreation?

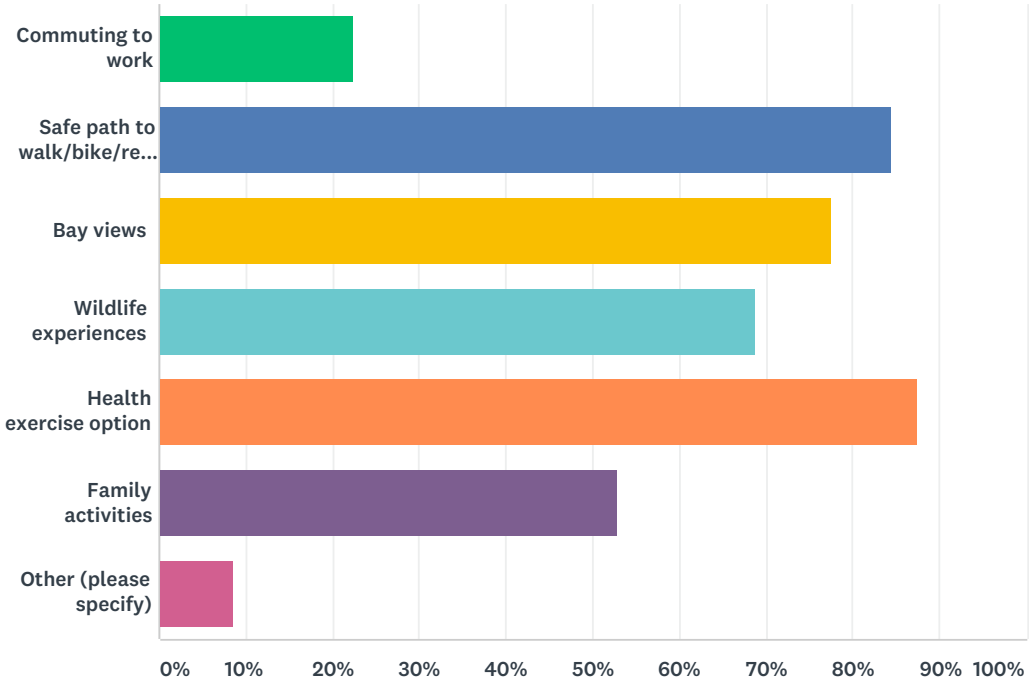
Answered: 699 Skipped: 20



ANSWER CHOICES	RESPONSES	
Never	5.01%	35
Rarely	12.59%	88
A few times per month	46.92%	328
Between 1-4 times per week	28.18%	197
5 or more times per week	7.30%	51
TOTAL		699

Q7 How would you use the Humboldt Bay Trail once completed? (Choose all that apply.)

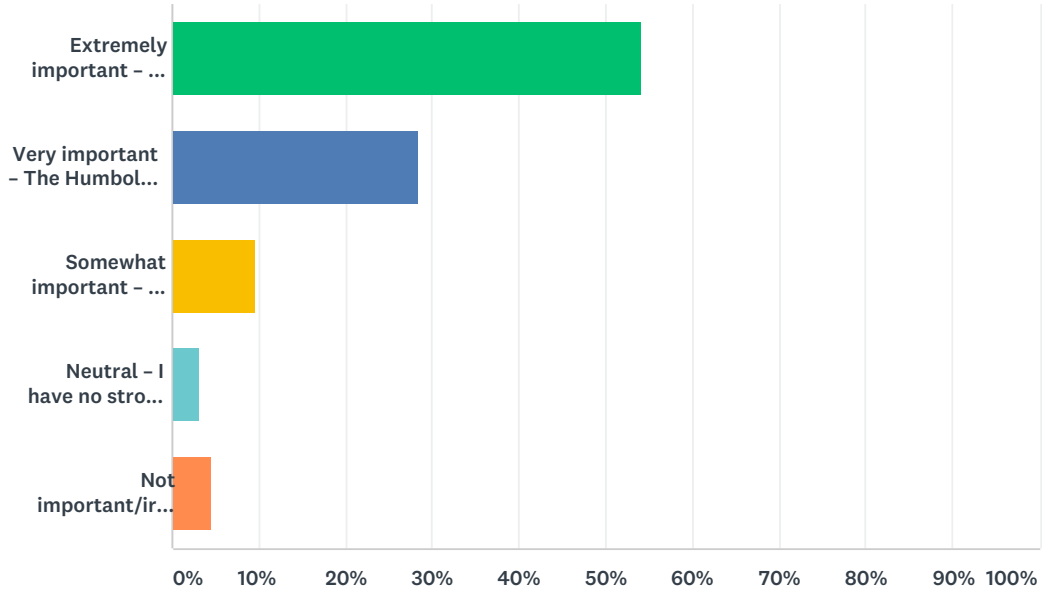
Answered: 681 Skipped: 38



ANSWER CHOICES	RESPONSES	
Commuting to work	22.47%	153
Safe path to walk/bike/recreate	84.58%	576
Bay views	77.68%	529
Wildlife experiences	68.87%	469
Health exercise option	87.52%	596
Family activities	53.01%	361
Other (please specify)	8.66%	59
Total Respondents: 681		

Q8 How important is the completion of the Humboldt Bay Trail to you/your family/your business?

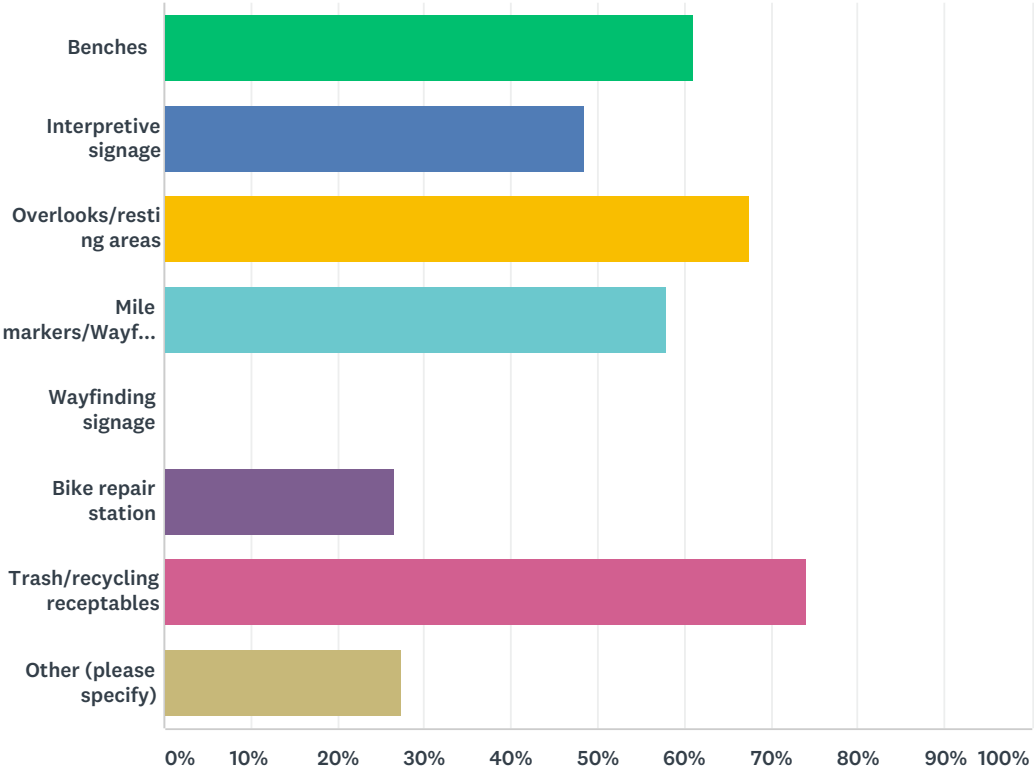
Answered: 697 Skipped: 22



ANSWER CHOICES	RESPONSES	
Extremely important – The Humboldt Bay Trail will transform transportation, tourism, and quality of life for the communities around Humboldt Bay	54.23%	378
Very important – The Humboldt Bay Trail will be a terrific improvement for both locals and visitors alike	28.41%	198
Somewhat important – The Humboldt Bay Trail will be a nice, new feature for the local community	9.61%	67
Neutral – I have no strong opinions	3.16%	22
Not important/irrelevant – I do not plan to use the trail / don't see the benefits	4.59%	32
TOTAL		697

Q9 What trail features would enhance your trail experience on the Humboldt Bay Trail? (Choose all that apply and feel free to expand upon your answers.)

Answered: 673 Skipped: 46



ANSWER CHOICES	RESPONSES	
Benches	61.07%	411
Interpretive signage	48.59%	327
Overlooks/resting areas	67.61%	455
Mile markers/Wayfinding signage	57.95%	390
Wayfinding signage	0.30%	2
Bike repair station	26.60%	179
Trash/recycling receptables	74.15%	499
Other (please specify)	27.49%	185
Total Respondents: 673		

Humboldt Bay Trail Public Participation Opportunities

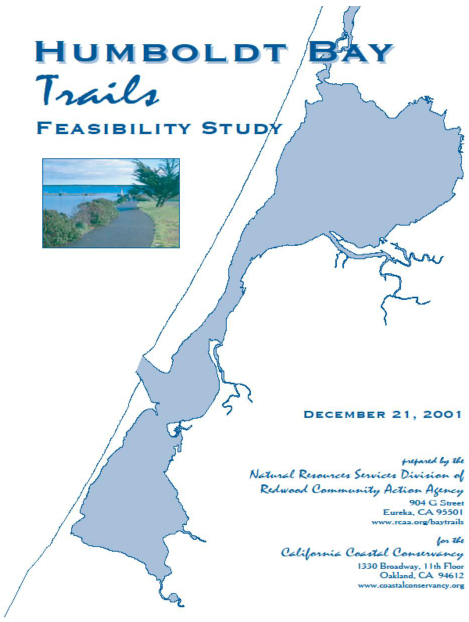
The Humboldt Bay Trail has been a community priority for over two decades. Numerous community outreach efforts detailed below have ensured that disadvantaged communities around Humboldt Bay have been involved in shaping a project that will have lasting safety, health and economic benefits.

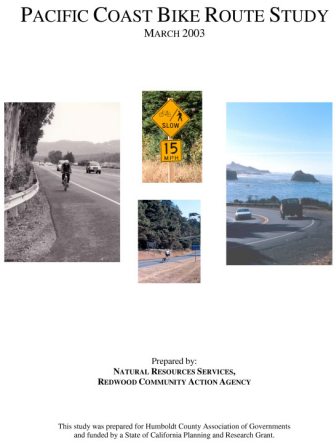
Humboldt Bay Bicycle Facilities Feasibility Study 1997

This was the first study, funded by the North Coast Unified Air Quality Management District, to examine active transportation facilities and opportunities around Humboldt Bay. Community members were engaged about which types of improvements for bicycle transportation could benefit them and their families.

Humboldt Bay Trails Feasibility Study 2001

The Humboldt Bay Trails Feasibility Study was the first look at the "big picture" of non-motorized access to and around Humboldt Bay. The intent of the study was to provide a full spectrum of information, public and professional input, recommendations, and conceptual designs and preliminary environmental checklists for projects that will promote public access to and around the entire 48-mile shoreline of Humboldt Bay. Three public visioning meetings were hosted with the purpose of these meetings to build a sense of excitement about improving access to and around the bay, and to have a charrette-style workshop for the public to share their visions and priorities for access projects.





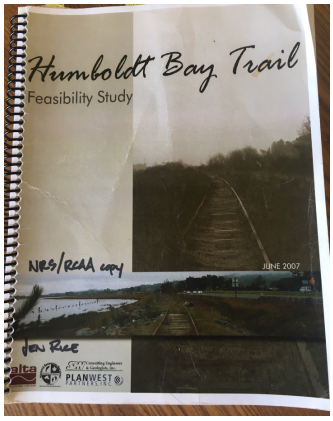
Pacific Coast Bike Route Study 2003

Redwood Community Action Agency assisted Caltrans in analyzing opportunities for the PCBR through District 1 including Humboldt County by engaging with communities throughout the District. This was the first study to examine the existing PCBR route and recommend facility and route improvements since the PCBR was first created over 25 years prior. The PCBR follows Highway 101 between Eureka and Arcata which rose as a top priority for bicycle improvements.

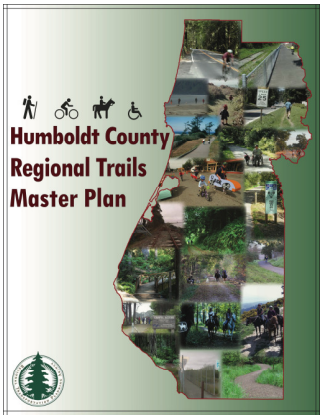
National Park Service Consultation – Humboldt Bay Trail: Eureka to Arcata – A Guiding Framework

The National Park Service facilitated a community discussion to support the region's vision for a pedestrian / bicycle trail between Arcata and Eureka.

Humboldt Bay Trail Feasibility Study: Arcata to Eureka 2007



Working from the progress made through the Humboldt Bay Trails Feasibility Study in 2001, this study focused on the Arcata to Eureka corridor and outreach to identify a feasible trail corridor. Numerous stakeholder and public meetings were held to examine potential trail corridors along Highway 101 and the rail corridor, eventually coming to consensus that the most feasible Humboldt Bay Trail alignment was within the rail corridor and the west side of Highway 101.

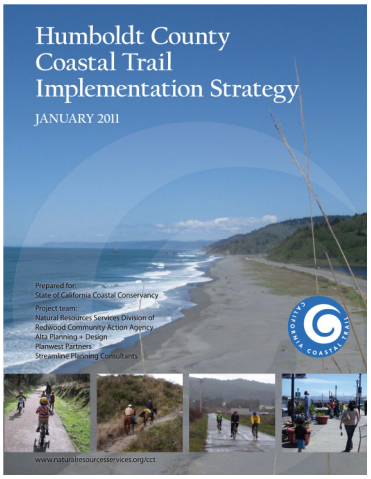


Humboldt County Regional Trails Master Plan 2010

This plan completed by the Humboldt County Association of Governments compiled all regional and local information on existing trails and active transportation planning in Humboldt County. The plan focused on a long-range plan and community outreach for active transportation connections within and between communities, particularly the Humboldt Bay Trail, to ensure safe and equitable access for non-motorized users.

Humboldt County Coastal Trail Implementation Strategy 2011

The *Humboldt County Coastal Trail Implementation Strategy* was a collaborative effort to plan a continuous public right-of-way for the California Coastal Trail (CCT) for non-motorized users along the Humboldt County coast – funded by the California State Coastal Conservancy and led by Redwood Community Action Agency (RCAA). Seven community workshops were held throughout Humboldt County, and the Humboldt Bay Trail was a priority project for even communities located further afield from Humboldt Bay.



California Coastal Commission: Fall 2013

On Thursday, November 14, 2013, the California Coastal Commission approved the 'Revised Findings on Consistency Certification' for the Eureka-Arcata Route 101 Corridor Improvement Project. At the Coastal Commission hearing in Eureka, many community

members spoke of the need for a completed Humboldt Bay Trail to ensure safety for biking and walking between Eureka and Arcata. One of the conditions from the final Coastal Commission ruling requires that construction of the highway improvements will not commence until adequate commitments are in place to assure that a separate trail parallel to Route 101 will be constructed. The Eureka-Arcata Route 101 highway project and Humboldt Bay Trail projects have thus become linked.

NORTH COAST RAILROAD AUTHORITY
FINDINGS AND RECOMMENDATIONS OF THE
AD HOC
HUMBOLDT BAY RAIL CORRIDOR COMMITTEE
DECEMBER 2012

NCRA Humboldt Bay Rail Corridor subcommittee meetings – 2012

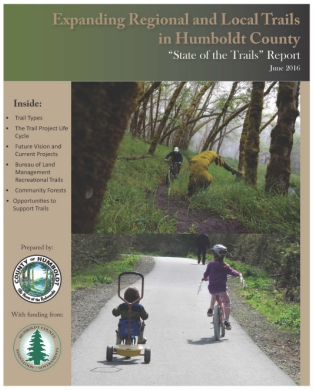
The NCRA held a series of three public meeting in 2012 to respond to community interest in trail development between Arcata and Eureka. The Ad Hoc Committee Resolution highlighted on page 3 the following finding: "NCRA will prioritize rail infrastructure restoration **and trail development in the Eureka to Arcata corridor** to more clearly align its timing and objectives with those of the Humboldt County Association of Governments/Caltrans' US 101 Corridor Improvement Project.

101 Bay Trail and Corridor Ad Hoc meetings through HCAOG – December 2013 – ongoing

In Fall 2013, an ad-hoc committee was formed with the purpose to ensure that the local agencies continue to work together and communicate effectively with Caltrans, elected officials, stakeholders, and the general public about the Humboldt Bay Trail and the Eureka-Arcata Route 101 Corridor Improvement Project. Regularly scheduled Ad Hoc 101 meetings take place the second Thursday of each quarter.

Best of Humboldt Fair outreach & Humboldt Bay Trail Project Update brochure – June 2014

The County of Humboldt and Redwood Community Action Agency conducted creative community outreach about the Humboldt Bay Trail at the well-attended Best of Humboldt Fair at the public fairgrounds in Eureka. The County developed an informative yet approachable brochure to update the public on the progress and next steps for the Humboldt Bay Trail.



Regional Trails Summit – June 2016

The regional trails summit brought the community together with leaders from local, state and federal agencies to share progress on developing trails to connect communities in our region and how the public could be

active in supporting and providing input on trail planning, design and implementation.

Public launch of the Humboldt Bay Trail Fund – 2017

The Humboldt Bay Trail Fund was established at the Humboldt Area Foundation as a way for private donors to assist in the continued development of the trail by focusing on the critical need for trail maintenance funds. In just over a year over $240,000 has been raised with donations from community members and local businesses. A Fund Working Group continues to outreach to grow the community the Humboldt Bay Trail.

2nd Annual Regional Trails Summit – June 2017

Based on the tremendous success from the 2016 Trails Summit, the County, HCAOG, local jurisdictions and trail supporters collaborated to host the second annual Regional Trails Summit. The cities of Eureka and Arcata shared progress in the active construction of their segments of the Humboldt Bay Trail, the Eureka Waterfront Trail and the Humboldt Bay Trail North. The County provided updates on how the community could support and comment on the design of Humboldt Bay Trail South.

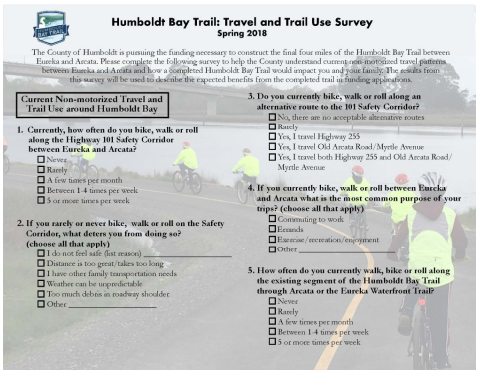
Humboldt Bay Trail South CEQA Public Meeting – February 2018

The County of Humboldt sponsored a public meeting to discuss the plan to complete the Humboldt Bay Trail between Eureka and Arcata. The meeting began with an informal open house to view exhibits of the current design and talk with planners and engineers, followed by a project update presentation and question-and-comment session. Approximately 135 people attended.

Happy Trails – weekly local radio show on KHUM

This weekly radio show on a local station was spearheaded in 2010 in large part to keep the pressure on community leaders to complete a trail between Eureka and Arcata. Numerous shows over the years have been

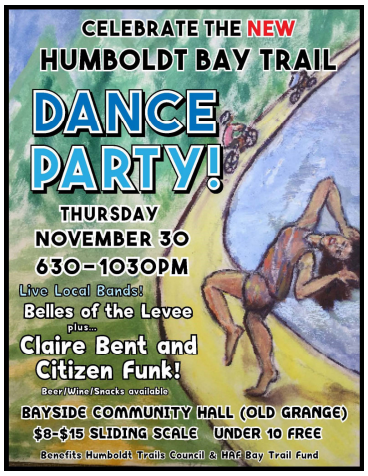
dedicated to updating the community on the Humboldt Bay Trail and inviting participation in its planning. Podcasts of past shows can be found at: http://www.khum.com/podcasts/

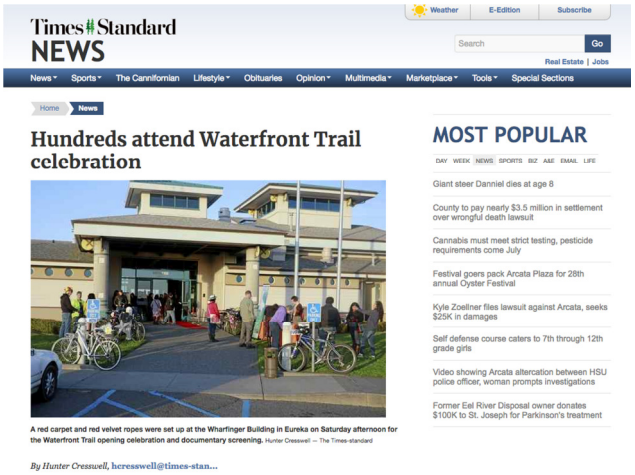


Humboldt Bay Trail South Survey – May & June 2018

In May and June 2018 the County conducted an online and in-person survey to understand current non-motorized travel patterns between Eureka and Arcata and how a completed Humboldt Bay Trail would impact residents and local businesses. 719 people completed the survey and also gave feedback on the Bay Trail South project.

Additional Humboldt Bay Trail public outreach opportunities and materials





Basis of Design Report for Trail Width

Humboldt Bay Trail: Eureka-to-Arcata Segment

	PREPARED BY
	Humboldt County Department of Public Works *In coordination with:* Humboldt County Association of Governments California Department of Transportation, District 1 City of Eureka City of Arcata Redwood Community Action Agency
	Date: MARCH 31, 2016

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Report Prepared by:

Hank Seemann, Deputy-Director, Humboldt County Public Works *March 31, 2016*

Concurring Agencies:

Marcella Clem, Executive Director, HCAOG

Merritt Perry, City Engineer, City of Fortuna
(Vice-chair, HCAOG Technical Advisory Committee)

for Brad mettam

Brad Mettam, Deputy District 1 Director, Caltrans

Miles Slattery, Parks and Recreation Director, City of Eureka

Doby Class, City Engineer, City of Arcata

Emily Sinkhorn, Deputy Director
Redwood Community Action Agency (Natural Resources Services Division)

1 INTRODUCTION

1.1 Purpose of Report

The purpose of this report is to document the design basis for the trail width of the Humboldt Bay Trail segment located between the cities of Eureka and Arcata, around the east side of Humboldt Bay, along the U.S. Highway 101 and North Coast Railroad Authority (NCRA) railroad transportation corridor. This report is intended to provide supporting technical information for applications for coastal development permits from the California Coastal Commission.

1.2 Overview of Humboldt Bay Trail

The Humboldt Bay Trail is envisioned as a network of trails (shared-use paths) providing non-motorized access for transportation and recreational use throughout the Humboldt Bay region. The Humboldt Bay Trail will connect communities with multi-modal transportation facilities and connect people to the bay by enabling people of all ages and abilities to access and experience the bay's resources directly. In addition to serving the region's transportation needs, the Humboldt Bay Trail will achieve a critical link in the California Coastal Trail and enable a significant expansion of resource-dependent use around the bay.

The Humboldt Bay Trail is being developed as a collaborative effort between the Humboldt County Association of Governments (HCAOG), Humboldt County, City of Arcata, City of Eureka, California Department of Transportation (Caltrans), California State Coastal Conservancy, NCRA, Redwood Community Action Agency (RCAA), and other community groups. The current focus is to develop a continuous trail from central Arcata to the southern end of Eureka for a total length of nearly 13 miles. Planning for the near-term phases of the Humboldt Bay Trail has been subdivided into four project areas:

1. Arcata City Trail (led by City of Arcata) – 1.3-mile bike path from Foster Avenue to Samoa Boulevard (Highway 255). This project was constructed in 2015.

2. Humboldt Bay Trail North (led by City of Arcata) – 3.0-mile bike path from Samoa Boulevard (Highway 255) along the Highway 101/railroad corridor to a terminus located north of Bracut Industrial Center. Construction is scheduled to begin in 2017.

3. Humboldt Bay Trail South (led by County of Humboldt) – 4.0-mile bike path from the southern terminus of the Bay Trail North project south along the Highway 101/railroad corridor to the west side of Eureka Slough, connecting to the Eureka Waterfront Trail. The construction start-date for this project (currently unfunded) is projected to be 2020.

4. Eureka Waterfront Trail Phases A/B/C (led by City of Eureka) – A set of three projects totaling 3.7 miles to fill gaps between existing segments of the Waterfront Trail. Construction is scheduled to begin in 2016.

1.3 Eureka-to-Arcata Segment

The Humboldt Bay Trail between Eureka and Arcata is a proposed Class I bike path aligned generally parallel to U.S. Highway 101 and the NCRA railroad, with potential alternative alignments at two locations near private property (Bracut and Brainard). In addition to bicycle use, the trail will provide transportation, recreation, and coastal access opportunities for

pedestrians and other non-motorized users. One of the major goals of the Humboldt Bay Trail is to maximize the number and variety of user groups who will benefit from it.

2 PROJECT INFORMATION

2.1 Design Approach

The Humboldt Bay Trail projects currently in progress involve segments of paved trails that will function as non-motorized transportation facilities complementing the roadway network. Planning and design processes for trails of this type are similar to the processes for road infrastructure. The lead agencies have taken a context-based approach for trail design consistent with the following:

- Caltrans Highway Design Manual (Chapter 80 - Application of Design Standards)
- Caltrans Director's Policy on Context Sensitive Solutions (DP-22)
- American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities

According to the Highway Design Manual (page 80-1), "the context of a highway is a critical factor when developing the purpose and need statement for a project in addition to making fundamental design decisions such as its typical cross section…. Designers need to be aware of and sensitive to land use, community context and the associated user needs of the facility…." This approach is intended to minimize impacts on scenic, historic, archaeological, environmental, and other important resources and support the livability of the community while meeting transportation needs.

The Caltrans Context Sensitive Solutions policy (page 1) encourages "innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals." Flexibility in applying design standards is allowed but must be supported using sound engineering judgment.

According to the AASHTO bicycle facilities guide (page 2-14), "A core value of context sensitive solutions is to provide an effective facility for both the user and the surrounding community and a project built in harmony with adjacent land use, preserving important environmental, historic, and aesthetic features of the area…. Context sensitive designs should address the needs of bicyclists…." Factors to be considered include facility function, traffic volume, speed, traffic mix, expected users, conditions of adjacent and intersecting facilities, topography, sensitive resources, adjacent land uses, and cost.

This context-sensitive approach is consistent with the 2007 Humboldt Bay Trail Feasibility Study: Eureka to Arcata (Alta Planning + Design, *et al*), which states (page 8):

> "Identifying the needs of trail users is critical to providing appropriate trail alignments and design features that respond to the surrounding community and anticipates uses of the trail. It is important to understand who will be using the trail, how they will use it, and what types of amenities will be most effective in making this trail an asset to the surrounding community. The trail's design will need to respond directly to the needs of the trail users and managers."

2.2 Context

The Eureka-to-Arcata segment of the Humboldt Bay Trail is situated within the seven-mile linear transportation corridor connecting the two largest urban areas in Humboldt County. According to the 2010 census, the greater Eureka area has a population of 45,034 and Arcata area has a population of 17,231 (the total population of the adjacent urban areas is 62,265). The Eureka-to-Arcata corridor is largely surrounded by open space including Humboldt Bay to the west and agricultural land to the east.

U.S. Highway 101 is a principal arterial and provides one of three routes around northern Humboldt Bay. Within the project area, Highway 101 is a four-lane expressway with two travel lanes in each direction (south-bound and north-bound) separated by a vegetated drainage ditch. The roadway includes 11- to 12-foot wide travel lanes and ten-foot wide shoulders. This segment of Highway 101 has the highest highway traffic volume within Humboldt County with an average annual daily traffic of 36,300 (2011 data). In 2002, this highway segment was designated the Eureka-Arcata Route 101 Safety Corridor as part of a program to reduce collision rates at the at-grade intersections. Caltrans and HCAOG are in the process of implementing the Eureka-Arcata Route 101 Corridor Improvement Project, with construction anticipated to begin in 2019 or 2020.

The railroad around Humboldt Bay is part of the Northwest Pacific Railroad line which has been owned and managed by NCRA since 1992. The track embankment was constructed starting in 1900 along the margin of the bay. Commercial railroad operations ceased in 1998 following severe storm damage on the line within the Eel River canyon. In 2012, a common vision was established for utilizing a rail-with-trail framework to develop trails within the railroad corridor (NCRA, 2012).

Bicyclists and pedestrians currently have very limited options for traveling between Eureka and Arcata. Although the shoulders of Highway 101 were recently widened by reducing travel lane width and colorized, many people are uncomfortable with traveling in close proximity to high volumes of traffic traveling at high speeds (the posted speed limit ranges from 50 to 65 miles per hour). Therefore, Highway 101 currently sees limited non-motorized use, except by experienced adult cyclists. The other two routes around the bay, Highway 255 and Myrtle Avenue/Old Arcata Road, have lower traffic volumes but comparable vehicle speeds and narrower shoulder widths.

As a transportation connection between Arcata and Eureka, this segment of the Humboldt Bay Trail will have high commuter use. The corridor has limited road and driveway crossings, so the trail will accommodate relatively long, undisrupted reaches where cyclists can reach high speeds.

Humboldt Bay is an exceptional natural feature of the region that provides significant cultural, scenic, and natural resources. Recreational use near Humboldt Bay is highly desirable, and access within the Eureka-to-Arcata corridor is currently limited. The Humboldt Bay Trail between Eureka and Arcata is intended to provide high-quality recreational experiences along the bay shoreline. The trail is expected to be heavily used for bird-watching, nature study, exercise, and enjoyment. The trail will also enable additional interpretive trails in the future.

The Bay Trail North and Bay Trail South projects are both situated within the Highway 101/railroad corridor between Arcata and Eureka and thus share a common context. The Arcata City Trail and Eureka Waterfront Trail are each situated within the urban areas of the respective cities and have their own unique contexts and user profiles. The trail widths of the in-city portions of the Humboldt Bay Trail network, along with other regional trails, are developed based on their specific contexts and should not be interpreted as implying a precedent or fixed standard for trails situated in different contexts.

2.3 Purpose and Need

A non-motorized trail between Eureka and Arcata has been identified as a community priority for over fifteen years in multiple surveys, workshops, meetings, and planning documents. When complete, the trail will link the two largest cities in Humboldt County and provide a major step toward regional trail connectivity in and around Humboldt Bay. The primary purposes of the Humboldt Bay Trail are to provide a balanced, "complete street" transportation network and enhance public access to Humboldt Bay. The trail is needed because Highway 101 between Eureka and Arcata is an incomplete transportation facility that was designed primarily to support motorized vehicles. The Humboldt Bay Trail has been a longstanding priority of HCAOG and its member agencies. The total cost for the Eureka-to-Arcata segment is expected to exceed $20 million, with the majority of the funding coming from state and federal transportation funds. A continuous trail will have many complementary benefits, including:

- Improved safety (through separation of motorized and non-motorized travelers)
- Economic development (by supporting transportation mobility and regional tourism)
- Congestion relief
- Enhanced quality of life
- Community connectivity
- Reduced vehicle miles traveled, fuel consumption, and emissions
- Partial rehabilitation of the railroad prism

2.4 Plans and Studies

Humboldt Bay Trails Feasibility Study

This 2001 planning level study discussed the unique context of Humboldt Bay and evaluated opportunities to improve non-motorized access by expanding or creating trails around the entire bay. RCAA (2001) identified the Humboldt Bay segment of the California Coastal Trail as the backbone of a regional trail system that provides coastal access to the bay. The concept of a trail project between Arcata and Eureka separate from the Highway 101 corridor was identified as the highest priority project in the region because it would connect the two largest cities in the county, provide recreational access to the bay, and enable the broad use of bicycles as a mode of transportation on a heavily traveled highway segment. RCAA (2001) recommended "pathway design that facilitates access by multiple users (including pedestrians and runners, stroller-joggers, and in-line skaters) with an emphasis on serving bicycle traffic – a 10-14' wide paved surface with marked lanes and occasional 'pull-outs' is recommended to serve all users and remain functional for cyclists" (Page III-51).

Humboldt Bay Trail Feasibility Study: Eureka to Arcata

In 2006, local agencies and stakeholders initiated a cooperative planning process to perform a more detailed analysis of the feasibility of developing a Class I bikeway/multi-use trail between Arcata and Eureka. The highway/railroad corridor was divided into twelve segments based on topography and other features, and five options (four trail options and a no-project option) were developed and evaluated. The report (Alta Planning + Design *et al*, 2007) presented information regarding design concepts, opportunities and constraints, environmental impacts, magnitude of costs, projected benefits, and implementation recommendations. The minimum tread width was identified as eight feet, with an attempt to be 10 feet wherever possible (Page 17).

Humboldt County Coastal Trail Implementation Strategy

In 2009, RCAA initiated a coordinated planning effort with funding from the Coastal Conservancy to develop an implementation strategy for completing the California Coastal Trail within Humboldt County. The final report (RCAA *et al*, 2011) included alignment evaluation

and prioritization and trail demand projections for the approximately 158-mile-long segment within Humboldt County. Trail alignments were evaluated based on the goals of providing a scenic experience; maximum access for a variety of non-motorized uses; connectivity to destinations and amenities along the coast and local communities; separation from motorized traffic; minimum impacts to natural habitats and cultural and archeological resources; and respect for private property. For the segment between Arcata and Eureka, the report recommended a bike path with soft surface shoulders along the rail corridor around Humboldt Bay. The recommended design standard was a hard surface path of 12 feet where possible, 10 feet in constrained areas, along with four-feet natural surface shoulders (Page 44).

Initial Study and Mitigated Negative Declaration for Arcata Rail with Trail Connectivity Project
In 2011 the City of Arcata prepared an environmental document for the Arcata City Trail and Bay Trail North projects for compliance with the California Environmental Quality Act (CEQA). The proposed project analyzed in the CEQA document had a paved trail tread of ten feet with two two-foot unpaved shoulders (Appendix I – Design Plan Set).

Project Study Report and Initial Engineering Study for Humboldt Bay Trail South
Humboldt County prepared a Project Study Report (March 18, 2014) for the Humboldt Bay Trail South project to support the County's request for funding from the California Transportation Commission to perform technical studies, engineering design, and permitting. The Project Study Report identified the proposed project as a trail with a 10-foot-wide pave surface and two-foot-wide softer shoulders on each side (page 12). Following that report, Humboldt County retained GHD, Inc. to prepare an Initial Engineering Study (August 2014). The standard (non-bridge) cross-section in the Initial Engineering Study included a paved trail width of ten to twelve feet.

Other Plans
The Humboldt Bay Trail has been addressed in several other local plans (Humboldt Bay Harbor, Recreation and Conservation District, 2007; HCAOG, 2008; HCAOG, 2010a; HCAOG, 2010b; HCAOG, 2012; NCRA, 2012; HCAOG, 2013).

2.5 Nexus with Coastal Commission Consistency Determination for Corridor Improvement Project

A concurrent project within the study area is the Route 101 Eureka-Arcata Corridor Improvement Project which is being implemented by Caltrans and HCAOG. The Corridor Improvement Project addresses six at-grade crossings on Highway 101 situated between the Eureka Slough Bridge and the Route 101/255 separation in Arcata. The Humboldt Bay Trail is formally linked to Highway 101 and the Corridor Improvement Project through conditions established by the California Coastal Commission. The Revised Findings of Consistency Certification (Coastal Commission, 2013) includes Condition 1 (Coastal Trail Planning), which specifies:

> "Construction of the Route 101 Corridor Improvements will not commence until adequate commitments are in place to assure that a separate Class 1 bike and pedestrian trail, parallel to Route 101 from Arcata to the northern end of downtown Eureka, will be constructed and operational by the time the major project components are completed" (Page 7).

2.6 Trail User Profile

The Humboldt Bay Trail will serve as a transportation corridor between two large urban areas and as a major regional destination for recreation and outdoor activities. The trail will be used by a wide range of users for a variety of trip purposes using a variety of mobility modes. Trail users will range in ages, experience levels, and abilities. Trip purposes will include commuting (to

work, school, social events, commerce) and recreation (exercise, enjoyment, nature study). Modes of mobility will include bicycles (upright, recumbent, three-wheeled), wheelchairs, skates, scooters, and on foot. Pedestrians will include people with baby strollers and people walking dogs. The trail will be used by individuals as well as groups (e.g., up to 10 to 20 people). In addition, vehicles will need to access the trail periodically for maintenance, law enforcement, and emergency response.

Different trail users have different needs and preferences. Experienced users typically travel for longer distances and durations and at higher speeds (up to 20 to 25 miles per hour). Experienced users typically desire a continuous trip at a steady rate with few conflicts and will make passing movements around slower users. Novice and casual users will travel for shorter distances and durations with slower speeds and more frequent stoppages. Bicycle commuters may ride before dawn and after sunset, especially during the winter.

As a relatively long segment of trail separated from a roadway, the Humboldt Bay Trail will become a popular destination for children learning to ride bicycles, as well as seniors. Children are generally slower in recognizing and responding to rapidly changing situations and less able to accurately judge the speed and distance of approaching cyclists. Children are also generally less familiar with "rules of the road" and conventions for trail use (e.g., slower users staying to the right). Children are more likely to travel on an irregular course with frequent starts and stops. Seniors are another special type of user, who may ride at a slower pace and have longer reaction times when responding to sudden movements or objects in their path (AASHTO, 2012). Stoppages for resting will be common.

The Humboldt Bay Trail is expected to be a popular destination for walking, running, wildlife viewing, and other forms of nature study. Pedestrians slowing or stopping for birdwatching and similar activities will be common.

2.7 Trail Use Estimates

Overview

Existing conditions along the Highway 101 corridor between Eureka and Arcata are a significant deterrent for non-motorized travel. A large number of people don't ride bicycles on the corridor due to the perceived dangers of traveling on the shoulder of a major highway. Surveys, letters, and oral testimony over many years provide evidence of high latent demand.

Annual Use

The 2011 Humboldt County Coastal Trail Implementation Strategy report (RCAA *et al*, 2011) provided quantitative estimates for annual trail use of proposed trail segments by analyzing local and tourist demand (Appendix N). Local demand was forecasted using Alta Planning + Design's Seamless Travel Model, which was calibrated using data collected in San Diego. The model applies a predictive formula based on demographic data (employment density, population density), presence of retail activity, and trail length. Tourist demand was estimated at the county level based on county visitor data and applying use factors from studies of other trails across the country. Results were adjusted for seasonal factors to develop annual estimates. Based on the analysis in this report, the estimated annual usage of the Humboldt Bay Trail between Eureka and Arcata is approximately 80,000 to 100,000 trips per year.

Peak Hourly Use

For design purposes, rates of trail use are desired on a daily or hourly basis. The Seamless Travel Model used by RCAA *et al* (2011) is likely adequate to estimate annual usage but is not

considered a robust predictive tool for daily or hourly usage (Dana Dickman, Alta Planning + Design, personal communication).

Development of quantitative methods to forecast bicycle and pedestrian travel is an emerging field of study. Quantitative methods require a high level of demographic data, user and household surveys, and statistical analysis (AASHTO, 2012). However, these methods still require many assumptions and have limited reliability due to (1) the many site-specific causal factors involved in the decision to use a trail, and (2) the wide range of spatial scales (existing models have primarily been developed at a city-wide scale in large urban settings).

Due to the lack of a good-fit quantitative model and the absence of adequate local survey data for calibration, the best approach for non-motorized travel demand analysis within the project area is to develop a qualitative estimate based on a comparison study with an existing facility.

The Humboldt Bay Trail will be a major "showcase" regional trail for Humboldt County, comparable to the Sacramento River Trail in Redding, the American River Trail in Sacramento, and the Bear Creek Greenway in Medford/Ashland (Jackson County, Oregon). Based on demographics and setting, use of the Humboldt Bay Trail between Eureka and Arcata is expected to substantially exceed the Hammond Trail located in McKinleyville; however the Hammond Trail provides a local example of a Class I bike path, and existing trail use data can be used as a reference point to support an estimate for the Humboldt Bay Trail.

According to the 2010 census, McKinleyville has a population of 15,177. The Hammond Trail is used for both commuting and recreation but likely has a higher percentage of recreational use compared to the proposed Humboldt Bay Trail. In 2011, RCAA organized volunteers to conduct counts of trail usage on two summer days over a period of 12 hours each day (RCAA, 2011). Results from this survey (reflecting total two-way volumes) are summarized on Table 1.

Table 1 – Trail Use Counts (Two-way) for the Hammond Trail, August 2011 (RCAA, 2011)

Location	Paved Trail Width (feet)	Wednesday, August 17		Saturday, August 20	
		Daily total	Peak hourly	Daily total	Peak hourly
Clam Beach near Strawberry Creek	8.0 – 8.5	89	16	97	16
Murray Road	10.0 – 10.5	285	42	364	53
Hiller Park	8.0 – 8.5	335	36	387	47
Hammond Bridge at Mad River	8.0	163	23	256	38

Estimates for peak hourly usage of the proposed Humboldt Bay Trail between Eureka and Arcata are provided in Table 2. Count data for current non-motorized use on Highway 101 are not available (Kevin Tucker, Caltrans, personal communication), therefore estimates for existing conditions (without trail) are based on personal observations. Estimates for future with-trail conditions are provided for the first year after construction (assumed to be 2020) and also for a 20-year planning horizon. Future with-trail estimates were developed using professional judgment by considering the similarities and differences between the contexts for the Hammond Trail and the proposed Humboldt Bay Trail, with adjustments for the different physical settings and community contexts. In particular:

- Population of areas served: the Humboldt Bay Trail will directly serve two urban areas with a total population almost four times larger than the area directly served by the Hammond Trail.
- Physical setting: The Humboldt Bay Trail will be longer and provide a more continuous corridor with less flow interruption.
- User profile: The Humboldt Bay Trail will see higher commuter use and will serve as a more popular recreation destination.

The estimates in Table 2 are intended to reflect an 85th percentile rate (i.e., 85% of days will have peak hourly usage below, 15% of days will have peak hourly usage above). In other words, the peak hourly rate would be met or exceeded approximately 50 days per year.

Table 2 – Estimated Peak Hourly Non-Motorized User Trips for Eureka-to-Arcata Segment of Humboldt Bay Trail

Scenario	Commuting Bicyclists	Recreational Bicyclists	Pedestrians	Total (Two-way)	Total (One-way)
Existing without Trail	5-10	5-10	0-5	10-25	5-13
Future (2020) with Trail	50-60	50-60	30-40	130-160	65-80
Future (2040) with Trail	60-75	60-75	40-50	160-200	80-100

As a design basis, peak hourly trail use on the Humboldt Bay Trail between Eureka and Arcata is expected to be three to four times greater than the Hammond Trail.

3 DESIGN STANDARDS

3.1 Highway Design Manual (Caltrans, 2015)

Chapter 1000 of the Highway Design Manual contains planning and design criteria for "bikeways," defined as facilities provided primarily for bicycle travel (Streets and Highways Code Section 890.4). A Class I bike path provides a completely separated right of way for the exclusive use of bicycles and pedestrians with minimal crossflow by motorists. Chapter 1000 provides design criteria for geometrics, separations between bike paths and highways, drainage, and signing and delineation. Chapter 1000 establishes minimum safety design criteria which are to be applied by transportation professionals using engineering judgment in the development and operation of bikeways (Streets and Highways Code Section 891). Guidance for Class I bike paths relevant for this report includes the following:

- Section 1003.1 – Shared use of a Class I bike path by bicycles and pedestrians has the potential for conflicts; consideration of separate facilities for pedestrians may be beneficial to minimize conflicts.

- Section 1003.1(1) – Shoulders for bike paths and roads have similar functionality. "Experience has shown that paved paths less than 12 feet wide can break up along the edge as a result of loads from maintenance vehicles."

- Section 1003.1(1)(a) – "The minimum paved width of travel way for a two-way bike path shall be 8 feet, 10-foot preferred." This statement is qualified by the following: "Where heavy bicycle volumes are anticipated and/or significant pedestrian traffic is expected, the paved width of a two-way bike path should be greater than 10 feet, preferably 12 feet or more. Another important factor to consider in determining the appropriate width is that bicyclists will tend to ride side by side on bike paths, and bicyclists may need adequate passing clearance next to pedestrians and slower moving bicyclists."

- Section 1003.1(1)(b) – "A minimum 2-foot wide shoulder, composed of the same pavement material as the bike path or all weather surface material that is free of vegetation, shall be provided adjacent to the traveled way of the bike path when not on a structure. A shoulder width of 3 feet should be provided where feasible. A wider shoulder can reduce bicycle conflicts with pedestrians."

3.2 Guide for the Development of Bicycle Facilities (AASHTO, 2012)

AASHTO policies and standards are to be used in conjunction with the Highway Design Manual (HDM, Section 82.3). Guidance from AASHTO (2012) relevant for this report includes the following:

- Section 5.2.1 (Width and Clearance) – "The usable width and the horizontal clearance for a shared use path are primary design considerations. Figure 5-1 depicts the typical cross section of a shared use path. The appropriate paved width for a shared use path is dependent on the context, volume, and mix of users. The minimum paved width for a two-directional shared use path is 10 ft (3.0 m). Typically, widths range from 10 to 14 ft (3.0 to 4.3 m), with the wider values applicable to areas with high use and/or a wider variety of user groups.

  "In very rare circumstances, a reduced width of 8 ft (2.4 m) may be used where the following conditions prevail:

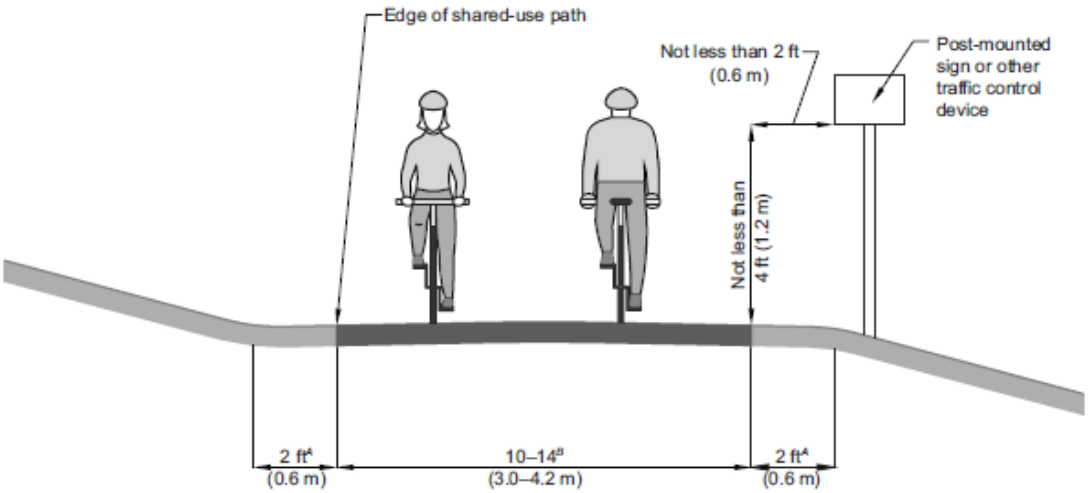
  - Bicycle traffic is expected to be low, even on peak days or during peak hours.
  - Pedestrian use of the facility is not expected to be more than occasional.
  - Horizontal and vertical alignments provide frequent, well-designed passing and resting opportunities.
  - The path will not be regularly subjected to maintenance vehicle loading conditions that would cause pavement edge damage.

  "In addition, a path width of 8 ft (2.4 m) may be used for a short distance due to a physical constraint such as an environmental feature, bridge abutment, utility structure, fence, and such. Warning signs that indicate the pathway narrows … should be considered at these locations.

  "A wider path is needed to provide an acceptable level of service on pathways that are frequently used by both pedestrians and wheeled users…. Wider pathways, 11 to 14 ft (3.4 to 4.2 m) are recommended in locations that are anticipated to serve a high percentage of pedestrians (30 percent or more of the total pathway volume) and high use volumes (more than 300 total users in the peak hour). Eleven foot (3.4 m) wide pathways are needed to enable a bicyclist to pass another path user going the same direction, at the same time a path user is approaching from the opposite direction (see Figure 5-2). Wider paths are also advisable in the following situations:

- Where there is significant use by inline skaters, adult tricycles, children, or other users that need more operating width;
- Where the path is used by larger maintenance vehicles;
- On steep grades to provide additional passing area; or
- Through curves to provide more operating space."

Typical Cross Sections of a Shared Use Path (AASHTO, 2012)



Notes:
[A] (1V:6H) Maximum slope (typ.)
[B] More if necessary to meet anticipated volumes and mix of users, per the *Shared Use Path Level of Service Calculator* (9)

Figure 5-1. Typical Cross Section of Two-Way, Shared Use Path on Independent Right-of-Way

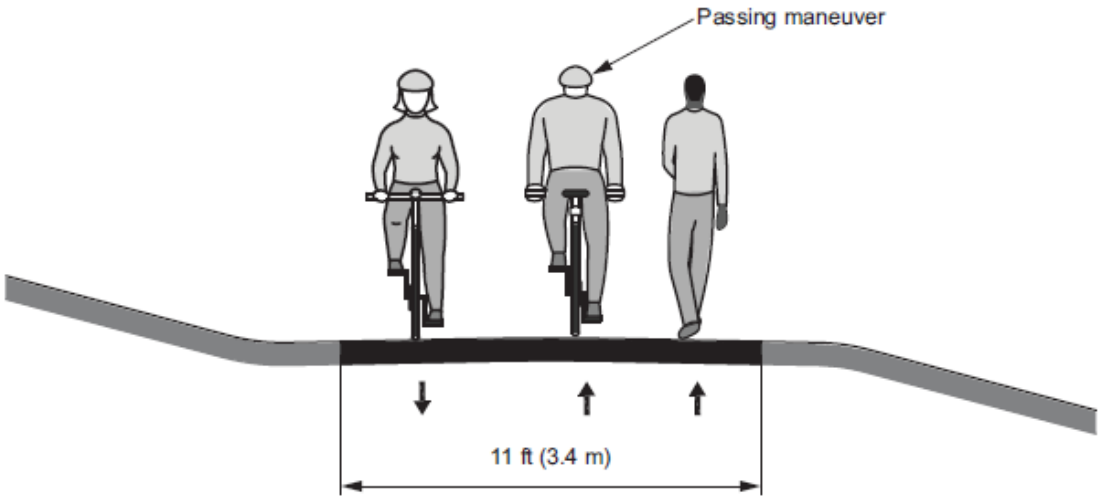


Figure 5-2. Minimum Width Needed to Facilitate Passing on a Shared Use Path

- Section 5.2.1 (Width and Clearance) – "Ideally, a graded shoulder area at least 3 to 5 ft (0.9 to 1.5 m) wide with a maximum cross-slope of 1V:6H, which should be recoverable in all weather conditions, should be maintained on each side of the pathway. At a minimum, a 2 ft (0.6 m) graded area with a maximum 1V:6H slope should be provided for clearance from lateral obstructions …."

3.3 Humboldt County Coastal Trail Implementation Strategy (RCAA *et al*, 2011)

RCAA *et al* (2011) noted that "The California Coastal Trail system through Humboldt County will require a number of trail types that respond to the context of each dynamic local landscape as well as a variety of trail users" (Page I-1). The report presents best practices for trail design guidelines for the multiple trail types needed to complete the network. For Class I bike paths, RCAA *et al* (2011) specified the following:

> "The anticipated range of users and forecast level of use by different user groups should dictate the design of each specific facility. Higher use, greater variety of use, and higher speed differentials all require greater width, increased separation of uses, and greater attention to regulation and education of bike path users. At a minimum, Class I bike paths require a minimum eight foot wide paved surface and a minimum of two foot wide clear, graded shoulders on both sides. This minimum standard is not appropriate for moderate to high-use segments accommodating mixed uses or high speed bicycle traffic. For moderate to high-use segments, a wider paved surface of ten to twelve feet (minimum) should be considered. In areas where a variety of users are expected, expanded unpaved shoulders should be included where possible. Where a path also doubles as an access route for maintenance or emergency vehicles, a minimum twelve foot wide path is recommended, as narrower paths tend to break up along the edges due to vehicle loads." (Page I-4).

3.4 Shared-Use Path Level of Service Calculator – A User's Guide (FHWA, 2006)

The Federal Highways Administration (FHWA) funded a study to assess the quality of service on 15 trails across the United States and develop an analytical tool to support the design of appropriate widths and cross sections for new trails. This study focused on measures for the quality of user experience on a trail and did not explicitly measure safety. FHWA (2006) determined that the quality of user experience on a trail is largely the result of being able to maintain an optimum speed and retaining freedom to maneuver. FHWA (2006) developed a model for trail Level of Service (LOS) that predicts the quality of user experience as a function of four variables: user volume, mode split, trail width, and presence of centerline. LOS categories are described in Table 3:

Table 3 –Trail Level of Service

Level of Service	Description from FHWA (2006)
A	**Excellent.** Trail has optimum conditions for individual bicyclists and retains ample space to absorb more users of all modes, while providing a high-quality user experience. Some newly built trails will provide grade-A service until they have been discovered or until their ridership builds up to projected levels.
B	**Good.** Trail has good bicycling conditions, and retains significant room to absorb more users, while maintaining an ability to provide a high-quality user experience.

C	**Fair.** Trail has at least minimum width to meet current demand and to provide basic service to bicyclists. A modest level of additional capacity is available for bicyclists and skaters; however more pedestrians, runners, or other slow-moving users will begin to diminish LOS for bicyclists.
D	**Poor.** Trail is nearing its functional capacity given its width, volume, and mode split. Peak-period travel speeds are likely to be reduced by levels of crowding. The addition of more users of any mode will result in significant service degradation. Some bicyclists and skaters are likely to adjust their experience expectations or to avoid peak-period use.
E	**Very Poor.** Given trail width, volume, and user mix, the trail has reached its functional capacity. Peak-period travel speeds are likely to be reduced by levels of crowding. The trail may enjoy strong community support because of its high usage rate; however, many bicyclists and skaters are likely to adjust their experience expectations, or to avoid peak-period use.
F	**Failing.** Trail significantly diminishes the experience for at least one, and most likely for all user groups. It does not effectively serve most bicyclists; significant user conflicts should be expected.

Grades A through C are generally considered acceptable levels of service, while Grades D through F can be considered degraded levels of service (FHWA, 2006).

Additional guidance from FHWA (2006) relevant for this report includes the following (all from Page 27):

- "Width is the key factor in determining LOS, and every additional foot of trail width has a positive impact on LOS."
- "Trails having 2.4-m (8.0-ft) width, which AASHTO recommends only in 'rare instances,' were found to have poor LOS, except at very low volumes or with user mixes that included few pedestrians and runners. The findings of this research support AASHTO's minimum 'recommended paved width for a two-directional shared-use path of [3.0 m] ten feet.'"
- "The study found that widths of 3.4-4.6 m (11.0-15.0 ft) provide improved LOS for higher volumes and more balanced user mixes than narrower widths. This is consistent with AASHTO recommendations that 'under certain conditions it may be necessary or desirable to increase the width of a shared-use path to 3.8 m (12.0 ft) or even to 4.3 m (14.0 ft), due to substantial use by bicycles, joggers, skaters and pedestrians….'"

Application of the LOS calculator for the Humboldt Bay Trail is discussed in Section 4.

4 RESULTS

4.1 Design Considerations

Overview

The Highway Design Manual and AASHTO (2012) provide standards that pertain to safety and operational effectiveness. The Humboldt Bay Trail must be designed to safely accommodate the expected volume and diversity of users, which includes a range of ages, experience levels, speeds, trip purposes, and mobility modes. The Humboldt Bay Trail is being designed to conform with the applicable standards to ensure that the trail meets the needs of the public and minimizes conflicts.

Safety

Trail width is a key design parameter for safety. A high rate of collisions or a perception of unsafe conditions will deter use and result in a failure to achieve the desired outcomes and benefits. Standards for trail width are intended to avoid or reduce the occurrence of collisions. The Humboldt Bay Trail will have a striped centerline delineating the opposite directions of travel, however in practice centerlines are fluid. With a range of speeds and a mix of bicycles and pedestrians, passing movements will be common. In addition, the presence of children, dogs, and people stopping to view wildlife will require cyclists to react to unexpected objects in their path. Users such as bicycle commuters will experience limited visibility during non-daylight hours. Shoulders are an essential feature of a trail surface by providing a recovery area if a trail user is forced to leave the path. Shoulders are also important for drainage and as a buffer from obstructions such as trees, signs, and fences.

Level of Service

Trail width is a key design parameter for operational effectiveness and the quality of the user experience. The calculator developed in FHWA (2006) was used to forecast the level of service for the Humboldt Bay Trail for trail widths ranging from 8.0 feet to 12.0 feet, using three scenarios for peak-hour one-way traffic volume: 65, 80, and 100. Each scenario assumed the same mode split (65% adult bicyclists, 5% child bicyclists, 20% pedestrians, 10% runners, 0% in-line skaters) with a centerline present. Results are provided in Attachment A and summarized on Table 4.

Table 4 – Forecasted Level of Service for Humboldt Bay Trail

Paved Trail Width (ft)	**Level of Service**		
	65 users/hr	80 users/hr	100 users/hr
12.0	B (Good)	B (Good)	B (Good)
11.0	B (Good)	B (Good)	C (Fair)
10.0	C (Fair)	C (Fair)	D (Poor)
9.0	C (Fair)	D (Poor)	D (Poor)
8.0	D (Poor)	D (Poor)	D (Poor)

A 12-foot trail would provide “Good” level of service for each scenario. An 8-foot trail would provide “Poor” level of service for each scenario. A 9- or 10-foot trail would provide “Fair” level of service trending to “Poor” with higher use, and an 11-foot trail would provide “Good” level of service trending to “Fair” with higher use.

Sensitive Resources / Environmental Factors

The majority of the trail between Eureka and Arcata will be constructed by widening the inboard side of the railroad fill prism. Widening the railroad prism will encroach on the drainage ditch situated between the railroad and highway. The drainage ditch has wetland characteristics and, although degraded, is considered by definition an Environmentally Sensitive Habitat Area (ESHA). One of the design goals for the Humboldt Bay Trail is to avoid and/or minimize impacts of ESHA and other natural resources to the extent feasible, while achieving the purpose and satisfying the need for the project. Alternative alignments that would avoid encroaching into the ditch have been determined to be infeasible.

Coastal Commission Guidance
During discussion at the hearing on September 12, 2013, Commissioners emphasized the need for the trail to accommodate pedestrians as well as cyclists. Some of the Commissioners comments suggested that a separate pedestrian path adjacent to the paved bike path was desired.

4.2 Specification of Trail Width

Four alternatives for trail cross-section and trail width were identified for consideration, as shown on Table 5:

Table 5 – Alternatives for Trail Type and Width

Attribute	**Alternatives**				
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Cross-section	Paved bike path and adjacent, unpaved pedestrian path	Paved bike path that allows all forms of non-motorized use (no adjacent pedestrian path)			
Tread width (bike path)	12 feet	12 feet	10 feet	9 feet	8 feet
Tread width (pedestrian path)	5 feet	n/a	n/a	n/a	n/a
Shoulder width	3 feet	3 feet	2 feet	2 feet	2 feet
Assessment:					
Conformance with Standards	Conforms	Conforms	Conforms	Does not conform	Does not conform
Consistency with previous plans and studies	Consistent	Consistent	Consistent	Inconsistent	Inconsistent
Consistency with Commission direction at 2013 hearing	Consistent	Consistent	Consistent	Inconsistent	Inconsistent
Level of benefits	Highest	Second highest	Meets minimum goals	Does not meet benefit goals	Does not meet benefit goals
Selection:	Not selected due to constraints	Not selected due to constraints	SELECTED ALTERNATIVE	Not selected due to non-conformance with standards and inconsistency with purpose/need	Not selected due to non-conformance with standards and inconsistency with purpose/need

Discussion
Alternative 1 provides a 12-foot paved bike path with a separate, adjacent 5-foot unpaved pedestrian path on one side and a 3-foot unpaved shoulder on the other side. This alternative conforms to standards and is consistent with previous plans and studies as well as direction from the Coastal Commissioners at the September 2013 hearing. This alternative has the highest level of benefits, but is considered infeasible due to multiple constraints, which include: limited available right-of-way; need to maintain ditch drainage capacity; proximity to sensitive resources; cost; and need for compatibility with railroad, highway, and private property.

Alternative 2 provides a 12-foot paved bike path with 3-foot unpaved shoulders. This alternative conforms to standards and meets all the consistency goals. This alternative would provide a level of service grade of "Good" for the 20-year planning horizon and would provide the various benefits discussed in Section 3. This alternative has the second highest level of benefits among the alternatives considered, but is considered infeasible due to the various constraints.

Alternative 3 provides a 10-foot paved bike path with 2-foot unpaved shoulders. Although providing fewer benefits than Alternatives 1 and 2, this alternative conforms with minimum safety and operational standards and is consistent with previous plans and studies as well as Coastal Commission direction from the September 2013 hearing. This alternative would provide an initial level of service grade of "Fair," transitioning to "Poor" at increasing levels of use.

Alternatives 4 and 5 provide a 9-foot and 8-foot paved bike path, respectively, with 2-foot unpaved shoulders. The Highway Design Manual and AASHTO (2012) provide allowances for a trail width less than 10 feet if certain conditions are met. The Highway Design Manual (Section 1003.1) specifies that selection of trail width must consider the volume of use, the presence of pedestrians along with bicyclists, and the need to accommodate passing movements. AASHTO (2012) provides a list (Section 5.2.1) of four conditions that must each be present to warrant a reduced width of 8 feet: low bicycle traffic, limited pedestrian use, frequent passing/resting opportunities, and infrequent use by maintenance vehicles. At least three of the four conditions cannot be met for the Humboldt Bay Trail; the third of these conditions (passing/resting opportunities) may be feasible. According to AASHTO (2012), 8-foot path widths are expected to be used for very short distances to accommodate significant constraints and should be posted with warning signs. Alternative 4 would provide an initial level of serve grade of "Fair" to "Poor," while Alternative 5 would provide an initial level of service grade of "Poor."

Alternatives 4 and 5 are deemed non-conforming with the Highway Design Manual and AASHTO (2012) and inconsistent with previous plans and studies. By not meeting the standards for adequately accommodating pedestrians as well as bicyclists, these alternatives are deemed inconsistent with Coastal Commission direction. Similarly, these alternatives would not meet the needs of the community and therefore would not fulfill the purpose of the project. Based on the discussion of standards in Section 3, a paved trail width of ten feet with two two-foot unpaved shoulders (Alternative 3) is considered the minimum acceptable alternative.

The City of Arcata analyzed the difference in wetland impacts between a 10-foot and 8-foot paved bike path (each with two 2-foot unpaved shoulders), corresponding to Alternatives 3 and 5, for the Bay Trail North project. Alternative 3 would encroach an additional two feet into the drainage ditch situated between the railroad and highway corridors. For the 3-mile Bay Trail North segment, Alternative 3 would have 0.15 acres more impacts compared to Alternative 5. Humboldt County has not performed this comparative analysis for the Bay Trail South project because the preliminary design has not been developed; however, the approximate differential impacts for Bay Trail South are likely to be similar in magnitude. Based on the limited encroachment into the ditch and the existing disturbed conditions of the ditch, the additional wetland impacts associated with Alternative 3 will not significantly disrupt the habitat values or degrade the ecological function of the ditch wetlands. All wetland impacts will be mitigated at the approved mitigation ratios.

4.3 Other Coastal Trails

Examples of trail projects located within the coastal zone include the following:

Project:	Morro Bay Harborwalk / Dune Restoration Project
Applicant:	City of Morro Bay
Permit No.:	3-05-071
Hearing date:	February 10, 2006
Project context:	Waterfront between highways and beach/dunes
Trail components:	8-foot boardwalk and 12-foot Class I bike path
Relevant information:	12-foot bike path was approved within ESHA.

Project:	Arana Gulch Master Plan
Applicant:	City of Santa Cruz
Permit No.:	3-11-074
Hearing date:	December 8, 2011
Project context:	68-acre open space area; Project area includes designated critical habitat for Santa Cruz tarplant (federally listed as threatened, state listed as endangered, CNPS List 1B)
Trail components:	8-foot trail
Relevant information:	Trail width was limited to 8 feet. Trail bisects the main meadow area which provides critical habitat for the federal- and state-listed plant.

Project:	Interstate-5 Improvements at San Elijo Lagoon
Applicant:	Caltrans and San Diego Association of Governments
Permit No.:	6-15-2092
Hearing date:	March 9, 2016
Project context:	Adjacent to Interstate-5
Trail components:	North Coast Bike Trail (3 miles of trail, 16-feet wide) and Manchester Avenue Trail
Relevant information:	Trail facilities have ESHA impacts.

5 REFERENCES

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Humboldt Bay Harbor, Recreation and Conservation District, May 2007. Humboldt Bay Management Plan.

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RCAA; Alta Planning + Design; Planwest Partners; and Streamline Planning Consultants for State Coastal Conservancy, January 2011. Humboldt County Coastal Trail Implementation Strategy.

RCAA, August 2011. Hammond Trail Counts. Technical memorandum with attachments, prepared for Humboldt County Public Works.

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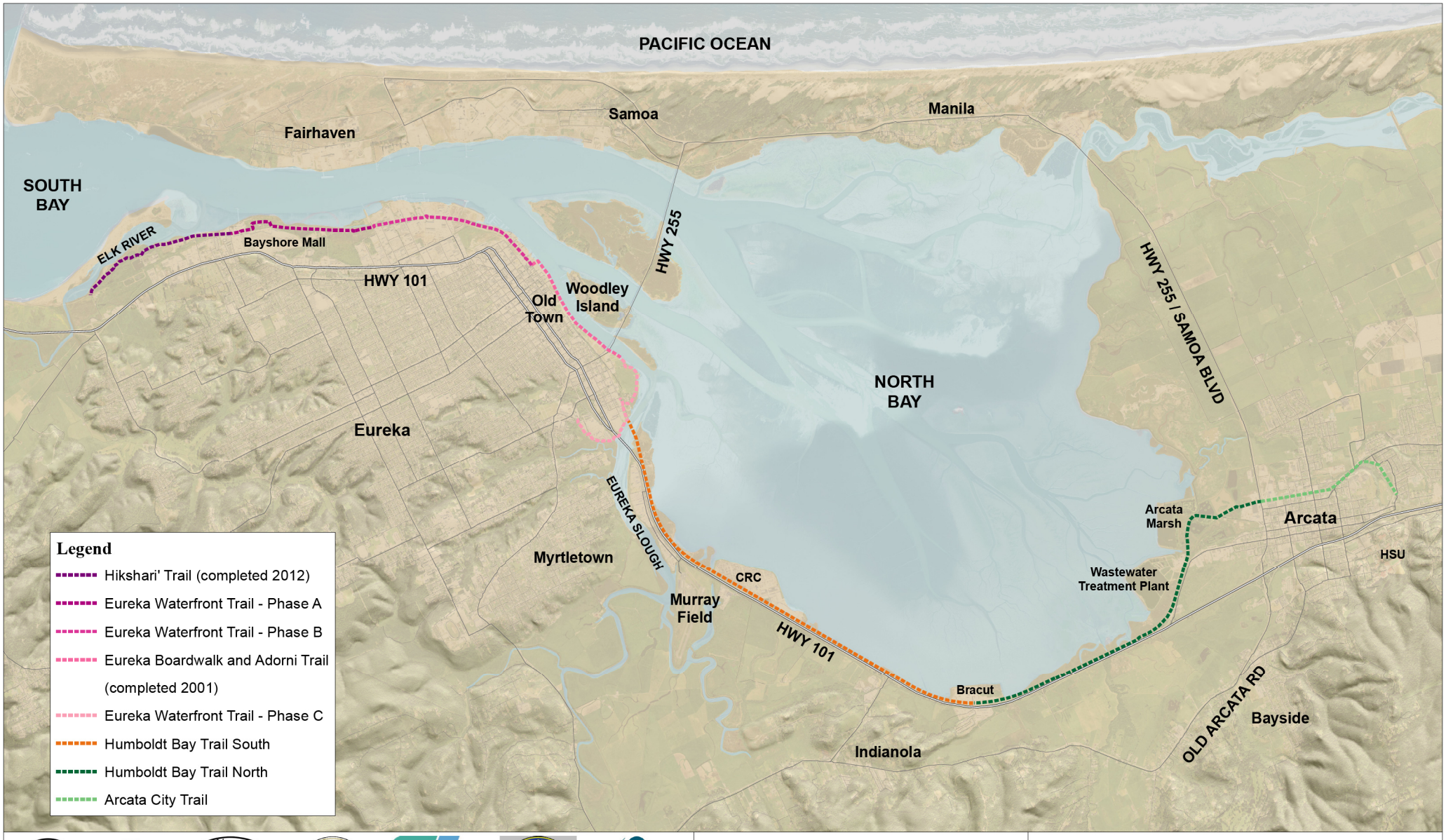

0 0.5 1 Miles

Date Prepared: September 26, 2014

Humboldt Bay Trail

Figure 1 - Site Map

Attachment A

Shared Use Path Flow Analysis Tool

Trail Level of Service (LOS) Calculator

Draft Spreadsheet Based on Federal Highway Administration Shared Use Path Study

North Carolina State University and Toole Design Group

Trail LOS Scale	
LOS Score	LOS Grade
X≥4.0	A
3.5≤X<4.0	B
3.0≤X<3.5	C
2.5≤X<3.0	D
2.0≤X<2.5	E
X<2.0	F

ROW #1

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 1	12.0	1	65.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.74	B	12.75%	6.21	0.05	0.05	3.69	3.69	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #2

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 2	11.0	1	65.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.62	B	12.75%	6.21	0.05	0.05	3.57	3.57	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #3

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 3	10.0	1	65.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.47	C	52.31%	25.49	0.21	0.21	3.26	3.26	C

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #4

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 4	9.0	1	65.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.30	C	52.31%	25.49	0.21	0.21	3.08	3.08	C

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #5

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 5	8.0	1	65.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.08	C	52.31%	25.49	0.21	0.21	2.86	2.86	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

MODEL ASSUMPTIONS

Trail volume represents the actual number of users counted in the field (the model adjusts this volume based on a peak hour factor of 0.85).

Bicyclists will pass all trail users that are traveling less than 12.8 miles per hour (average bicyclist speed)

Shared Use Path Flow Analysis Tool

Trail Level of Service (LOS) Calculator

Draft Spreadsheet Based on Federal Highway Administration Shared Use Path Study

North Carolina State University and Toole Design Group

Trail LOS Scale	
LOS Score	LOS Grade
X≥4.0	A
3.5≤X<4.0	B
3.0≤X<3.5	C
2.5≤X<3.0	D
2.0≤X<2.5	E
X<2.0	F

ROW #1

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 1	12.0	1	80.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.71	B	15.81%	9.48	0.08	0.08	3.63	3.63	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #2

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 2	11.0	1	80.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.59	B	15.81%	9.48	0.08	0.08	3.51	3.51	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #3

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 3	10.0	1	80.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.45	C	59.60%	35.75	0.30	0.30	3.15	3.15	C

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #4

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 4	9.0	1	80.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.27	C	59.60%	35.75	0.30	0.30	2.97	2.97	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #5

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 5	8.0	1	80.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.05	C	59.60%	35.75	0.30	0.30	2.75	2.75	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

MODEL ASSUMPTIONS

Trail volume represents the actual number of users counted in the field (the model adjusts this volume based on a peak hour factor of 0.85).

Bicyclists will pass all trail users that are traveling less than 12.8 miles per hour (average bicyclist speed)

Shared Use Path Flow Analysis Tool

Trail Level of Service (LOS) Calculator

Draft Spreadsheet Based on Federal Highway Administration Shared Use Path Study

North Carolina State University and Toole Design Group

Trail LOS Scale	
LOS Score	LOS Grade
X≥4.0	A
3.5≤X<4.0	B
3.0≤X<3.5	C
2.5≤X<3.0	D
2.0≤X<2.5	E
X<2.0	F

ROW #1

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 1	12.0	1	100.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.68	B	19.89%	14.92	0.12	0.12	3.56	3.56	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #2

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 2	11.0	1	100.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.56	B	19.89%	14.92	0.12	0.12	3.44	3.44	C

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #3

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 3	10.0	1	100.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.42	C	67.53%	50.63	0.42	0.42	2.99	2.99	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #4

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 4	9.0	1	100.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.24	C	67.53%	50.63	0.42	0.42	2.82	2.82	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #5

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
Humboldt Bay Case 5	8.0	1	100.0	65.0%	20.0%	10.0%	0.0%	5.0%	100.0%	3.02	C	67.53%	50.63	0.42	0.42	2.60	2.60	D

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

MODEL ASSUMPTIONS

Trail volume represents the actual number of users counted in the field (the model adjusts this volume based on a peak hour factor of 0.85).

Bicyclists will pass all trail users that are traveling less than 12.8 miles per hour (average bicyclist speed)

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Humboldt
Address: 825 5th Street, Fifth Floor
Eureka, CA 95501

From:
Public Agency: Humboldt County Public Works
Address: 1106 Second Street
Eureka, CA 95501
Contact: Hank Seamann, Public Works Deputy Dir.
Phone: (707) 445-7741
hseemann@co.humboldt.ca.us
Lead Agency (if different from above):
Same as above
Address:
Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2018022036

Project Title: Humboldt Bay Trail South

Project Applicant: County of Humboldt Department of Public Works

Project Location (include county): NCRA and Caltrans corridor between Bracut and Eureka in Humboldt County

Project Description:
Construction and operation of a Class I bike path along the North Coast Railroad Authority and Caltrans Highway 101 corridor generally between Bracut and Eureka, with the exception of a proposed levee trail segment around the California Redwood Company mill site, and construction of a cable barrier between Bracut and Gannon Slough.

This is to advise that the Humboldt County Board of Supervisors (☒ Lead Agency or ☐ Responsible Agency) has approved the above described project on July 31, 2018 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
Humboldt County Public Works Department at 1106 2nd Street, Eureka, CA 95501

Signature (Public Agency): Hank Seamann Title: Deputy-Director

Date: July 31, 2018 Date Received for filing at OPR: _____

FILED
County of Humboldt
Kelly E. Sanders
County Clerk
12-2018-138
07/31/2018
BC

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

CATEGORICAL EXEMPTION/CATEGORICAL EXCLUSION DETERMINATION FORM

01-HUM-CR-0			RPSTPLE 5904(143)
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

PROJECT DESCRIPTION: (Briefly describe project including need, purpose, location, limits, right-of-way requirements, and activities involved in this box. *Use Continuation Sheet, if necessary.)*

Humboldt Bay Trail (Eureka-to-Bracut Segment) – In Eureka from X Street to the Bracut Industrial Facility near the Arcata city limits, along the U.S. Route 101 and NCRA railroad transportation corridor and along the shoreline of north Humboldt Bay. Construct a Class I multi-use path (trail). See attached for more detail.

CALTRANS CEQA DETERMINATION (Check one)

☒ **Not Applicable – Caltrans is not the CEQA Lead Agency** ☐ **Not Applicable – Caltrans has prepared an Initial Study or Environmental Impact Report under CEQA**

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☐ **Exempt by Statute.** (PRC 21080[b]; 14 CCR 15260 et seq.)

☐ **Categorically Exempt. Class . (PRC 21084; 14 CCR 15300 et seq.)**

Based on an examination of this proposal and supporting information, the following statements are true and exceptions do not apply:

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

☐ **Exempt by General Rule.** [This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment (14 CCR 15061[b][3].)

Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager	
Signature	Date	Signature	Date

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA, and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b).

CALTRANS NEPA DETERMINATION (Check one)

☒ **23 USC 326:** The State has determined that this project has no significant impacts on the environment as defined by NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b). As such, the project is categorically excluded from the requirements to prepare an EA or EIS under the National Environmental Policy Act. The State has been assigned, and hereby certifies that it has carried out the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding dated May 31, 2016, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

- ☐ **23 CFR 771.117(c): activity (c)(_3_)**
- ☐ **23 CFR 771.117(d): activity (d)(___)**
- ☐ **Activity ___ listed in Appendix A of the MOU between FHWA and the State**

☐ **23 USC 327:** Based on an examination of this proposal and supporting information, the State has determined that the project is a Categorical Exclusion under 23 USC 327. The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Brandon Larsen		**Susan Theiss**	
Print Name: Senior Environmental Planner or Environmental Branch Chief		Print Name: Project Manager/DLA Engineer	
Signature	Date: 07/13/18	Signature	Date: 7/16/18

Date of Categorical Exclusion Checklist completion: 07/13/18 Date of ECR or equivalent: 07/11/18

Briefly list environmental commitments on continuation sheet. Reference additional information, as appropriate (e.g., CE checklist, additional studies and design conditions).

01-HUM-CR-0			RPSTPLE 5904(143)
Dist.-Co.-Rte. (or Local Agency)	P.M./P.M.	E.A/Project No.	Federal-Aid Project No. (Local Project)/Project No.

Continued from page 1:

Humboldt Bay Trail South
RPSTPLE 5904 (143)
(Humboldt County Department of Public Works)

Project Description

The Humboldt Bay Trail South Project would provide non-motorized (primarily pedestrian and bike) transportation and recreational access by creating a Class I multi-use trail connection between the City of Eureka's Waterfront Trail and the City of Arcata's Humboldt Bay Trail North. Beginning at its southern terminus at the south end of the Eureka Slough Bridge, the project would make use of the unused NCRA railroad transportation corridor as it extends north towards Brainard's Slough. For the purposes of this study, the approximately 4.2-mile-long Humboldt Bay Trail South alignment was divided into nine unique segments, in addition, a narrow extension continues north adjacent to the recently completed Humboldt Bay Trail North segment, where installation of a cable barrier is proposed between the pedestrian trail and Highway 101. The nine segments are listed below:

- Segment 1: Connection to Eureka Waterfront Trail
- Segment 2: Eureka Slough Crossing
- Segment 3: Eureka Slough North
- Segment 4: Eureka Slough to CRC
- Segment 5: CRC and South Eucalyptus Area
- Segment 6: CRC North Bay Crossing
- Segment 7: North Eucalyptus Area
- Segment 8: South of Bracut
- Segment 9: Bracut

Design Standards and Approach

Throughout the project alignment, the following design standards would be applied as the goal for design:

Trail Width and Surface (All Project Segments)

In accordance with the County of Humboldt's Basis of Design Report for Trail Width (March 31, 2016), a context-based approach will be utilized for selecting the appropriate trail width for the project. Trail width is a key design parameter for user safety. Trails that are too narrow can result in a high rate of collisions or a perception of unsafe conditions, which could deter use and result in a failure to achieve the desired outcomes and benefits. Trail width is also a key design parameter for the quality of the user experience, with wider trails typically resulting in a higher quality user experience.

In order to satisfy the project need, while minimizing impacts on environmental sensitive areas, the standard trail would consist of a 10-foot-wide asphalt track with 2-foot-wide gravel shoulders on each side. A narrower trail width may be used in isolated areas, where special situations preclude construction of the standard trail width. In accordance to Class I bikeway design and accessibility standards, the trail would be designed with a two percent or less cross slope and a five percent or less running slope. In areas where the project crosses tidally influenced waters, the standard trail would consist of a bridge (described below). The proposed trail may include intersection lighting at the Bracut driveway intersection. This additional lighting would be located approximately 0.25

miles from the proposed bridge at Brainard's Slough and 750 feet from the average high-tide water edge of Humboldt Bay to the west.

Streetscape Improvements (All Project Segments)
The viewing platforms and interpretive sign areas associated with the project may consist of either low-profile landscaped areas or raised deck platforms comprised of steel, asphalt-concrete, concrete, or wood or rail tie borders filled with crushed rock. Each platform/sign area may include interpretive signs, benches, trash receptacles and landscaping. These areas would encourage an appreciation of the environment and the socio-cultural history of the area by providing opportunities for nature and cultural study. The opportunities include providing up-close views of local vegetation/habitats, mid-range views of Eureka Slough/Humboldt Bay, long-range views of the surrounding ridge lines, and interpretive signs that provide information about local habitats and cultural/historical sites.

Directional and wayfinding signage would be installed at regular intervals to inform trail users of nearby connections to surface streets and nearby destinations.

Trailheads associated with the project may include new or refurbished parking spaces, interpretive signs, gateway signage, kiosks, benches, trash receptacles, and landscaping. The proposed project does not include a defined trailhead at this time, but may be considered in the future as a separate project.

Structural Pavement Sections (All Project Segments)
The trail is anticipated to have a typical pavement structural section that has approximately 12 inches of aggregate base and approximately 3 inches of asphalt concrete. In areas of poor soils, the structural section may be increased to up to 3 feet of aggregate/engineered fill base or other soil stabilization measures such as the use of geotextiles and increased structural section depth.

California Redwood Company Area (Project Segment 5)
Approximately 1.1 miles of the proposed trail alignment follows the outer perimeter levee surrounding the CRC. The existing levee varies in width from 12 to more than 30 feet wide and averages approximately 10 feet higher than the adjacent Humboldt Bay mud flats. The standard trail section would be maintained along the levee, but may include additional fencing and/or slope/drop-off protection. In general, the trail elevation is proposed to be very similar to that of the existing levee; however, the elevation profile would vary as needed to comply with the standards and other design elements. Portions of the levee that are narrow or low in elevation may need additional embankment to widen or raise the elevation of the trail. Sections may also require reinforced steepened slopes or short retaining systems (e.g., gabion walls) to limit necessary embankment fill. If widening is necessary, it would generally occur on the CRC side of the levee rather than towards Humboldt Bay. The additional embankment would be added along the inside slope at an approximate 1.5:1 slope. In most cases, the added embankment would result in fill into the inboard ditch/wetlands. When this occurs, the inboard ditch would be reconstructed to provide for the necessary capacity and to also mitigate onsite for wetlands impacts associated with inboard ditch. The CRC portion of the trail is proposed to be connected to the adjacent rail-with-trail sections (on both ends) by bridges used to cross a mud flat (north end) and saltmarsh (south end) and provide a smooth transition back on to the main trail alignment located between the railroad tracks and highway. Proposed bridge designs are described below.

Eureka Slough Crossing (Project Segments 2 and 3)
Approximately 700 feet to the northwest of the Highway 101 Eureka Slough crossing is via an existing railroad bridge owned by NCRA. The bridge is currently unused as there is no rail service within the area. If rail service were to resume, significant maintenance or improvements would be required to bring the system to operational standards. The proposed trail would occupy the railroad bridge by modifying the existing structure to accommodate the trail. One option is to remove the rails and ties and stockpile them for future reinstallation and to install an asphalt, concrete, or a wooden surface over the existing bridge surface. Another option is to leave the existing rails and ties in place and install an asphalt, concrete, or wooded surface over the rails. A third option would be to install asphalt, concrete, wooden, or pre-manufactured surface up to the level of the rails that would allow for cooperative use with trains, if trains were ever to resume use of the rails. All options would include new safety railing and minor cosmetic improvements to the bridge's appearance (such as painting over graffiti). During construction, management and protection measures would be implemented to prevent construction debris and other materials from falling from the bridge and entering the waterway below.

Brainard's Slough Crossing (Project Segment 9)
Brainard's Slough forms from the confluence of Washington Gulch and Rocky Gulch drainages, which is located east of Highway 101 before crossing under the highway towards the bay via a single reinforced box culvert, then under the NCRA railroad tracks. Two 48- inch diameter corrugated metal pipe culverts at the railroad crossing are significantly damaged and do not currently function. Replacement of these two damaged culverts with a pedestrian bridge structure along with bank rehabilitation in the vicinity of the trail crossing will be required for construction of the trail.

The bridge structure would need to be approximately 120 feet long. The bridge would consist of a single-span, pre-manufactured structural section composed of steel, aluminum, fiberglass, or concrete. The bridge would be supported on each end by abutments (including wingwalls) supported by up to five 18-inch diameter cast-in-steel-shell (CISS) piles (on each end). Up to 10 piles would be installed to a depth of up to approximately 100 feet below ground surface during periods of low tide. The steel shells would be installed using a vibratory hammer (American Pile driving Equipment Model 200 or similar), which would use a vegetable-based, non-toxic, hydraulic oil, in case of a hydraulic leak in or near Humboldt Bay. Each steel shell would be proofed by driving its final 5 feet using a conventional impact pile driver (135 kilojoules) to achieve design tip elevation and verify load capacity. No pile driving would occur in water, as installation would occur during low tides.

The existing failed culverts and debris (including timber ties, supports and rock debris in the channel) would be removed, the remaining rail embankment regraded (as-needed), and riprap would be installed (including on the bay side) to stabilize the embankment/shoreline and reduce the potential for ongoing erosion.

Prior to completing the final design, the County will complete a geotechnical analysis to determine the bearing capacity of the soils and the size and target depth of piles.

CRC Bridge Structures (Project Segments 4, 5, 6, and 7)
Two bridge structures would be constructed at the north and south extents of the CRC property for trail portions that cross tidally influenced waters. The bridges would be at least 10-feet wide between railings and would be comprised of pre-manufactured wood, fiberglass, steel, aluminum,

or concrete. The northern CRC bridge is anticipated to be a three-span bridge supported with four piers (one on each end and two within the mid-sections located in Humboldt Bay). Each pier is anticipated to be comprised of up to five 18-inch diameter CISS piles. Like the bridge structure proposed for the Brainard's Slough crossing, the steel shells would be installed to a depth of approximately 100 feet below ground surface using a vibratory pile-driver for the majority of the length and an impact hammer to proof each pile as previously described. In order to provide access for cranes on the bay mudflats, temporary sheet piles and washed coarse-grained aggregate fill would be used to construct an access road and landings along the alignment of the trail bridge. The sheet piles would be installed approximately 30 feet below ground surface using vibratory methods and the aggregate fill would be wrapped in geotextile fabric to separate native and fill soils. Water-filled bladders may also be used to construct a coffer dam to isolate the work area from the tidal bay waters. Isolating the work area with water-filled bladders would allow for work within the bay to be expedited as work would not be restricted to periods of low tides only. The coffer dam method would also reduce the likelihood of construction-generated sediment entering the bay and would reduce the possibility of entrapment of fish and other organisms in and around the temporary access road and work pad landings.

The southern CRC bridge would be a single-span bridge approximately 80 feet in length. Like the Brainard's Slough bridge, the southern bridge is anticipated to be supported on each end by abutments with a foundation of up to four 18-inch diameter CISS piles driven approximately 100 feet deep. The piles would be installed in the same manner and using the same equipment as described for the northern CRC bridge.

The vibratory driver used for the installation of sheet piles and steel shell piles at the north and south extents of the CRC property is anticipated to be operated for approximately 3 hours per day for a total of 20 days. It is anticipated that the proofing of the piles (up to 28 total) would require approximately 100 blows per pile driving 3 to 4 piles per day. The installation of sheet piles and steel shells would occur out of water during low tide or, in the case of the northern CRC bridge, be isolated by coffer dams to avoid and minimize hydroacoustic impacts (barotraumas) to fish and other marine organisms. Prior to completing the final design, the County will complete a geotechnical analysis to determine the bearing capacity of the soils and the size and target depth of piles.

Retaining Structures (Project Segments 5, 6, 7, and 8)
Retaining structures may be used at each end of the bridges (abutment wingwalls) and also along the segment of the trail beginning at the northwest corner of the CRC property and extending north-westerly for a distance of approximately 2,700 linear feet. This segment of trail north of CRC would be located between the railroad and the Highway 101 corridor, either directly adjacent to the railroad or directly adjacent to the highway (behind an existing metal beam guardrail). A retaining wall structure may be required in order to maintain minimum setbacks from the NCRA tracks or Highway 101 (depending on the alignment) while minimizing encroachment into the existing drainage ditch that is located between the railroad and highway. The structure may consist of cast-in-place concrete or soldier pile retaining wall. If soldier pile retaining wall is used, 30- to 40-foot long reinforced concrete or steel H section soldier piles would be driven at 8-foot intervals and approximately 22-34 feet below ground surface leaving approximately 6–8 feet exposed above the ground surface. Soldier piles would need to be driven using the same (or similar) pile driver that would be used for proofing the CISS pilings. Lagging (concrete or treated timber) would be used to retain the backfill. It is anticipated that the soldier piles (approximately 340 total) would require 100 blows per pile driving approximately 15 piles per day. The top of the retaining structures would not

exceed the elevation of the railroad and the height to the ground surface is expected to be 6 feet or less. For safety purposes, the retaining structure would include railings that are designed to comply with the California Building Code.

Eucalyptus Trees (Project Segments 5, 6, and 7)
A grove of existing aging eucalyptus trees located along the NCRA railroad north of the CRC property would need to be removed as part of the project. Some trees are in direct conflict with the trail alignment and all pose a safety hazard to trail users (i.e., falling debris and ground litter). The trees would be limbed and trunks rigged, felled, and lowered in sections (i.e., sectional felling). Tree stumps would be removed to the extent practicable through excavating, grinding or other means, with remaining stumps and root systems treated with an herbicide to prevent regrowth. Required equipment and workers would access the trees from both the highway and railroad sides. The removal operation would likely require the temporary closure of one or more lanes of Highway 101. The project would also remove all eucalyptus saplings in the vicinity of the trail (generally from the highway to the railroad prism).

Shoreline Protection (Project Segments 6, 7, 8, and 9)
As previously discussed, the project includes localized shoreline restoration and protection at the Brainard's Slough crossing. In addition to Brainard's Slough, there are multiple areas along the project where the existing railroad fill prism has deteriorated and shows significant signs of erosion as a result of wave action from Humboldt Bay. The area between CRC and Bracut is generally in the worst condition with more areas of deterioration between Eureka Slough and CRC. In order to protect the trail prism from future erosion and damage, sections of the rail prism would be reconstructed and armored with rock rip-rap. The rock armoring is anticipated along both the bay side and highway side to protect against direct wind and wave action and wash over erosion. The shoreline protection along the bay side (the western side of the railroad prism) would be limited (horizontally) to the bayward extent of the existing rip-rap. No additional encroachment into the bay beyond the toe of existing rock armoring is proposed.

Striping and Vehicle Control (All Project Segments)
The trail may include a centerline stripe throughout or at specific locations only, such as driveway crossings, curves, or bridge approaches. Standard trail-related traffic-control signage would be installed in order to comply with Class I standards and MUTCD requirements. At locations where the trail intersects a vehicular roadway, removable bollards would be installed to prevent motorized vehicles from entering the trail. Authorized personnel (e.g., police, emergency-responders, County/City maintenance crews, etc.) would be able to remove the bollards and temporarily access some portions of the trail with motorized vehicles.

Drainage (All Project Segments)
The trail would typically have a two percent or less cross slope to allow surface water to flow off of the trail surface. When the trail is directly adjacent to the railroad or the highway facilities, the cross slope of the trail would slant away from the railroad/highway in order to convey runoff towards the drainage ditch. In locations where the existing drainage ditches are in close proximity to the proposed trail alignment, culverts may need to be extended or added. Similarly, in cases where the trail's fill prism encroaches into the existing drainage ditch causing a reduction in capacity, the drainage ditch may need to be reconstructed at approximately the same grade and depth, but at a location (horizontally) offset from the original position.

Barriers and Fencing (All Project Segments)
Safety railing and fencing is proposed along retaining walls, viewing platforms, the CRC levee, and at the edge of the trail when adjacent to steep embankments. The railing and fencing would be constructed from wood or metal material.

High-tension cable barriers and metal beam guard rail would be utilized between Highway 101 and the trail to provide additional protection of trail users from errant vehicles. The cable barrier would be installed along portions of the proposed Humboldt Bay Trail South project, as well as along the existing Humboldt Bay Trail North project. The high-tension cable barrier would be set back approximately 10 feet from the edge of trail and approximately 8 to 12 feet from the edge of the highway shoulder. The cable barrier would consist of steel wire ropes (typically 4 strands) mounted on steel posts secured in concrete foundations. A 2-foot wide concrete weed mat would be installed along the length of the cable barrier. Figure 2 shows a typical cable barrier along a highway.

Where the trail is less than 10 feet from the edge of the highway shoulder, a metal beam guard rail or other positive barrier will be required. In this situation the trail would be located approximately 3 feet behind the metal beam guard rail wood posts. A weed control mat would be installed along the length of new metal beam guardrail to help control vegetation.

Billboards (Project Segments 7 and 8)
There are four billboards in the vicinity of the project, all of which are situated on private property. Three of the billboards are located outside the project area on the bay side of the railroad prism. One of the billboards is located within the project area between the highway and railroad. Depending on the final trail alignment, the trail may narrowly avoid this billboard, or the billboard may conflict with the trail, which may result in removal or relocation of the billboard. The future disposition of the remaining three billboards located outside the project area is unknown at this time and are not analyzed in this document.

Construction Staging, Activities, and Equipment
Construction staging is planned at four discrete areas located on either end of the CRC and Bracut Industrial Park property. These four discrete staging areas are in addition to general staging areas that are anticipated within the project work area and the Caltrans and NCRA right-of-ways. These four discrete staging areas are located on private property and use would be dependent on approval from the landowners.

Construction activities would primarily include removal of trees and vegetation, excavation and grading, bridge foundation construction and pre-manufactured bridge installation, trail paving, fencing, and signage, along various segments of the project alignment. All construction activities would be accompanied by both temporary and permanent erosion and sediment control best management practices (BMPs).

Construction equipment required for trail construction would include: tracked excavators, backhoes, graders, bulldozers, dump trucks, rollers, paving machines, cranes, water trucks, drill rigs, vibratory and impact hammer pile-drivers, and pick-up trucks. Equipment required for pre-manufactured bridge assembly and placement would include excavators and cranes.

Roadways that would be used for construction access and the staging areas include Highway

101, the entrance into CRC, and the entrance into Bracut Industrial Park. It is not anticipated that any temporary utility extensions, such as electric power or water, would be required for construction.

Traffic Control

In accordance with jurisdictional requirements, the construction contractor would be required to obtain an encroachment permit from the County, the City of Eureka, NCRA, and Caltrans prior to beginning the work along Highway 101. As part of the encroachment permit process, the construction contractor will be required to prepare a traffic control plan for review and acceptance of planned work within the public right-of-way. The development and implementation of a traffic control plan would include, but not necessarily be limited to: temporary traffic control systems, delineators, signs, and flaggers conforming to the current California Manual of Uniform Traffic Control Devices.

Erosion and Sediment Control

Erosion control measures shall be implemented during construction of the proposed action. These measures shall conform to the provisions in Sections 20-2 and 20-3 of the Caltrans Standard Specifications and the special provisions included in the contract for the proposed action. Such provisions include the preparation of a SWPPP, which describes and illustrates the best management practices (BMPs) at the proposed action sites. Erosion control measures to be included in the SWPPP or to be implemented by the County include, but are not limited to, the following:

- To the maximum extent practicable, activities that increase the erosion potential in the action area shall be restricted to the relatively dry summer and early fall period to prevent or minimize the potential for rainfall events to transport sediment to surface water features. In-channel and in-bay construction activities would be restricted to the period of July 1st–September 31st. Upland construction would likely occur throughout the year as long as work activities comply with the conservation and avoidance and minimization measures identified herein and for the protection of other sensitive or special-status plant or animal species. For upland construction activities that must take place during the late–fall, winter, or spring (e.g., vegetation removal prior to avian nesting periods), then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.
- Areas where wetland and upland vegetation are to be removed shall be clearly identified in the construction documents and reviewed by the County prior to issuing for bid.
- Within 10 days of completion of construction, in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, disturbed areas shall be temporarily stabilized to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, appropriate BMPs will be installed upon completion of the day's activities to control erosion and prevent sediment laden stormwater from leaving the construction area.
- Suitable perimeter control BMPs, such as silt fences, or straw wattles, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These BMPs shall be installed prior to any clearing or grading activities.

Environmental Analysis

Cultural Resources
An Area of Potential Effects (APE) Map was approved on 12/19/17, an Archaeological Survey Report, Historic Resource Evaluation Report, and a Historic Property Survey Report were all approved on 04/03/18. The reports found No Historic Properties Affected as a result of the project. Caltrans requested SHPO to concur that several resources within the APE are not eligible for inclusion in the National Register, concurrence was received from SHPO on 06/19/18.

Biological Resources
A Natural Environment Study (NES) was prepared and then approved on 03/15/18. In preparing the NES it was determined that the project may affect, but is not likely to adversely affect Tidewater Goby, SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon or their designated habitats. It was determined that the Programmatic Letter of Concurrence between USFWS and Caltrans for potential effects to Tidewater Goby would apply. The project will incorporate the measures outlined in the PLOC to avoid and minimize potential effects to the species. A Biological Assessment was submitted to National Marine Fisheries on 02/23/18 and a Letter of Concurrence (LOC) was received on 03/22/18. It was also determined that the project will have no effect on other federally listed threatened or endangered species that have potential to exist within the project limits. Conditions for avoiding and minimizing effects to federal and state listed species are contained within the NES and LOC.

A wetland delineation was conducted and included as an appendix to the NES. It was determined that there will be take of both state and federal wetlands. A Wetlands Practicable Alternative Finding was produced and concluded that the proposed action includes all practicable measures to minimize harm to wetlands as a result of the project.

Visual
A Visual Impact Assessment was conducted and approved by Caltrans on 03/22/18. In general, the document concluded that the project would have a minimal effect and a beneficial impact on the existing and planned visual resources in the project alignment or vicinity. This would include improvements to existing aesthetics and visual resources, as well as creation of additional viewing opportunities of Humboldt Bay, mudflats, and marshland. New features such as signage, bridge crossings, and viewing platforms will be constructed to be unobtrusive and blend with the landscape. Tree removal associated with the project was determined to lessen the aesthetic quality along the trail but according the VIA it would not be a significant impact.

Hazardous Waste
An Initial Site Assessment (ISA) for Hazardous Waste was completed and then approved on 12/14/17 by a Caltrans Hazardous Waste specialist. The ISA found that there is potential for hazardous waste at two locations within the project limits due to historic activities. It was determined that there is a low potential for encountering the material due to the scope of the project but a Preconstruction Site Investigation with soil borings will occur prior to construction.

4(F)
The project will have minor permanent impacts to property owned and operated by USFWS. Potential impacts to public lands are subject to review under Section 4(f) of the Department of Transportation Act (49 U.S.C. 303). Based on the small-scale and minimal impacts anticipated for the proposed project, it was determined that it would have a *de minimis* effect (i.e., would not have

an adverse effect) on the existing use, features, or attributes that compose the Humboldt Bay National Wildlife Refuge. These findings were posted for a 30-day public review period and USFWS concurred on 05/01/18.

Other Environmental Considerations

Other than a temporary increase in ambient noise from equipment during construction, there were no noise related impacts. The project will also have no significant floodplain encroachment.

The project will have five permanent right of acquisitions and two temporary easements. There is no public controversy anticipated in association with the acquisitions or easements.

There has been some public concern related to the removal of a stand of Eucalyptus adjacent to the project as a public safety measure for trail users. The trees are not a native species to the area and they were previously evaluated for their historic significance. The determination was made that they are not eligible for inclusion in the National Register.

Permits

- Coastal Development Permit from the Coastal Commission
- 404 Permit from Army Corps of Engineers
- 401 Permit from Waterboard
- 1600 Permit from California Department of Fish and Wildlife

Categorical Exclusion Checklist

Dist/Co/Rte/PM:	01-HUM-CR-0	Fed. Aid No. (Local Project):	RPSTPLE 5904(143)	EA/Project No.:

SECTION A: TYPE OF CE: Use the information in this section to determine the applicable CE and corresponding activity for this project.

1. Project is a CE under CE Assignment 23 USC 326. ☒ Yes ☐ No

If "yes", check applicable activity in one of the three tables below (activity must be listed in 23 CFR 771.117 (c) or (d) list or included in activities listed in Appendix A of the CE Assignment MOU to be eligible for 23 USC 326).

	Activity Listed in 23 CFR 771.117(c)
1 ☐	Activities which do not involve or lead directly to construction such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed; and Federal-aid system revisions which establish classes of highways on the Federal-aid highway system.
2 ☐	Approval of utility installations along or across a transportation facility.
3 ☒	Construction of bicycle and pedestrian lanes, paths, and facilities.
4 ☐	Activities included in the State's *highway safety plan* under 23 U.S.C 402.
5 ☐	Transfer of Federal lands pursuant to 23 U.S.C 107(d) and/or 23 U.S.C 317 when the land transfer is in support of an action that is not otherwise subject to FHWA review under NEPA.
6 ☐	The installation of noise barriers or alterations to existing publicly owned buildings to provide for noise reduction.
7 ☐	Landscaping.
8 ☐	Installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur.
9[1]	The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary, or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C 5121):[2]
☐	(i) Emergency repairs under 23 U.S.C 125;
☐	(ii) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility (such as a ferry dock or bus transfer station), including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action: (A) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and (B) Is commenced within a 2-year period beginning on the date of the declaration.
10 ☐	Acquisition of scenic easements.
11 ☐	Determination of payback under 23 U.S.C 156 for property previously acquired with Federal-aid participation.
12 ☐	Improvements to existing rest areas and truck weigh stations.
13 ☐	Ridesharing activities.
14 ☐	Bus and rail car rehabilitation.
15 ☐	Alterations to facilities or vehicles in order to make them accessible for elderly and handicapped persons.
16 ☐	Program administration, technical assistance activities, and operating assistance to transit authorities to continue existing service or increase service to meet routine changes in demand.
17 ☐	The purchase of vehicles by the applicant where the use of these vehicles can be accommodated by existing facilities or by new facilities which themselves are within a CE.
18 ☐	Track and railbed maintenance and improvements when carried out within the existing right-of-way.
19 ☐	Purchase and installation of operating or maintenance equipment to be located within the transit facility and with no significant impacts off the site.

[1] On the CE form, distinguish between c9i or c9ii

[2] Include copy of the emergency declaration in the file

Categorical Exclusion Checklist

Dist/Co/Rte/PM: 01-HUM-CR-0	Fed. Aid No. (Local Project): RPSTPLE 5904(143)	EA/Project No.:

20 ☐	Promulgation of rules, regulations, and directives.
21 ☐	Deployment of electronics, photonics, communications, or information processing used singly or in combination, or as components of a fully integrated system, to improve the efficiency or safety of a surface transportation system or to enhance security or passenger convenience. Examples include, but are not limited to, traffic control and detector devices, lane management systems, electronic payment equipment, automatic vehicle locaters, automated passenger counters, computer-aided dispatching systems, radio communications systems, dynamic message signs, and security equipment including surveillance and detection cameras on roadways and in transit facilities and on buses.
22[3] ☐	"Projects, as defined in 23 U.S.C. 101, that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways,[4] mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities with direct access to an existing transportation facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way." Existing operational right-of-way also does not include areas outside those areas necessary for existing transportation facilities such as uneconomic remnants, excess right-of-way that is secured by a fence to prevent trespassing, *or that are acquired and held for a future transportation project.* A transportation facility must already exist at the time of the review of the proposed project being considered for the CE. This precludes the acquisition of right-of-way and the subsequent use of this CE to build within that right-of-way.
23[5] ☐ ☐	Federally-funded projects: Enter project cost $ and Federal funds $ (i) That receive less than $5,403,484.88 of Federal funds; or (ii) With a total estimated cost of not more than $32,420,909.28 and Federal funds comprising less than 15 percent of the total estimated project cost.
24 ☐	Localized geotechnical and other investigation to provide information for preliminary design and for environmental analysis and permitting purposes, such as drilling test bores for soil sampling; archeological investigations for archeology resources assessment or similar survey; and wetland surveys.
25 ☐	Environmental restoration and pollution abatement actions to minimize or mitigate the impacts of any existing transportation facility (including retrofitting and construction of stormwater treatment systems to meet Federal and State requirements under sections 401 and 402 of the Federal Water Pollution Control Act (33 U.S.C. 1341; 1342) carried out to address water pollution or environmental degradation.
26 ☐	Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints in paragraph (e) of this section [771.117(e)]. **Note: In order to use this CE, certain constraints must be met. Complete Section A, Item 2 below.**
27 ☐	Highway safety or traffic operations improvement projects, including the installation of ramp metering control devices and lighting, if the project meets the constraints in paragraph (e) of this section [771.117(e)]. **Note: In order to use this CE, certain constraints must be met. Complete Section A, Item 2 below.**
28 ☐	Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in paragraph (e) of this section [771.117(e)]. **Note: In order to use this CE, certain constraints must be met. Complete Section A, Item 2 below.**
29 ☐	Purchase, construction, replacement, or rehabilitation of ferry vessels (including improvements to ferry vessel safety, navigation, and security systems) that would not require a change in the function of the ferry terminals and can be accommodated by existing facilities or by new facilities which themselves are within a CE.
30 ☐	Rehabilitation or reconstruction of existing ferry facilities that occupy substantially the same geographic footprint, do not result in a change in their functional use, and do not result in a substantial increase in the existing facility's capacity. Example actions include work on pedestrian and vehicle transfer structures and associated utilities, buildings, and terminals.
Activity Listed in Examples in 23 CFR 771.117(d)	
1	*Reserved.*
2	*Reserved.*
3	*Reserved.*
4 ☐	Transportation corridor fringe parking facilities.

[3] On the CE form, identify in the project description that all work is within operation right-of-way.

[4] "Fixed Guideway" means a public transportation facility using and occupying a separate right-of-way for the exclusive use of public transportation such as rail, a fixed catenary system (light rail, trolley, etc.) passenger ferry system, or for a bus rapid transit system.

[5] On the CE form, distinguish between c23i or c23ii.

Categorical Exclusion Checklist

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5 ☐	Construction of new truck weigh stations or rest areas.
6 ☐	Approvals for disposal of excess right-of-way or for joint or limited use of right-of-way, where the proposed use does not have significant adverse impacts.
7 ☐	Approvals for changes in access control.
8 ☐	Construction of new bus storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and located on or near a street with adequate capacity to handle anticipated bus and support vehicle traffic.
9 ☐	Rehabilitation or reconstruction of existing rail and bus buildings and ancillary facilities where only minor amounts of additional land are required and there is not a substantial increase in the number of users.
10 ☐	Construction of bus transfer facilities (an open area consisting of passenger shelters, boarding areas, kiosks and related street improvements) when located in a commercial area or other high activity center in which there is adequate street capacity for projected bus traffic.
11 ☐	Construction of rail storage and maintenance facilities in areas used predominantly for industrial or transportation purposes where such construction is not inconsistent with existing zoning and where there is no significant noise impact on the surrounding community.
12 ☐	Acquisition of land for hardship or protective purposes. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed. (i) Hardship acquisition is early acquisition of property by the applicant at the property owner's request to alleviate particular hardship to the owner, in contrast to others, because of an inability to sell his property. This is justified when the property owner can document on the basis of health, safety or financial reasons that remaining in the property poses an undue hardship compared to others. (ii) Protective acquisition is done to prevent imminent development of a parcel which may be needed for a proposed transportation corridor or site. Documentation must clearly demonstrate that development of the land would preclude future transportation use and that such development is imminent. Advance acquisition is not permitted for the sole purpose of reducing the cost of property for a proposed project
13 ☐	Actions described in paragraphs (c)(26), (c)(27), and (c)(28) of this section that do not meet the constraints in paragraph (e) of this section.
Activity Listed in Appendix A of the CE Assignment MOU for State Assumption of Responsibilities for Categorical Exclusions	
1 ☐	Construction, modification, or repair of storm water treatment devices (e.g., detention basins, bioswales, media filters, infiltration basins), protection measures such as slope stabilization and other erosion control measures throughout California.
2 ☐	Replacement, modification, or repair of culverts or other drainage facilities.
3 ☐	Projects undertaken to assure the creation, maintenance, restoration, enhancement, or protection of habitat for fish, plants, or wildlife (e.g., revegetation of disturbed areas with native plant species; stream or river bank revegetation; construction of new, or maintenances of existing fish passage conveyances or structures; restoration or creation of wetlands).
4 ☐	Routine repair of facilities due to storm damage, including permanent repair, to return the facility to operational condition that meets current standards of design and public health and safety without expanding capacity (e.g., slide repairs, construction or repair of retaining walls).
5 ☐	Routine seismic retrofit of facilities to meet current seismic standards and public health and safety standards without expansion of capacity.
6 ☐	Air space leases that are subject to Subpart D, Part 710, title 23, Code of Federal Regulations.
7 ☐	Drilling of test bores/soil sampling to provide information for preliminary design and for environmental analyses and permitting purposes.

Categorical Exclusion Checklist

Dist/Co/Rte/PM:	01-HUM-CR-0	Fed. Aid No. (Local Project):	RPSTPLE 5904(143)	EA/Project No.:

2. This section must be completed in order to use a CE under 23 CFR 771.117(c)(26), (c)(27), or (c)(28).

☐ The action **DOES NOT** include any of the following constraints found in 23 CFR 771.117(e):

A.
- An acquisition of more than a minor amount of right-of-way or that would result in any residential or nonresidential displacements

B.
- A bridge permit from the U.S. Coast Guard; OR
- An action that does not meet the terms and conditions of a U.S. Army Corps of Engineers nationwide or general permit under section 404 of the Clean Water Act (i.e., does the project require a Standard 404 permit [Individual Permit or Letter of Permission][?) AND/OR
- A permit required under Section 10 of the Rivers and Harbors Act of 1899

C.
- A finding of "adverse effect" to historic properties under the National Historic Preservation Act; OR
- The use of a resource protected under 23 U.S.C. 138 or 49 U.S.C. 303 (section 4(f)) except for actions resulting in *de minimis* impacts; OR
- A finding of "may affect, likely to adversely affect" threatened or endangered species or critical habitat under the Endangered Species Act

D.
- Construction of temporary access, or the closure of existing road, bridge, or ramps, that would result in major traffic disruptions

E.
- Changes in access control

F.
- A floodplain encroachment other than functionally dependent uses (e.g., bridges, wetlands) or actions that facilitate open space use (e.g., recreational trails, bicycle and pedestrian paths); OR
- Construction activities in, across, or adjacent to a river component designated or proposed for inclusion in the National System of Wild and Scenic Rivers

If the action includes any of the constraints listed above, it **MAY NOT** be processed under 23 CFR 771.117(c)(26), (c)(27), or (c)(28), however, the project may qualify for a CE under 23 CFR 771.117(d)(13).

3. Project is a CE for a highway project under NEPA Assignment 23 USC 327. ☐ Yes ☒ No

(Use only if project does not qualify under CE Assignment 23 USC 326 [activities not included in three previous lists above].)

4. Independent Utility and Logical Termini

☒ The project complies with NEPA requirements related to connected actions and segmentation (i.e. the project must have independent utility, connect logical termini when applicable, be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made and not restrict further consideration of alternatives for other reasonably foreseeable transportation improvements). (FHWA Final Rule, "Background," *Federal Register* Vol. 79, No. 8, January 13, 2014.)

5. Categorical Exclusions Defined (23 CFR 771.117[a]).

FHWA regulation 23 CFR 771.117(a) defines categorical exclusions as actions which:

- do not induce significant impacts to planned growth or land use for the area;
- do not require the relocation of significant numbers of people;
- do not have a significant impact on any natural, cultural, recreational, historic or other resources;
- do not involve significant air, noise, or water quality impacts;
- do not have significant impacts on travel patterns; or
- do not otherwise, either individually or cumulatively, have any significant environmental impacts.

☒ Checking this box certifies that project meets the above definition for a Categorical Exclusion.

6. Exceptions to Categorical Exclusions/Unusual Circumstances (23 CFR 771.117[b]).

FHWA regulation 23 CFR 771.117(b) provides that any action which normally would be classified as a CE but could involve *unusual circumstances* requires the Department to conduct appropriate environmental studies to determine if the CE classification is proper. Unusual circumstances include actions that involve:

- Significant environmental impacts;
- Substantial controversy on environmental grounds;
- Significant impact on properties protected by section 4(f) of the DOT Act or section 106 of the National Historic Preservation Act; or
- Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.

All of the above unusual circumstances have been considered in conjunction with this project. (Please select one.)

☒ Checking this box certifies that **none of the above conditions apply** and that the project qualifies for a Categorical Exclusion.

☐ Checking this box certifies that unusual circumstances **are involved.** However, the appropriate studies/analysis have been completed, and it has been determined that the CE classification is still appropriate.

Categorical Exclusion Checklist

SECTION B: Compliance with FHWA NEPA policy to complete all other applicable environmental requirements[6] prior to making the NEPA determination:

During the environmental review process for which this CE was prepared, all applicable environmental requirements were evaluated. Outcomes for the following requirements are identified below and fully documented in the project file. [NOTE: EVERY SECTION BELOW MUST BE COMPLETED, DO NOT SKIP ANY SECTIONS.]

FSTIP

☒ The project description on the Categorical Exemption/Categorical Exclusion Form matches the project description in the FSTIP and RTP, and the appropriate page of the FSTIP is in the project file.

Air Quality

☒ Air Quality Conformity Findings Checklist has been completed and project meets all applicable AQ requirements.
☐ For 23 USC 326 projects which require an air quality conformity determination (this will apply to certain projects under 23 CFR 771.117(c)(22), (c)(23), (c)(26), (c)(27), and (c)(28)), list the date of the Caltrans conformity determination: _____
☐ For 23 USC 327 projects, list date of FHWA concurrence on conformity determination: _____

Cultural Resources

☒ Section 106 compliance is complete. ☐ Screened Undertaking
Select appropriate finding: ☒ No Historic Properties Affected ☐ No Adverse Effect with Standard Conditions
☐ No Adverse Effect without Standard Conditions ☐ Adverse Effect/MOA ☐ Phasing/Project PA

Noise

23 CFR 772
☒ Is this a Type 1 project? ☐ Yes ☒ No (skip this section.)
☐ Future noise levels with project either approach or exceed NAC or result in a substantial increase.
If yes, ☐ Abatement is reasonable and feasible ☐ Abatement is not reasonable or feasible

Waters, Wetlands

- **Section 404 of the Clean Water Act**
  Impacts to Waters of the U.S.: ☒ Yes ☐ No; If yes, approval anticipated:
  ☒ Nationwide Permit ☐ Individual Permit ☐ Regional General Permit ☐ Letter of Permission
- **Wetland Protection (Executive Order #11990)**
  ☐ No Wetland Impact
  ☒ Permanent Wetland Impact; Only Practicable Alternative Finding is included in a separate document in the project file
- **Section 401 of the Clean Water Act**
  ☐ Exemption ☒ Certification

Biology

- **USFWS,** Species List Date: 02/13/18 (must be < 180 days old)
  ☐ No Effect Section 7 (Federal Endangered Species Act)
  Consultation with USFWS Findings (Effect determination):
  ☒ Not Likely to Adversely Affect with USFWS Concurrence. Date: 03/15/18
  ☐ Likely to Adversely Affect with Biological Opinion Date: _____
- **NOAA Fisheries,** Species List Date: 02/13/18 (must be < 180 days old) ☐ N/A: Project outside of NOAA jurisdiction
  ☐ No Effect Section 7 (Federal Endangered Species Act)
  Consultation with NOAA Fisheries Findings (Effect determination):
  ☒ Not Likely to Adversely Affect with NOAA Fisheries Concurrence. Date: 03/22/18
  ☐ Likely to Adversely Affect with Biological Opinion Date: _____
- **Essential Fish Habitat (Magnuson-Stevens Act) Findings** (Effect determination):
  ☐ Magnuson-Stevens Fishery Conservation and Management Act does not apply
  ☐ No Adverse Effect ☒ Adverse Effect and consultation with NOAA Fisheries

[6] Please consult the SER for a complete list of applicable laws, statutes, regulations, and executive orders that must be considered before completing the CE.

Categorical Exclusion Checklist

Floodplains

Floodplains (Executive Order #11988)
☐ No Floodplains ☒ No Significant Encroachment ☐ Significant Encroachment

Section 4(f) Transportation Act (23 CFR 774)

Section 4(f) regulation was considered as a part of the review for this project and a determination was made:
☐ Section 4(f) does not apply
(Project file includes documentation that property is not a Section 4(f) property, that project does not use a Section 4(f) property, or that the project meets the criteria for the temporary occupancy exception.)
☒ Section 4(f) applies
☒ *De Minimis*
☐ Programmatic: Type _____ (List one of the five appropriate categories as defined in 23 CFR 774.3)
☐ Individual: ☐ Legal Sufficiency Review complete ☐ HQ Coordinator Review Complete

Section 6(f) – Properties Acquired with Land and Water Conservation Fund grants

Was the above property purchased with grant funds from the Land and Water Conservation Fund?
☒ No, Section 6(f) does not apply. No additional documentation required.
☐ Yes ☐ Documentation of approval from National Park Service Director (through California State Parks) has been received for the conversion/and replacement of 6(f) property.

Coastal Zone

Coastal Zone Management Act of 1972
☐ Not in Coastal Zone ☐ Qualifies for Exemptions ☐ Qualifies for Waiver ☒ Coastal Permit Required
☐ Consistent with Federal State and Local Coastal Plans ☐ Federal Consistency

Coast Guard – Bridge Over Navigable Waters of the U.S.

☒ Not applicable
☐ 23 USC 144(c) USCG Bridge Permit Exception
☐ 33 CFR 115.70 Advance Approval
☐ USCG Bridge Permit

Relocation and Right of Way

- **Relocations**
  ☒ No Relocations
  ☐ Project involves _____ (#) relocations and will follow the provisions of the Uniform Relocation Act.
- **Right of Way Acquisitions/Easements**
  ☐ No right of way acquisitions or easements
  ☒ Project involves 5 (#) acquisitions and 2 (#) easements.

Hazardous Waste and Materials

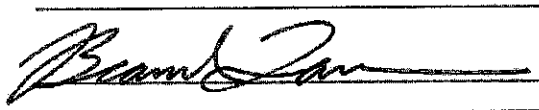
- Are hazardous materials or contamination exceeding regulatory thresholds (as set by U.S. EPA, Cal EPA, County Environmental Health, etc.) present? ☐ Yes ☒ No
- If yes, is the nature and extent of the hazardous materials or contamination fully known? ☐ Yes ☐ No
  If no, briefly discuss the plan for securing information:

SECTION C: Certification

Based on the information obtained during environmental review process and included in this checklist, the project is determined to be a Categorical Exclusion pursuant to the National Environmental Policy Act and is in compliance with all other applicable environmental laws, regulations, and Executive Orders.

Prepared by (print name): Brandon Larsen

Title: Senior Environmental Planner

Signature:  Date: 07/13/18

Humboldt Bay Trail South Project

Environmental Commitment Record

Project Name	Humboldt Bay Trail South Project	**Federal Project No.**	xxxx	
Contact	Hank Seeman, 707-445-7741	**County Project No.**	xxxx	

Project Description: *The Humboldt County Department of Public Works (County) is proposing to construct a Class I multi-use recreational trail between Bracut and the City of Eureka, Humboldt County, California. The Humboldt Bay Trail South Project (project) would provide the interconnecting link between two recently constructed segments of the larger Humboldt Bay Trail system (the City of Arcata's Bay Trail North and the City of Eureka's Waterfront Trail). The proposed project would be aligned in or adjacent to the currently unused North Coast Railroad Authority (NCRA) railroad corridor that follows the Humboldt Bay coastline immediately west of U.S. Highway 101 (Highway 101).*

NOTE: This following table is intended as a summary guide to environmental commitments and is meant to be a living document. Much of the information presented was gathered during the CEQA and NES process prior to the issuance of regualtory permits. It does not replace or supersede any environmental commitments made in technical studies or correspondence prior to NEPA clearance. If there are any discrepancies between this table and technical studies/permits then the technical studies/permits will take precedence. Typically, environmental commitments related to regulatory permits will be added to the table once the permits are authorized.

PERMITS REQUIRED	Agency	Permit Number	Date of Permit	Project Component
Section 7 ESA; Biological Opinion(s)	NMFS/USFWS			Entire Corridor
Section 404 Individual Permit	USACE			Wetlands and waters
Section 401 Water Quality Certification	RWQCB			Wetlands and waters
Section 1602 Streambed Alteration Agreement	CDFW			Wetlands and waters
Coastal Development Permit	California Coastal Commission			Entire Corridor

Task and Brief Description	Document	Timing / Phase	Actions to Comply with Task	Task Completion Initials	Task Completion DATE
Humboldt Bay Trail South					
Condition #1 - Special Status Plants					

The County of Humboldt shall implement the following avoidance and protection measures for special-status plants: 1. Due to the mobility and fluctuation of populations of Humboldt Bay owl's-clover, and Point Reyes bird's beak specifically, seasonally appropriate pre-construction surveys shall occur approximately one year prior to construction within the planned area of disturbance for the project, during the appropriate blooming time (spring or summer) for the target species. Impacts to special-status annual salt marsh plants such as Humboldt Bay owl's-clover, Point Reyes bird's beak, and western sand spurrey shall be avoided to the extent feasible. If these plants occur within the project footprint, and permanent impacts cannot be avoided, they shall be conserved through re-seeding (by hand, by a qualified biologist) into suitable habitat in the immediate project area. Seed will be collected in the late summer or early fall the year before construction when seeds from each target species are mature. Seed will be stored and spread post project construction in the best possible suitable habitat, near areas where impacts have occurred. Seeds should be spread in high elevation tidal marsh environments in the vicinity of salt grass if possible for Point Reyes bird's beak and near other native high salt marsh species, and in areas where invasive cordgrass is absent or sparse. 2. If future pre-construction surveys determine that other special-status species are present within the project footprint, these plants will also be avoided to the extent feasible, and if not feasible, they shall be conserved by measures appropriate for the individual species which may include methods such as plant relocation, seed collection, and/or nursery plant propagation. 3. Pre-construction surveys will also be performed within the planned area of disturbance, less than seven days prior to ground disturbance within habitat appropriate for Humboldt Bay owl's-clover, Point Reyes bird's beak and western sand spurrey. At this time any newly identified impacts to special-status plant species within the planned area of disturbance that cannot be feasibly avoided will be quantified and mapped. In the event that mature seed is available for Humboldt Bay owl's-clover, Point Reyes bird's beak and western sand spurrey and plants cannot be feasibly avoided, the seed will be collected, stored, and spread post construction and as described in this mitigation measure. All special-status plant species found at this time within the planned area of disturbance, but outside the trail footprint will be flagged for avoidance during construction. 4. Any plants that could not be feasibly avoided and that will be impacted will be mapped, and the number of individuals documented prior to construction. The approximate quantity of seed collected from these plants and the dates the seed was collected and spread will also be reported. No monitoring is proposed for the seeded areas as assessing the success of these areas is impractical given the mobility of seeds in the tidally influenced salt marsh environment. 5. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.	CEQA MMRP, NES	Pre- and During Construction	The County will schedule pre-construction surveys one year prior to construction. If sensitive plants cannot be avoided, arrangements will be made to collect seed		
Condition #2 - Fish Avoidance					

The County of Humboldt shall implement the following avoidance and protection measures for ESA-listed and other special-status fishes: 1. Prior to complete dewatering of any in-channel or in-bay work areas, coffer dams or barrier nets shall be placed to block off the area. Any fish remaining inside the coffer dams or barriers will be carefully removed by a qualified biologist. In order to minimize potentially adverse effects to aquatic organisms, all translocation/removal of fishes will be conducted by qualified fisheries biologists. Any fish that cannot be herded by seines from the work areas and must be physically handled will be immediately released in suitable habitat away from the action area, with comparable habitat and water quality conditions. Immediately following completion of in-channel or in-bay work, any cofferdams or block nets will be removed allowing free fish passage through the project area during the remainder of the construction period. 2. To minimize the potential hydroacoustic effects on fish of driving piles for bridge footings in and adjacent to tidally influenced stream/slough channels ("in-channel") and on intertidal mudflat areas ("in-bay"), a vibratory driver will be used to the maximum extent practicable. It is anticipated that piles would need to be proofed by driving the final 5 feet with an impact hammer to achieve design tip elevation and to verify load capacity. 3. To protect the most vulnerable life stages of sensitive fish species that occur within the action area, all in-channel and in-bay work will be restricted to the period between July 1 and September 31. This seasonal work window correlates to the period of the year when sensitive fish species are least likely to occur in the action area. To further reduce the potential for hydroacoustic effects on fish potentially occurring in the action area, all pile driving, using either vibratory or impact hammers, of piles placed in-channel and in-bay mudflat areas will be scheduled to occur between the latter 2-hours of outgoing tides and beginning 2-hours of incoming tides, when tidal inundation of work areas is minimal and so that all pile driving will occur out of the water.	CEQA MMRP, BA	Construction	The County will identify a qualified biologist with necessary permits or permissions and make arrangements to have the biologist present during coffer dam installation and to have fish relocated if present.		
Condition #3 - Tidewater Goby					
The County of Humboldt shall implement the following avoidance and minimization measures for tidewater goby: 1. To avoid crushing adult gobies and their breeding burrows, no construction equipment will operate within potential goby habitat and no workers shall walk within the wetted channel in potential goby habitat areas. 2. To avoid barotrauma injury to gobies or damage to breeding burrows, no impact or vibratory equipment shall be used within an active, wetted channel in or contiguous with potential goby habitat or in any location where it could have an adverse effect on breeding burrows and gobies. In addition, heavy equipment used outside the wetted channel, must be operated at a distance as far as possible from suitable breeding habitat to avoid barotrauma injury and/or damage to goby breeding burrows. 3. No pile driving is permitted in the wetted channel within potential goby habitat. 4. New access roads must not enter a wetted channel or watercourse within potential goby habitat.	CEQA MMRP, NES, BA	Construction	Contractor will comply with avoidance measures.		
Condition #4 - Northern Red-legged Frog					

The County of Humboldt shall implement the following avoidance and minimization measures for northern red-legged frogs: 1. Construction in waterways and wetlands with standing water shall be limited to the period of the year between July 1 and October 30 to avoid disturbance to breeding northern red-legged frogs. 2. No more than one week prior to commencement of ground disturbance within 50 feet of suitable northern red-legged frog habitat, a qualified wildlife biologist shall perform a preconstruction survey for the northern red-legged frog and shall relocate any specimens that occur within the work -impact zone to nearby suitable habitat. 3. In the event that a northern-red legged frog is observed in an active construction zone, the contractor shall halt construction activities in the area where observed and the frogs shall be moved to a safe location in similar habitat outside of the construction zone.	CEQA MMRP, NES	Pre- and During Construction	The County will arrange for a qualified biologist to conduct a survey immediately prior to construction.		
Condition #5 - Nesting Birds					
The County of Humboldt shall implement the following measures to ensure no significant impacts to native migratory bird species: 1. The County will attempt to remove trees and other vegetation that could potentially contain nesting birds outside the bird nesting season (March 15 to August 15). If vegetation removal occurs outside the bird nesting season, no further mitigation is necessary. If vegetation removal occurs between March 15 and August 15, the County shall have a qualified wildlife biologist conduct preconstruction surveys within the vicinity of the impact area, to check for nesting activity of native birds and to evaluate the site for special-status bird species such as Little Willow Flycatcher and White-tailed Kites. The biologist shall conduct a minimum of one preconstruction survey within the seven-day period prior to vegetation removal activities. If vegetation removal work lapses for seven days or longer during the nesting season, a qualified biologist shall conduct a supplemental avian survey before project work is reinitiated. 2. If an active nest is found, the biologist will determine the extent of an appropriate construction-free buffer zone to be established around the nest and/or operational restrictions in consultation with the California Department of Fish and Wildlife. Buffer zones will be delineated with flagging and maintained until the nests have fledged or nesting activity has ceased. Buffer sizes would take into account factors such as (1) highway and other ambient noise levels, (2) distance from the nest to the highway and distance from the nest to the active construction area, (3) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (4) distance and amount of vegetation or other screening between the construction site and the nest; and (5) sensitivity of individual nesting species and behaviors of the nesting birds.	CEQA MMRP, NES	Pre- and During Construction	To the extent practical, the County will remove trees and other vegetation outside of the nesting bird season. If removal must occur during nesting season, then the specified survey and avoidance measures shall be followed.		
Condition #6 - White-tailed Kite/Raptor Avoidance					

The following measures are recommended to avoid or minimize the potential for project-related impacts to raptor species including white-tailed kite: Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist within the BSA and a 500-ft buffer around the BSA to ensure that no nests will be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of construction activities, or re-initiation of construction activities if they have ceased for more than 7 days. During this survey, the biologist should inspect all trees immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough (i.e., within 500 feet) to the construction area to be disturbed by these activities, the biologist (in consultation with the CDFW) would determine the extent of a construction-free buffer zone to be established around the nest. The County will inform Caltrans when such an activity occurs. If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season (January through August), if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts. If vegetation is to be removed by the Project and all necessary approvals have been obtained, potential nesting substrate (e.g., trees) that will be removed may be removed between September and February (i.e., outside of the nesting season) to help preclude nesting.	NES	Pre- and During Construction	To the extent practical, the County will remove trees and other vegetation outside of the nesting bird season. If removal must occur during nesting season, then the specified survey and avoidance measures shall be followed.		
Condition #7 - Wetlands Avoidance					
The County of Humboldt shall implement the following avoidance and protection measures for Waters of the United States and Waters of the State: 1. The County shall attempt to avoid or minimize impacts to wetlands/waters to the greatest extent feasible in the final design plans. 2. Areas where wetland and upland vegetation are to be removed shall be clearly identified in the construction documents and reviewed by the County prior to issuing for bid. 3. Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, disturbed areas shall be temporarily stabilized to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, appropriate BMPs will be installed upon completion of the day's activities to control erosion and prevent sediment laden stormwater from leaving the construction area. 4. Suitable perimeter control BMPs, such as silt fences, or straw wattles shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These BMPs shall be installed prior to any clearing or grading activities. 5. If spoil (or stockpile) sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, swales shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion. 6. Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.	CEQA MMRP	Pre-construction	The County shall ensure that the contractor complies with avoidance and protection measures.		

7. A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features. 8. Equipment and hazardous materials shall be stored 50 feet away from surface water features.					
Condition #8 - Wetlands Mitigation					
The County shall compensate for wetlands impacts through restoration, rehabilitation, and/or creation of wetlands. If the wetland mitigation project being led by Caltrans on the Lanphere Parcel in the Arcata Bottoms does not have sufficient capacity to fully compensate for the Humboldt Bay South project's wetland impacts, then the County will identify an alternative site and develop a specific plan for that property to create the necessary wetland amount. A Wetlands Mitigation and Monitoring Plan shall be prepared in coordination with the USACE, NCRWQCB, CCC, and CDFW. Compensation for wetlands shall occur so there is no net loss of wetland habitat. Mitigation ratios will be determined in consultation with the USACE, NCRWQCB, CCC, and CDFW. The Wetland Mitigation and Monitoring Plan shall include the following elements: proposed mitigation ratios; description and size of the restoration or compensatory area; site preparation and design; plant species; planting design and techniques; maintenance activities; plant storage; irrigation requirements; success criteria; monitoring schedule; and remedial measures. The Plan shall be implemented by the County	CEQA MMRP, NES	Pre, During, and Post Construction	It is anticipated that more detailed mitigation requirements will result from the USACE section 404 permit process. The County will be responsible for complying with the general requirements here and with any more specific requirements agreed to as part of the 404/401 process.		
Condition #9 - Protect Archaeological Resources					
If cultural materials such as chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery. Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action. If the find is determined to constitute either an historical resource or a unique archaeological resource per CEQA Guidelines sections 15064.5, the archaeologist shall develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.	CEQA MMRP	Construction;	The contractor will be responsible for day to day compliance with this measure. If resources are encountered and work is stopped in the area of the find, then the County shall determine the appropiate course of action in compliance with the measure.		
Condition #10 - Protect Human Remains					
The County's contractor shall immediately notify the Humboldt County Coroner should human remains, associated grave goods, or items of cultural patrimony be encountered during construction, and the following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. In the event of the coroner's determination that the human remains are Native American, the Native American Heritage Commission would be contacted and would appoint a Most Likely Descendant (MLD). A qualified archaeologist, the County and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.	CEQA MMRP	Construction	The contractor will be responsible for day to day compliance with this measure. If resources are encountered and work is stopped in the area of the find, then the County shall determine the appropiate course of action in compliance with the measure.		
Condition #11 - Unknown Hazardous Materials					

In the event any hazardous, toxic, noxious, objectionable, or unknown chemicals are encountered during trail construction, construction shall be halted by the construction crew on duty and reported to the general contractor for the project and the County of Humboldt. Prior to resuming any work the County shall be responsible for obtaining a soil sample for analysis. The findings of the analysis shall be submitted, as applicable, to the North Coast Regional Water Quality Control Board (NCRWQCB) and any other appropriate regulatory agencies. Work shall not continue until and unless written approval is obtained from these agencies. The County shall comply at all times with the requirements and regulations of the NCRWQCB and other appropriate regulatory agencies with regard to the handling, transport, and disposal of hazardous materials such as contaminated soils to the satisfaction of these agencies. Disposal of all hazardous materials would be in compliance with all applicable California hazardous waste disposal laws. Construction specifications will include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g. fuel, oil, and grease).	CEQA MMRP	Construction	The contractor will be responsible for day to day compliance with this measure. If a spill occurs, once stabilized the County shall determine the appropriate course of action in compliance with the measure.		
Condition #12 - Preliminary Site Inspection					
The County shall ensure that in areas of ground disturbance, a Preliminary Site Investigation (PSI) that includes pre-construction soil borings is conducted prior to finalization of plans/specifications in order to characterize soil and groundwater in anticipation of implementation of construction activities. Once the areas of ground disturbance and potential dewatering are confirmed, the PSI Workplan shall identify potential contaminants of concern for laboratory analysis, location, and number of borings necessary for pre-characterization, and depth for sample collection. Laboratory analytical results of soil and groundwater samples collected from the borings shall be utilized to ascertain whether health and safety concerns are present for construction workers and determine potential soil and/or groundwater handling and disposal options. Proposed soil borings and/or grab groundwater sample locations shall be determined following identification of the areas and depths of soil excavation and dewatering activities. If soil and/or groundwater impacts are identified, site workers involved in excavation activities shall be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained (Occupational Safety and Health Administration [OSHA] 1910.120).	CEQA MMRP	Pre-construction	The County will ensure that a PSI is conducted prior to final design, and that if any unexpected conditions are later encountered that the appropriate response is initiated.		
Condition #13 - Visual Impact Avoidance					
To avoid adverse impacts, new sources of light, including any outside night lighting associated with construction, will be designed to protect wildlife and nighttime views, including views of the night sky. This design goal will be satisfied using a variety of means as applicable, including fixture types, cut off angles, shields, lamp arm extensions, and pole heights. Specific design preferences include not directing light upward or to other properties, avoiding brightly illuminated vertical surfaces where feasible, such as walls and lamp poles, and not directing lighting toward environmentally sensitive habitats. The Recommended Practices of the Illuminating Engineering Society of North America should be consulted for lighting levels and quality of light.	Visual Impact Assessment	Pre-construction	The County will review design plans to ensure that this condition is met.		
Condition #14 - Erosion and Sedimentation Control During Construction					

Develop a Storm Water Pollution Prevention Plan (SWPPP) to identify appropriate erosion control measures and other Best Management Practices (BMPs) necessary to minimize erosion and sedimentation during construction of project.	CEQA ISMND, NES	Pre- and During Construction	The County will ensure that a SWPPP be developed by a Qualified SWPPP Developer prior to construction and that appropriate erosion and sediment control BMPs are implemented throughout construction and until final stabilization is achieved. Construction will be conducted from July 1st - September 31st for any in-bay work. For upland construction activities that must take place during the late-fall, winter, or spring (e.g. to avoid avian nesting periods), temporary erosion and sediment control structures shall be in place and operational at the end of each construction day until permanent erosion control structures are in place.		
Condition #15 - Prevention of Spread of Invasive					
The County shall take measures to avoid the spread of invasive species. These shall include guidance provided by the State of California Aquatic Invasive Species Management Plan (CDFG 2008).	NES	During Construction	All equipment used for off-road construction activities will be weed-free prior to entering the project area. If used, mulches shall be weed free. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites shall consist of sterile seed and/or locally adapted native plant materials to the extent practicable. Any equipment (including boots/waders) and construction equipment shall be properly disinfected or cleaned according guidance provided by the State of California Aquatic Invasive Species Management Plan prior to in-channel or bay work.		
Condition #16 - Air Quality/Dust Control					

The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions.	NES	During Construction	Dust control program shall include the following requirements: Water inactive construction sites and exposed stockpile sites as necessary but at least daily, during regular work days, or until soils are stable. In accordance with California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 in. of freeboard (i.e., minimum vertical distance between top of load and the trailer). Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in		
Condition #17 - Spill Prevention					
Construction specifications will include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g., fuel, oil, and grease):	NES	During Construction	A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially		

State Transportation Improvement Program

Humboldt County
Document Year 2018, Version Number 9
PPNO: 2391
(Dollars in Thousands)

DIST:	PPNO:	EA:	CTIPS ID:	TCRP NO.:
01	2391		130-0000-2578	

CT PROJECT ID: 0114000127

COUNTY:	ROUTE:	PM:
Humboldt County	101	79.8 / 83.8

TITLE (DESCRIPTION):
Humboldt Bay Trail South (Along the North Coast Railroad Authority (NCRA) Railroad and US 101 corridor between Eureka and Bracut (approximately 2 miles south of Arcata). with a portion located on the perimeter levee around the CRC mill site, along the shoreline of Humboldt Bay. The project is construction of a 4.2 mile Class I bike path (with wetland mitigation, shoreline protection, drainage improvements, safety barriers and fencing, and associated elements) to link the Eureka Waterfront Trail and Humboldt Bay Trail North.)

ELEMENT: Capital Outlay MPO ID: 30 LAW: 14
SPONSOR: Humboldt County
MPO: Rural Non-MPO
CORRIDOR:
PRJ MGR: Hank Seeman
PHONE: (707) 445-7741
EMAIL: hseemann@co.humboldt.ca.us

ASSEMBLY: 2
SENATE: 2
CONGRESS: 2

IMPLEMENTING AGENCIES:
PAED Humboldt County
PSE Humboldt County
RW Humboldt County
CON Humboldt County

Categories	Outputs/Outcomes	Unit	Total
Local streets and roads	Bicycle lane mile(s)	Miles	4.23

PROJECT VERSION HISTORY *(Printed Version is Shaded)* (Last 9 versions displayed)

Version	Status	Date	Updated By	Change Reason	Amend No.	Vote	Cum Award	Programmed Dollars in Thousands - Total for Project: Prog Con	Prog RW	PA & ED	PS & E	RW Sup	Con Sup
9	Official	01/30/2019	EZECHLIN	Amendment - Cost/Scope/Sch. Change	G-19-01	2,000		16,600		1,450	550		
8	Official	10/17/2018	EZECHLIN	Future Cons Funding	E-18-139	2,000		7,600	600	1,450	550		
7	Official	10/18/2018	EZECHLIN	Allocation - CTC Vote	FP-18-24	2,000		7,600	600	1,450	550		
6	Official	06/27/2018	EZECHLIN	Time Extension - Project Allocation	W-17-24	1,450		7,600	600	1,450	550		
5	Official	08/16/2017	EZECHLIN	Amendment - Other (Explain ==>)	W-17-37	1,450		7,600	600	1,450	550		
4	Official		EZECHLIN	Budget Update		1,450		7,600	600	1,450	550		
3	Official		EZECHLIN	Adoption - Carry Over	G-16-19	1,450		7,600	600	1,450	550		
2	Official	08/20/2014	EZECHLIN	Allocation - CTC Vote	FP-14-06	1,450		7,600	600	1,450	550		
1	Official	03/20/2014	EZECHLIN	Adoption - New Project	G-14-06			7,600	600	1,450	550		

Fund Source 1 of 4 RIP

Extension
PAED
PSE 08/31/2018 550
RW
CON

VOTE	DATE	AMOUNT
PAED	08/20/2014	1,450
PSE	10/18/2018	550

	PRIOR	18-19	19-20	20-21	21-22	22-23	23-24	FUTURE	TOTAL
PA&ED	1,450								1,450
PS&E	550								550
R/W SUP									
CON SUP									
R/W									
CON									
Total:	2,000								2,000

20.30.600.621 - Local Roads Rehabilitation
Fund Type
National Hwy System
Funding Agency
Humboldt County Association of Governments

Fund Source 2 of 4 State SB1 ATP

Extension

VOTE	DATE	AMOUNT

	PRIOR	18-19	19-20	20-21	21-22	22-23	23-24	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON				13,296					13,296
Total:				13,296					13,296

20.XX.720.100 - Active Transportation Program - SB1
Fund Type
Active Transportation Program - SB1
Funding Agency

State Transportation Improvement Program

Humboldt County
Document Year 2018, Version Number 9
PPNO: 2391
(Dollars in Thousands)

Fund Source 3 of 4 CT Minor Pgm.

Extension	VOTE DATE AMOUNT

CT-MINOR - Caltrans Minor Program
Fund Type
State Cash
Funding Agency

	PRIOR	18-19	19-20	20-21	21-22	22-23	23-24	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON				1,250					1,250
Total:				1,250					1,250

Fund Source 4 of 4 Other State

Extension	VOTE DATE AMOUNT

SHOPP - SHOPP Funds on STIP Projects
Fund Type
National Hwy System
Funding Agency

	PRIOR	18-19	19-20	20-21	21-22	22-23	23-24	FUTURE	TOTAL
PA&ED									
PS&E									
R/W SUP									
CON SUP									
R/W									
CON				2,054					2,054
Total:				2,054					2,054

Project Total:

VOTE	TOTAL AMOUNT
PAED	1,450
PSE	550

	PRIOR	18-19	19-20	20-21	21-22	22-23	23-24	FUTURE	TOTAL
PA&ED	1,450								1,450
PS&E	550								550
R/W SUP									
CON SUP									
R/W									
CON				16,600					16,600
Total:	2,000			16,600					18,600

HQ Comments:
******** Version 9 - 04/03/2019 ********
CTC approves ATP funding for Construction of $13,296k with an updated project Title and Scope per resolution G-19-01 approved 01/30/2019. -ez

******** Version 8 - 10/19/2018 ********
CTC approves concurrent consideration of funding E-Resolution E-18-139 on 10/18/2018. -ez
******** Version 7 - 10/19/2018 ********
CTC approves allocation of $550k RIP PS&E per resolution FP-18-24 on 10/18/2018. -ez
******** Version 6 - 10/19/2018 ********
CTC approves time extension for project allocation for PS&E of $550 for two months, to 8/31/18 per waiver 17-24. -ad/ez
******** Version 5 - 08/24/2017 ********
CTC approves 14 month time extension for expenditure for PA&ED of $1,450,000. -ez
******** Version 4 - 10/18/2016 ********
'Future need moved to outside STIP cycle. -es
******** Version 3 - 08/12/2016 ********
CTC approves delay of PS&E to FY 17-18 per adoption resolution G-16-19 on 05/18/2016. -ez
******** Version 2 - 08/18/2014 ********
CTC approved an allocation of $1,450k RIP PA&ED FY 14/15 per Resolution FP-14-06. -gv
Updated to NH vs. State Cash. -ez
******** Version 1 - 03/24/14 ********
Adoption new project per 2014 STIP Adoption Resolution G-14-06 and 12/08/13 PPR. - aa/ez

Active Transportation Program
Benefits Form

Project Information	
Project Title: Humboldt Bay Trail South	Date: March 14, 2019
Project Identifier (EA, PPNO, etc): PPNO 2391	

Contact Information	
Nominating Agency: Humboldt County Public Works	Agency Completing Form: Humboldt County Public Works
Contact Person: Hank Seemann Phone: 707-445-7741	Contact Person: Hank Seemann Phone: 707-445-7741
Email Address: hseemann@co.humboldt.ca.us	Email Address: hseemann@co.humboldt.ca.us

ATP Indicator	Measures/Outcomes	Unit	Current	Projected	
				Outcome	Year
Counts	Bicycle Counts	Each	33	182	2021
	Pedestrian Counts	Each	6	167	2021

In the space below, qualitatively explain the assumptions and methodologies used for the proposed outcomes.

The City of Arcata operates an automated counter on Humboldt Bay Trail North, approximately 1.75 miles north of the project area. Average daily counts in 2018 were 87 pedestrians and 83 cyclists. The City of Eureka performed manual counts on the Eureka Waterfront Trail approximately 0.5 miles south of the project area for three hours in July 2018 (average 22 pedestrians and 8 bicyclists per hour). The estimated daily counts for the Eureka monitoring point are 132 pedestrians and 48 bicyclists. We assume Humboldt Bay Trail South will receive 75% of these daily average counts on adjacent trail segments plus three times the existing use on Highway 101. Pedestrians: (87+132) x 0.75 + (6 x 3) = 182. Bicyclists: (83+8) x 0.75 + (33 x 3) = 167.